

A57 Link Roads

TR010034

**9.52 Comments on CPRE PD&SY's
Written Representation**

Rule 8(1)(c)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

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The Infrastructure Planning (Examination Procedure) Rules 2010

A57 Link Roads Development Consent Order 202[x]

9.52 Applicants comments on CPRE Peak District and South Yorkshire Written Representations

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1. Introduction

- 1.1.1. This document sets out National Highways' comments on the Written Representations submitted to the Planning Inspectorate on or before Deadline 2 (14 January 2022) namely:
- CPRE Peak District and South Yorkshire (REP2-069)
- 1.1.2. 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.
- 1.1.3. 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.
- 1.1.4. 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. Traffic and Transport

CPRE comment: *The need for the A57 Link Roads is not established*

National Highways response:

- 2.1.1. The need for the Scheme has been firmly established through the analysis underpinning the first Route Investment Strategy (RIS1) for the A57/A628 Trans Pennine route and was confirmed by the RIS1 announcement that describes the preferred intervention on which the Scheme is based. The need for the Scheme is also set out in the Case for the Scheme (REP2-016).

CPRE comment: *The A57 Link Roads do not solve the traffic problem; instead they address the symptoms of it by displacing, redistributing and generating traffic in Longdendale and Glossopdale.*

National Highways response:

- 2.1.2. The Scheme meets its stated objectives in addressing the identified problems as set out in the Case for the Scheme (REP2-016).

CPRE comment: *The Transport Appraisal Report is too superficial to allow full comprehension of the traffic effects.*

National Highways response:

- 2.1.3. The Transport Assessment Report (TAR) (APP-185) has been prepared in accordance with best practice and presents the relevant transport related impacts of the Scheme in sufficient detail to adequately assess and comprehend its traffic effects.

CPRE comment: *Alternative measures that would address the problem without invasive road building were dismissed inappropriately by National Highways. Furthermore it emphasises that road building has been the preferred option; rigorous scrutiny of alternatives, as required by the test of major development (see below), has not been pursued.*

National Highways response:

- 2.1.4. Please refer to National Highways' response RR-0282-5 to the Relevant Representations (REP1-042).

CPRE comment: *A lorry ban coupled with sustainable transport measures and technological improvements was never fully tested by Highways England in 2015*

National Highways response:

- 2.1.5. Please refer to National Highways' response RR-0170-1 to the Relevant Representations (REP1-042).

CPRE comment: *The strategic case for which has not been updated, as we pointed out in December 2020. The Treasury updated its Green Book in November 2020 which gave the applicant plenty of time for a review of the strategic case.*

National Highways response:

- 2.1.6. The strategic case for the Scheme was reviewed and updated in 2021 to reflect the Treasury's updated Green Book issued in November 2020. The information presented in The Case for the Scheme (REP2-016) is therefore based on the Treasury's most up to date Green Book.

CPRE comment: *The nature of the problem has not been defined in the DCO documents. National Highways condenses the issues in a few sentences which describe the symptoms not the actual problem. 'The A57 and A628 between Manchester and Sheffield currently suffer from heavy congestion, creating unreliable journeys, which limits journey time reliability. This restricts economic growth due to the delays experienced by commuters and business users alike. The congestion also results in rat running through smaller towns and villages, as vehicles attempt to reduce queuing times'. This description wholly underplays the complexity of the issues along the corridor and the wider context.*

National Highways response:

- 2.1.7. National Highways considers that the nature of the problem has been clearly defined and summarised in the DCO documents and does not underplay the complexity of the issues. CPRE has not suggested an alternative description of the problems along the corridor.

CPRE comment: *Aspirations for an all-weather fast route through Longdendale linking the M1 and the M67 are commencing piecemeal with a bypass of Mottram, which threatens the integrity of the habitats and the special qualities of the National Park. The aspirations reflect a failure to plan strategically for trans-Pennine travel between the Scottish border and the A50.*

National Highways response:

- 2.1.8. The performance of the whole of the Strategic Road Network (SRN) is regularly reviewed by National Highways through periodic refreshment of Route Investment Strategies (RIS). Should future RIS identify a need for further interventions on the A57/A628 corridor to address identified problems, then these would be considered alongside other priorities and competing needs across the SRN.
- 2.1.9. There are other Trans Pennine schemes either being planned or progressed, e.g. Network Rail's Transpennine Route Upgrade (TRU) for the railway between York and Manchester via Leeds and Huddersfield. The A57 Link Road scheme is therefore one of several interventions for improvements to transportation across the Pennines that all form part of a strategic approach to planning for cross-Pennine transportation. The Examination is, however, only concerned with the Scheme which is the subject of the dDCO.

CPRE comment: *Instead of following Government guidance (webTAG at the time) the scope of the trans-Pennine Feasibility Study addressed the symptoms not the problem. The geographical scope of the study interpreted trans-Pennine as 'connectivity between Manchester and Sheffield', with the M62 excluded. National Park statutory purposes and policy were misunderstood and incorrectly applied.*

National Highways response:

- 2.1.10. National Highways fully understands and appreciates the Peak District's statutory purposes and policies. These have been given proper consideration through a thorough review of applicable policies and the Scheme's compliance with them presented in the Case for the Scheme (REP2-016).

CPRE comment: *The webTAG guidance towards generating and sifting options was not followed, and the assessment of the sifted options was not robust.*

National Highways response:

- 2.1.11. National Highways is satisfied that the identification of potential interventions to address the identified problems and the sifting of options fully complied with Department of Transport's Transport Analysis Guidance (TAG) as well as National Highways' own internal Project Control Framework (PCF) process that were applicable at the time that the shifting of options was undertaken.

CPRE Comment: *Car Free Low Carbon Travel for Longdendale and Glossopdale*

3.2.8 The full report by MTRU accompanies this written representation as a standalone report. In summary the package consists of the following:

- a) An HGV control scheme for the National Park to remove through HGVs. This would need an area based approach and have two options: restricting only the heaviest (over 32 tonnes) or all HGVs (over 7.5 tonnes) except for access.*
- b) Reconstruction of the A57 junction at Woolley Bridge to include a priority entry lane for buses and cyclists from the A57.*
- c) Signalisation of the M67 roundabout*
- d) Bus priority and service improvements*
- e) Traffic calming through the villages including speed reduction*
- f) Cycleway and footway improvements*
- g) Local sustainable travel schemes such as Active Travel, bike-cargo, Travel to Work plans*
- h) Public realm improvements to encourage walking*
- i) Travel planning exercise to:*
 - define place to place local cycle and walking routes (not necessarily the same)*
 - set up new or improved bus services with initial incentives to try them*
 - better integrate rail and bus services locally*
 - improve links to TfGM networks for public transport and cycling*
 - pilot bike and e-bike deliveries from local shops.*

National Highways response:

- 2.1.12. 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.

CPRE Comment: 4.2.4 Omission of Greater Manchester and Sheffield conurbations from the Study area - The Area of Detailed Modelling 49,50 (ADM) and Affected Road Network 51 (ARN) exclude almost the whole of urban Sheffield, Barnsley, and the majority of Greater Manchester. 'The central Manchester and Sheffield areas have been excluded as these are highly sensitive to model noise 52. This sensitivity could result in traffic using alternative routes for reasons unrelated to the TPU scheme, which could distort the assessment.' Apart from Tameside, Glossop and Huddersfield the majority of the ADM is the rural Peak District, where traffic generally flows freely. By contrast Sheffield and Greater Manchester are congested leading to higher outputs of greenhouse gases (GHG) and air pollutants. The scheme increases traffic substantially within Tameside and between the two conurbations (on trans-Pennine routes). Beyond the ADM traffic impacts disappear into thin air. These exclusions appear illogical for a scheme aiming to improve connectivity between Greater Manchester and Sheffield City Regions 53. Furthermore wider economic benefits in both Manchester and Sheffield are included in the economic assessment and add significantly to the Benefit Cost Ratio 54. Yet such benefits in both these conurbations may not be realised due to congestion.

National Highways response:

- 2.1.13. Please see National Highways' responses 3.1 and 3.2 to the Examining Authority's First Written Questions (REP2-021).

CPRE comment: 4.2.5 Traffic model refinement - The TPU Stage 3 combined modelling and appraisal report indicates that model refinement took place to alter the distribution of traffic within Glossop, and through Tintwistle.

National Highways response:

- 2.1.14. The traffic modelling used to assess the Scheme is based on a refined and improved version of the Trans Pennine South Regional Model. The zoning covering Glossop within this model was previously treated at an aggregate level that was considered too coarse for adequate assessment of the Scheme. Consequently, the model was refined to ensure that the distribution of modelled trips better reflected the geographical spread of local housing and employment across Glossop by disaggregating the demand into more finely defined zones. The refinement of the traffic model therefore enabled a more accurate assessment to be undertaken of the likely forecast impact of the Scheme on traffic flows, including within Glossop and through Tintwistle.

CPRE comment: 4.2.7 In the context of the above model refinement the traffic forecasting results on the A628T east of Tintwistle and on Glossop High Street appear perverse.

National Highways response:

- 2.1.15. The traffic modelling used for the assessment of the Scheme has been developed, calibrated, and validated in accordance with the Department for Transport's Transport Analysis Guidance (TAG). Consequently, National Highways are confident that the traffic modelling accurately forecasts changes in

traffic flows due to the Scheme, including on the A628 east of Tintwistle and Glossop High Street.

CPRE Comment: 4.2.10 *It appears that refinement of the traffic model could have altered the outcomes for the environmental statement accompanying the DCO application. The assumption that modelled traffic would follow new routes may be unrealistic.*

National Highways response:

- 2.1.16. The environmental statement is based on the traffic modelling undertaken to assess the impact of the Scheme, which as stated above, was refined to provide a higher degree of accuracy within the Area of Detailed Modelling (ADM). Regarding the assumption that modelled traffic would follow new routes may be unrealistic, see National Highways' response to 4.2.7 above.

CPRE Comment: 4.2.13 *In the TAR, 4.1.4-4.1.9, the Uncertainty Log (UL) includes:*

- *The Road Investment Strategy (RIS) and Local Authority highway schemes included in the TPS RTM (trans-Pennine South Regional Transport Model); and*
- *The housing and employment developments within the Area of Detailed Modelling boundary.*

No details of these schemes or developments are supplied or appended to the TAR.

National Highways response:

- 2.1.17. The forecast traffic demand used for the assessment of the Scheme is primarily derived from the Department of Transport's (DfT) National Trip End Model (NTEM). NTEM provides forecast growth in trips based on forecast changes in the economy and demographics by area, e.g. forecast changes in population, car ownership, household spending, levels of employment, etc. NTEM therefore inherently accounts for future development since population growth cannot take place without additional housing development and economic growth cannot take place without additional commercial development. However, NTEM trip origins and destinations are based on relatively large geographical areas (Ward level) and do not therefore reflect the specific locations within each area of future developments that will enable growth. To adjust for this, the matrices of the origins and destinations of forecast trips used in the traffic modelling are adjusted to take account of committed development by refining the start and end points of trips to reflect the specific locations of committed developments using smaller zones. Nonetheless, the overall growth in trips across the assessed road network is capped to the NTEM forecast level of growth.
- 2.1.18. Details of the schemes and developments listed in the Uncertainty Log can be provided by National Highways if necessary.

CPRE Comment: 4.2.18 *Traffic Forecasts - The prediction of what would happen (the core scenario) without the scheme is based on forecasts from the DfT's National Trip End Model (NTEM). These overstate the general rate of traffic growth.*

National Highways response

- 2.1.19. The National Trip End Model (NTEM) represents the Department of Transport's centrally agreed position for scheme appraisal as set out in the Transport Analysis Guidance (TAG). National Highways recognises that there is uncertainty with current traffic forecasts. It is for this reason that sensitivity tests of the benefits of the Scheme have been undertaken using both high and low growth traffic forecasts. These sensitivity tests demonstrate that the Scheme is forecast to deliver significant benefits under both the low and high growth scenarios. Also see National Highways' response 3.7 to the Examining Authority's First Written Questions (REP2-021).

CPRE Comment: 4.2.19 Journey times are misleading and inadequate.

National Highways response

- 2.1.20. National Highways considers that the journey times presented in the Transport Assessment Report are neither misleading nor inadequate. National Highways believes that CPRE has incorrectly assumed that the economic benefits of the Scheme are focused solely on the changes in journey times along these routes and ignores changes in journey times and induced traffic impacts across the rest of the existing network. In reality, the economic assessment of the Scheme includes the journey time impacts along the entire route of every trip within the Area of Detailed Modelling ADM (e.g. from Manchester to Sheffield). It is only trips which don't pass through the ADM (e.g. Sheffield to Sheffield) that are excluded from the economic assessment, as these are not considered material to the assessment of the Scheme.

3. Effects on Greenhouse Gas Emissions

3.1. Summary of CPRE Comments

3.1.1. *The scheme's increase in carbon emissions is unacceptable in the context of the climate emergency and weighs against the scheme in the planning balance. The scheme would increase carbon emissions annually in the study area by between 0.7 and 0.8% during a crucial period to 2030 when absolute rapid reductions are required. It would make significant and unsustainable inroads into subnational, regional and local carbon budgets, and impair their balance and achievement of Net Zero targets. It would impair compliance with the UK's Nationally Determined Contribution (NDC). The evidence of the impact on regional and local budgets suggests that the impact of scheme emissions on UK carbon budgets is grossly underestimated.*

3.2. National Highways' response: Study area for carbon is unclear

3.2.1. In response to paragraph 4.4.3 Paragraph 3.24 of DMRB LA 114 states 'The study area for assessing a project's vulnerability to climate change shall be based on the construction footprint/project boundary (including compounds and temporary land take)'. As the scope of the assessment is to identify whether anticipated changing climate conditions and weather events are likely to have significant adverse effects on the Scheme itself during construction and operation. It is not considered necessary to extend the study area beyond the extent of the DCO boundary for here, because the sensitive receptor in the vulnerability assessments is the Scheme itself, i.e. elements of the project. It should be noted that this element of the DMRB LA 114 Climate assessment is not related to GHG emissions.

3.2.2. Response to 4.4.4. of Written Representation: Road user carbon emissions (GHG emissions) have been calculated for the Area of Detailed Modelling (ADM) as presented in Figure 2.1 of the Transport Assessment Report (APP-185). This was on the basis that the traffic modelling was considered sufficiently reliable in term of representing changes in traffic due to the Scheme within the ADM. The ADM includes all road links included in the air quality affected road network (ARN) and on that basis is consistent with the ARN as stated in ES Chapter 14: Climate (REP1-019) paragraph 14.5.1.

3.3. National Highways' response: Carbon emissions may be underestimated

3.3.1. Response to 4.4.5. of Written Representation: Calculations of road user carbon emissions (GHG emissions) were updated for the DCO submission documents from those reported in the 2019 Appraisal Summary Table (AST). It should be noted that the ASTs dated 2019 were not submitted with the DCO application and should be disregarded as they would not have been based on the current Scheme specific traffic data and are superseded by assessments submitted with the DCO application based on updated traffic data. Updates to the traffic data and associated environmental assessments were undertaken for the Scheme (in

early 2021) were to account for: amendments to the scheme design, revised traffic modelling data and updated emission factors published by Defra.

- 3.3.2. The updated assessment for the DCO submission gives a larger value for the CO₂ emissions increase over the 60 years than the value in the 2019 AST. The economic appraisal for the Scheme as presented in the Case for the Scheme (REP2-016) was also updated for the DCO submission and as such accounts for the increase in the 60-year change in GHG emissions.
- 3.3.3. In response to paragraphs 4.4.6 – 4.4.9 of the Written Representation, regarding embedded carbon emissions: The construction carbon emissions reported in Chapter 14 of the ES have been calculated in accordance with the DMRB LA 114 standard.
- 3.3.4. DMRB LA 114 requires the Applicant to calculate construction carbon using an industry recognised carbon calculation tool in accordance with the Overseeing Organisation requirements. We have used National Highways' carbon emissions calculation tool, which enables calculation of the embodied carbon (CO₂e), which covers the key greenhouse gases) associated with materials, along with carbon associated with transport and management of wastes across the construction and maintenance lifecycle. The carbon tool in its current form was launched at the start of the first Road Investment Strategy (RIS 1). The emphasis on reducing carbon emissions is continued in RIS 2, which includes a performance indicator on supply chain carbon emissions. The assessment approach is therefore consistent with all other National Highways schemes. It also uses lifecycle carbon emissions factors drawn from comprehensive sources such as the Inventory of Carbon and Energy and government carbon emission factors.
- 3.3.5. The applicant was unable to locate the document referenced in the Written Representation (due to redactions), and therefore cannot comment on this methodology. However, it is understood that the Barrett formula is not consistent with National Highways carbon tool as it uses a different reporting mechanism for GHG emissions.

3.4. National Highways' response: Recent legal case with implications for carbon assessment

- 3.4.1. In relation to the other DCO National Highways schemes, the Applicant submitted responses to the following additional consultations for the DCOs that were requested by the SoS on 26 January 2022. These have been submitted for:
- 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)
- 3.4.2. The Applicant also responded to the SoS consultation letter for the A38 Derby Junctions (TR010022) on 2 February 2022.
- 3.4.3. It is the Applicant's position that these responses are also relevant to this Scheme. In 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 will submit this in a Scheme specific response on or before Deadline 6 of the DCO examination.

3.5. National Highways' response: NPSNN does not reflect the urgency of the Climate Emergency

3.5.1. Section 104 (2) of the Planning Act 2008 states that:

In deciding the application the Secretary of State must have regard to—

(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"),

(aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;

(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),

(c) any matters prescribed in relation to development of the description to which the application relates, and

(d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.

3.5.2. Section 104 (3) states that:

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.

3.5.3. Subsections 4-8 are as follows:

(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.

(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.

(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.

(7) This subsection applies if the Secretary of State is satisfied that the adverse impact of the proposed development would outweigh its benefits.

(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.

- 3.5.4. It is not considered that any of the subsections named are applicable, as deciding the application in accordance with the NN NPS 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.
- 3.5.5. 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 policy framework for the determination of the Application and the Secretary of State must decide the application in accordance with it.

3.6. National Highways' response: The Carbon Assessment

- 3.6.1. Paragraph 4.4.19 of the Written Representations states '*There is no current environmental baseline for us to understand the carbon emissions at the present time. This is a crucial omission to understanding the full nature of the scheme's impacts*'.
- 3.6.2. The DfT have advised National Highways that a sensitivity test based on the impact of the policy measures set out in Transport Decarbonisation Plan (TDP) (July 2021) can now be undertaken for schemes. The DfT have approved a sensitivity test based on the rate of improvement shown in the TDP which can be applied to GHG emissions calculated for the Scheme assessment. The results of this test will be included in the Applicant's response to the requests in Item 6(d) of ISH1, to respond in writing with respect to the SoS's consultation letter. It will present the change in GHG emissions between the 'with scheme scenario' and 'without scheme scenario', split by carbon budgets, for the GHG emissions previously reported in the environmental statement, the updated GHG emissions based on EFTv11 and TDP sensitivity test (upper and lower bounds). It is intended that this will improve the assessment of the significance that is currently reported in Chapter 14 of the ES by considering the TDP and the net zero pathway, which was not available when the DCO application was submitted.

3.7. National Highways' response: Effects of scheme's carbon emissions on UK carbon budgets and international obligations

- 3.7.1. In accordance with the DMRB standards LA 114 and LA 105, 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 current, legally adopted 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.

- 3.7.2. National Highways' position is that, in accordance with the NPSNN, only a comparison with the current national carbon reduction budgets is relevant.
- 3.7.3. In response to the following comment '*The scheme's year-on-year increasing emissions, when absolute reductions are required, could materially impact on the ability to meet the UK carbon budgets and have a significant effect on climate*', there is 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) isn't outweighed by improvements in the future year vehicle emissions used in the assessment (National Highways speed band emission factors based on Defra Emissions Factor Toolkit (EFT v10.1)).
- 3.7.4. However, the Applicant would like to refer back to the response to ExAWQ1 8.13 (REP2-021):
- 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 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.
- 3.7.5. 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 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).

3.8. National Highways' response: UK International Obligations

- 3.8.1. The National Highways response to ExAWQ1 8.2 (REP2-021) explains how the compliance with UK International obligations has been considered, which has been through a comparison with national carbon reduction budgets.
- a) UK's Nationally Determined Contribution (NDC) – Emissions are considered in the context of national carbon budgets, in line with guidance in DMRB LA 114 and the NPS NN. It is by the delivery of emission reductions in line with the national budgets, mandated by the Climate Change Act, that the UK Government seeks to meet its obligations as a Paris Agreement signatory. The transport emissions calculated up to 2030 reported in Chapter 14 of the ES have been undertaken in accordance with DMRB LA 105. It should be noted that the NDC is economy wide.
 - b) Other carbon budgets, for example Local Carbon Budgets as defined by local or regional authorities, are not defined in the relevant NPSNN, 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. Some local authorities – such as GMCA – have taken the next step and set themselves ambitious local budgets to play their part in achieving these reductions. Chapter 14 of the ES considers local and regional ambitions to reduce GHG emissions as part of its review of relevant local and regional policy. However, it is not a requirement to base an assessment of significance on these; the Climate Change Act does not include a statutory duty for local authorities to set budgets or deliver these reductions.

- 3.8.2. The Applicant would note that the method used for the calculations within 4.4.23(a) (page 46) of the Written Representation is not clear, and therefore cannot comment.

3.9. National Highways' response: Failure to Assess the Impact of Scheme Emissions on Subnational, Regional and Local Greenhouse Gas Targets

- 3.9.1. The Applicant considers that the recent response to the SoS's consultation letter (dated 26 January 2022 and 2 February 2022) which is referred to earlier is also relevant here.
- 3.9.2. In line with the requirements set out in Climate Change Act 2008¹ (CCA 2008), Part 1, Section 4 (see below) parliament has set carbon budgets² at the national scale.

"Carbon budgets

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].

- 1. Carbon budgets cover the following 11 sectors:*
- 2. Surface Transport*
- 3. Buildings*
- 4. Manufacture and Construction*
- 5. Electricity Generation*
- 6. Fuel Supply*
- 7. Agriculture and land use, land use change and forestry*
- 8. Aviation*
- 9. Shipping*
- 10. Waste*
- 11. Fluorinated gases (F-gases)*

¹ https://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf

² <https://www.gov.uk/guidance/carbon-budgets>

12. Greenhouse gas removals

- 3.9.3. 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).
- 3.9.4. 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.
- 3.9.5. 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.
- 3.9.6. 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).
- 3.9.7. 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.
- 3.9.8. 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.

3.10. National Highways' response: Scheme's emissions are significant

- 3.10.1. The assessment reported in Chapter 14 of the ES is consistent with the requirements in the DMRB LA 114 standard. The Applicant cannot comment on the assessment criteria used in the Written Representative.

3.11. National Highways' response: Measures that NPSNN uses to claim exemption for the SRN

- 3.11.1. 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.
- 3.11.2. In their Written Representation, CPRE state: *By contrast, during this time the scheme would increase carbon emissions annually by between 0.7% and 0.8%.* This seems to be a local/regional level calculation of percent change. This is not within the national context as per the NPSNN.
- 3.11.3. 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. Green Belt

4.1. National Highways' response to Section 4.6 'The Scheme is Inappropriate Development in the Green Belt'

- 4.1.1. NPPF paragraph 150 (previously 146) sets out development that is appropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it, which includes local transport infrastructure which can demonstrate a requirement for a Green Belt location.
- 4.1.2. CPRE argues that two recent DCO schemes (the A19/A184 Testo's junction and the A19/A184 Testo's junction require a Green Belt location because they are upgrades of existing roads, which is something that does not apply to the Scheme. The need for a Green Belt location cannot simply limited to upgrades of existing roads within the Green Belt (and what is now paragraph 150c of the NPPF does not set such a restriction). This is reflected in NN NPS paragraph 5.171 which recognises that "linear infrastructure linking an area near a Green Belt with other locations will often have to pass through Green Belt land."
- 4.1.3. The justification for why the Scheme is local transport infrastructure that requires a Green Belt location is set out in the Case for the Scheme.
- 4.1.4. The Tameside UDP is still the main document which is used to determine planning applications for development in the borough and its policies are still in force, including policies T2 and T3.

4.2. National Highways' response to Section 4.6 'The Scheme Conflicts with the Purposes of the Green Belt'

- 4.2.1. The Applicant has set out in the Case for the Scheme (REP2-016) why it considers the Scheme does not conflict with the purposes of the Green Belt.
- 4.2.2. With regards to NPPF para 138 part a) 'checking the unrestricted sprawl of large built-up areas' and b) 'preventing neighbouring towns merging into one another', National highways would highlight that pressure for developing land in the Green Belt on the edge of existing settlements exists regardless of the Scheme and revisions to the Green Belt to release land for development can only take place through the Local Plan process; previously proposed allocations or site submissions by private landowners as part of this process are not relevant to the consideration of the Scheme and there are no allocations in the emerging *Places for Everyone Plan*.
- 4.2.3. Policy OL3 of the Tameside UDP is not a general policy authorising infill but relates to minor expansions of certain specific named existing sites within the Green Belt, none of which are within the boundary of the DCO. The nearest, Longdendale Community High School lies to the north-east of the Scheme. Notwithstanding the status of OL3, the NPPF (paragraph 149) sets out that limited infilling or the partial or complete redevelopment of previously developed land can be appropriate development in the Green Belt. The NPPF allows for infilling in certain circumstances with or without the Scheme. Likewise, as quoted by the CPRE (page 63), there will be pressure for residential development due to

Mottram being an attractive place to live, not as a result of the construction of the Scheme.

- 4.2.4. With regards to page 63 part c) In addition to comments on encroachment within the Case for the Scheme, according to the Local authority green belt statistics for England: 2020 to 2021³ Tameside possesses over 5,000 hectares of land designated as Green Belt whilst High Peak has nearly 4,000. As the CRPE themselves agree in their deadline 3 submission in terms of total Green Belt area, the Scheme area is small. The impact of the Scheme on habitats, wildlife and flood risk is covered elsewhere within the relevant chapters of the submitted Environmental Statement.
- 4.2.5. With regards to page 64 part d) The Scheme's impact on the setting of the Conservation Area has been properly considered within Chapter 6 of the ES: Cultural Heritage
- 4.2.6. With regards to page 65 part e) There is not a requirement to demonstrate how the Scheme would assist in urban regeneration. We set out how the Scheme does not conflict with this purpose in the Case for the Scheme.

4.3. National Highways' response to Section 4.6 'The Scheme Harms the Openness of the Green Belt'

- 4.3.1. Green belt is not a visual or landscape designation and does not imply any particular visual or landscape quality requirement. The key to Green Belt is its openness and preventing urban sprawl.
- 4.3.2. The openness of the greenbelt (or any land) is not directly related to the height of a feature or element within or across it. For example, Uluru (Ayer's Rock) does not necessarily affect openness and indeed, can enhance the perceptual experience of openness.
- 4.3.3. The elements of the landscape design comprise principally of landform and planting which have been carefully designed to ensure that the scheme is both screened from sensitive receptors and integrated into the local landscape character with both open and enclosed sections. This will deliver a blend of screened highway and more open views. The landform enclosing the road is largely as a false cutting and this combined with the undulating nature of the wider landscape, means views of the route will be limited and also seen within the context of a wider landscape setting of rising hills and moorland slopes. The design is a combination of various influences - visibility, landscape character biodiversity and habitat creation as well as drainage considerations
- 4.3.4. In summary it is considered that the openness of the green belt is not compromised by the addition of the Scheme.

4.4. National Highways' response to Section 4.6 'Very special circumstances' do not exist to outweigh the harm'

- 4.4.1. National Highways disagrees and consider that, should the Scheme be considered inappropriate development, there are very special circumstances that

³ <https://www.gov.uk/government/statistics/local-authority-green-belt-statistics-for-england-2020-to-2021>

outweigh the harm in line with paragraph 148 of the NPPF. Furthermore, we consider that harm has been appropriately assessed as set out in our response to the Examining Authority's First Written Question 4.2 (REP2-021).

5. Air Quality

5.1. CPRE Comments: Summary of Written Representation

- 5.1.1. *The applicant concluded that during operation, there would be no significant adverse effect on human health due to the Scheme and there would be an improvement in air quality. The Scheme is not considered to be a risk to non-compliance with the Air Quality Directive (5.7.30) or the Air Quality Strategy (AQS) objectives.*
- 5.1.2. *We disagree. Due to redistribution of traffic air pollution would reduce for those living along Hyde Road, Mottram Moor and Woolley, but there are still exceedances of the Limit Value and the Air Quality Strategy (AQS) objective¹⁵² elsewhere. Two AQMAs in the vicinity of the scheme and 2 AQMAs further east along the trunk road corridor have been omitted from the baseline study. This is presentational bias. The TPU Stage 3 Combined Modelling and Appraisal Report 7.3.1-7.3.3 revealed that ‘an unmitigated TPU scheme could have significant AQ effects and jeopardise the application for development consent. Changes in traffic flow and speed as a result of the scheme were predicted to cause exceedances of the AQ strategy objectives for annual mean nitrogen dioxide (NO₂)’, in relation to these two AQMAs. The Scheme could jeopardise compliance with the AQS objectives and the Air Quality Directive.*

5.2. National Highways’ response: Omissions from the assessment

Omission of AQMAs

- 5.2.1. Please see National Highways’ response to Examining Authority’s First Written Questions 7.15 and 7.16, which sets out the determination of the study area for the air quality assessment.
- 5.2.2. The air quality study area has been determined in accordance with DMRB LA 105. DMRB LA 105 defines traffic change criteria for determining whether air quality impacts can be scoped out or require assessment (DMRB LA 105 paragraph 2.1). Where traffic screening criteria are met for roads these form the Affected Road Network (ARN) for the Scheme.
- 5.2.3. The Sheffield city-wide AQMA and Barnsley AQMA No. 6 (at Langsett) are further east of the A57 and A628 trunk road corridor. The traffic change due to the Scheme does not meet the DMRB LA 105 traffic scoping criteria within either of these AQMA. These AQMA are located over 6km and 19km from the ARN on the A57 and A628/A616 trunk roads respectively and are not considered to be close to the border of the ARN.
- 5.2.4. Regarding the AQMAs closer to the vicinity of the Scheme, the DMRB LA 105 traffic change criteria are not exceeded for the majority of the sections of the A57 within Glossop AQMA and none of the A628 within Tintwistle AQMA. The Glossop AQMA and Tintwistle AQMA are acknowledged within ES chapter 5 section 5.6 baseline conditions (REP3-006) and the boundaries are included in Figure 5.1 (APP-076). This is in accordance with DMRB LA 105 paragraph 2.15 which stated “...baseline information shall be gathered to inform the air quality

assessment:2) local authority air quality monitoring reports including the locations of any AQMAs within or close to the boarder of the ARN...”.

- 5.2.5. Where roads are not within the ARN for the majority of the Glossop AQMA, Tintwistle AQMA, Sheffield City wide AQMA and Barnsley AQMA No.6, this indicates that the change with the Scheme would not be sufficient to require further assessment at these locations.

Omission of Greater Manchester Clear Air Zone (GM CAZ)

- 5.2.6. Please refer to National Highways’ response to Examining Authority's First Written Question 7.4.

Omission of measurement of particulate matter (PM)

- 5.2.7. The Air Quality assessment for the scheme has been carried out in accordance with DMRB LA105 guidance which requires an assessment of PM₁₀ to be carried out.
- 5.2.8. A scheme specific survey measuring particulate matter concentrations has not been undertaken as there was existing monitoring for PM₁₀ within the air quality study area from a monitoring site operated by Tameside Metropolitan Borough Council. This is presented in ES Chapter 5 Air quality (REP3-006) at paragraph 5.6.24.
- 5.2.9. Modelling of PM₁₀ has been undertaken as part of the air quality assessment, the results of which are presented in ES Chapter 5 [(REP3-006)] at paragraph 5.7.23 and within Appendix 5.5 [APP-159] Section 1.2. PM_{2.5} is not required to be assessed as concentrations are below the annual mean Air Quality Strategy (AQS) objective throughout the UK. As stated in ES Chapter 5 (REP3-006) at paragraphs 5.3.18, measured PM_{2.5} concentrations at monitoring sites within Greater Manchester show that there have been no exceedances of the UK AQS annual mean threshold of 25 µg/m³ in recent years. The highest annual mean PM_{2.5} concentration measured in Greater Manchester in 2018 was 12 µg/m³, less than half the annual mean threshold.
- 5.2.10. Although the WHO published revised air quality guidelines in 2021, these are not applicable within UK legislation, therefore, as appropriate and in line with best practice guidance, the air quality assessment for the Scheme applies the UK AQS objectives and Air Quality Directive Limit Values as the relevant threshold for assessment.

No recognition of local and regional reduction targets

- 5.2.11. Please refer to National Highways’ response to Examining Authority's First Written Question 7.4 with regards to consideration of the GMCA Clean Air Plan.
- 5.2.12. Please refer to National Highways’ response to (c) “Omission of measurement of particulate matter (PM)” above with regards to the consideration of the WHO guidelines published in 2021.

Effects on air quality in 2040 have been omitted

- 5.2.13. Please refer National Highways’ response to Examining Authority's First Written Question 7.13.

5.3. National Highways' response: Effects of the Scheme

Air Quality Management Areas (AQMAs)

- 5.3.1. Please see National Highway's response to Examining Authority's First Written Questions 7.15 and 7.16.
- 5.3.2. It should be noted that air quality modelling results in ES Chapter 5 (REP3-006) are presented using the Defra LAQM.TG(16) technical guidance method for the compliance risk assessment and using National Highways alternative Long Term Annual Projection Factors (LTTE6) for human health and ecological receptors. The air quality modelling results using LTTE6 projection factors are used to ensure that the modelled NO₂ concentrations are not too optimistic when making the judgement of the significance of the effects of the Scheme on air quality. Local Authorities will typically have undertaken air quality modelling for the purposes of their Local Air Quality Management duties using the Defra LAQM.TG(16) technical guidance method for determining NO₂ concentrations. As such the assessment undertaken by National Highways using LTTE6 projection factors is not intended to be used as a basis for determining if there is a need to amend the boundaries of AQMAs.

Other effects

- 5.3.3. No comments to provide

Air Quality Directive - Compliance Risk Assessment

- 5.3.4. The compliance risk assessment for the scheme has been carried out in accordance with DMRB LA 105 guidance. The compliance assessment modelling results provided in the ES Chapter 5 Air quality [(REP3-006)] at paragraphs 5.7.25 to 5.7.30 show that the Scheme would not result in an increase in concentrations of annual mean NO₂ where there are existing exceedances of the annual mean NO₂ limit value, nor would there be any new exceedances of the annual mean NO₂ limit value be introduced by the Scheme. Consequently, the Scheme is not considered to be a risk to non-compliance with the Air Quality Directive in any area. The assessment did identify two locations where there are existing exceedances of the annual mean NO₂ limit value, but these locations are expected to have a decrease in annual mean concentrations greater than 0.4 µg/m³ with the Scheme. Given that concentrations are expected to reduce in these locations they do not present a risk to compliance. This is in accordance with DMRB LA105 guidance Figure 2.79.
- 5.3.5. The economic appraisal of air quality considered overall changes in emissions of NO_x and PM_{2.5}, not changes in concentrations. The emissions have been calculated for the Area of Detailed Modelling (ADM) as presented in Figure 2.1 of the Transport Assessment Report (APP-185). The increase in emissions is as a result of an increase in vehicle kilometres over the ADM. The economic appraisal is for a 60 year period from the Scheme opening year of 2025.
- 5.3.6. The assessment 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. 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 vehicles by 2030, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035. 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 monetisation of emissions in the economic appraisal is therefore particularly conservative given the average emissions of the fleet are likely to change substantially beyond 2030.

6. Landscape and Visual Amenity

6.1. CPRE Comments: Summary of NH Assessment of Effects

6.1.1. *By the design year (Year 15) there would no significant effects on landscape or townscape character; three representative viewpoints and twelve visual receptors would continue to experience significant effects. There would not be any significant indirect effects on landscape character or visual amenity within the Peak District National Park due to increases in traffic.*

Context

Landscape Profiles

- 6.1.2. *The scheme lies within two coincident landscape character areas (a) National Character Area Profile (NCA) 54 Manchester Pennine Fringe²²⁵, the transitional zone between the open moorlands of the Dark Peak and Southern Pennines, and the densely populated conurbation of Manchester; (b) the Dark Peak Western Fringe (DPWF) Landscape Character Area²²⁶ (LCA) as defined by the PDNPA. NH has divided these two landscape character areas into scheme level LCAs (SLLCA) and townscape character areas (SLTCA)²²⁷. We will also refer to the Greater Manchester Landscape Character and Sensitivity Assessment that accompanies the Places for Everyone Joint Plan²²⁸ (August 2018) that NH has ignored. Assessment using all these LCAs and LCTs²²⁹ is substantially the same but with some subtle differences which will become apparent.*
- 6.1.3. *In summary the scheme would lie on the northern and western slopes of the River Etherow valley, a landscape with a network of springs, streams and localised damp hollows; pastoral farmland; and an abundance of trees, dense beside streams and settlements. On the valley floor the river follows a meandering channel with wet soils supporting wetland vegetation. Away from the settlements there are isolated farmsteads and small clusters of dwellings (along Edge Lane and Carrhouse Lane) and narrow lanes such as Coach Road.*
- 6.1.4. *NH has used Landscape Designations and Landscape Character Types (Table 7.28) as landscape receptors, which is acceptable for overall character but does not address the effects on individual elements, or features, or specific aesthetic or perceptual effects. To address this omission we have spelt out important individual elements.*

Consultation results

- 6.1.5. *It is important to remember what local people think about this landscape. The consultation questionnaire asked specific questions about the local landscape. Q13a Would you describe the landscape surrounding the Scheme as particularly important to you? Q13b If yes, what are the three most important natural, or man-made features of this landscape to you? The majority 972/1441 (67%) agreed the landscape was particularly important. The most valued elements were its natural, green, undeveloped character, with beautiful, open views of countryside, the farmland, fields and meadows; the wildlife; the green, rolling hills and undulations, often in the distance; and the moors, including Hobson Moor, Mottram Moor and Woodhead. The peace and tranquillity, and the easy access*

to the countryside on footpaths and bridleways were also important. The most frequently mentioned feature was trees.

- 6.1.6. *NH has scoped out of its assessment the majority of landscape elements described in the consultation responses and selected only a handful of named elements (ES Ch.7 Tables 7.4 and 7.5) for consideration and in a defective manner. In the context of the European Landscape Convention (ELC), to which the UK is a signatory, consultation comments should be a material consideration when assessing the landscape effects. The ELC adopts a broad definition of landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. Landscape is important, not just as scenery or a backdrop, but because it links culture with nature, and past with present. It has many values not all of them tangible; it matters to, and is valued by, people and provides a context for people's lives. The ELC applies to all landscapes everywhere and in any condition and is concerned with the whole landscape not just the 'best bits'. It recognises the dynamic nature of landscape – managing the landscapes that we inherit, managing change and creating new landscapes. Good landscape is everyone's right; everyone has a right to be involved in determining its future. The consultation responses are important, should not be ignored, as NH has largely done, and should be a material consideration in the planning balance.*

6.2. National Highways' response: Landscape Effects

Landscape Profiles

- 6.2.1. The Landscape Character Assessments used in the production of the LVIA are considered to be appropriate to the NH LVIA produced. As per ES Chapter 7 Landscape and Visual Effects (REP2-007), paragraph 7.3.3 of the assessment was undertaken following the requirements of the DMRB LA107 standard and informed by guidance set out in GLVIA3.
- 6.2.2. A team of six chartered Landscape Architects (LA's), working collaboratively, were involved in the assessment and the landscape design of the Scheme. As well as design experience all of the team are experienced in LVIA , five of the team attended site, two of the six landscape architects worked specifically on the landscape and visual assessment . and their Professional judgement in line with GLVIA3 was applied.
- 6.2.3. With reference to the Greater Manchester Landscape Character and Sensitivity Assessment that accompanies the *Places for Everyone Joint Plan*, the Applicant has used landscape character assessments that are appropriate in the LVIA produced. The CPRE has used an alternative character assessment which they describe as 'substantially the same but with subtle differences'. Additionally, this document was not raised by the consultees during the consultation period, when establishing the methodology.
- 6.2.4. In reference to not addressing the effects on individual elements, or features, or specific aesthetic or perceptual effects, Tables 7.26 and 7.27 list the key characteristics and refer to the landscape elements and features, and perceptual qualities where applicable, in discerning the magnitude of change. In addition, landscape elements and features are considered throughout ES Chapter 7: Landscape and Visual Effects (REP2-007) as follows:

- Paragraph 7.3.7: Elements and features which are key contributors to landscape character such as woodlands, distinctive individual trees, rural lanes, watercourses, and the overall landscape area.
- Paragraph 7.3.9: The assessment of landscape effects including the change or removal of key existing landscape features e.g. prominent existing individual mature trees or change to a watercourse.
- Paragraph 7.6.4: Landscape Baseline identifies individual landscape receptors including designations, landscape character, land use, elements and features, and settlement and built elements. Elements and features are generally limited to those within the Draft Order Limits.
- Paragraphs 7.6.11 and 7.6.12 refers to detailed tree surveys undertaken. Paragraph 7.6.13 to Ancient Woodland which is all outside the DCO limits.
- Paragraphs 7.6.14 discusses field boundaries. Paragraph 7.6.21 considers Melandra Castle.

6.2.5. Therefore, a diverse range of landscape elements and features have been considered.

Consultation Results

- 6.2.6. In relation to the matter of public perception of landscape value, the receptors were sense checked against the questionnaire responses (1500 number) received from the public which was part of the statutory consultation. Although the responses were considered within the assessment, they did not in themselves influence the outcomes when determining the overall significance as that is based on DMRB and informed by GLVIA3.
- 6.2.7. A number of the geographic locations and places mentioned on the Consultation Response Forms were scoped out. Reasons include:
- Clarity of the geographic location was not provided
 - Geographic location is outside of the 1 km (Landscape) 2 km (Visual) study area
 - Little or no theoretical visibility indicated by the ZTV, and/or
 - Little or no theoretical visibility, indicated by field or desktop top studies, as a result of visual barriers.
- 6.2.8. There were some specific comments relating to named places from small numbers of people, these places have been separated into landscape and visual receptors and considered in Table 7.4 and Table 7.5 with landscape considered to 1 km and visual considered to 2 km in line with the methodology. Refer to Figure 7.1, 7.3 and Fig 7.8 for designation, representative viewpoint and receptor locations.
- 6.2.9. Less specific elements and features have been assessed through the assessment of landscape character.
- 6.2.10. In relation to the matter of the ELC and 'all landscapes matter', the landscape character and townscape character assessment includes the elements and features of all the landscape areas within the study area irrespective of designation.

Landscape Effects

- 6.2.11. The Applicant notes that a separate methodology is relied upon for the CPRE assessment, as per 4.7.7 through to 4.7.27 (REP2-069) (pages 72-78), of the Written Representation and this is not clear (in terms of its relevance and basis), and therefore cannot be commented on.
- 6.2.12. As per ES Chapter 7, Para 7.3.3 'A detailed landscape and visual assessment has been undertaken following the requirements of the DMRB LA 107 standard. The assessment is also informed by guidance set out in GLVIA3 and GLVIA3 Statements of Clarification.'
- 6.2.13. Additionally, as per para 7.3.5 'The assessment was undertaken by two chartered Landscape Architects (LA's) experienced in LVIA and their professional judgement was used in line with GLVIA3.'

National Highways' response: Townscape – The Built Environment

- 6.2.14. The Applicant notes that a separate methodology is relied upon for the CPRE Townscape assessment, as per 4.7.28 through to 4.7.47 (REP2-069)(pages 79-82), of the Written Representation and this is not clear (in terms of its relevance and basis) , and therefore cannot be commented on.
- 6.2.15. As per ES Chapter 7: Landscape and Visual Effects, Paragraph 7.3.3 of the Environmental Statement 'A detailed landscape and visual assessment has been undertaken following the requirements of DMRB LA 107 standard. The assessment is also informed by guidance set out in GLVIA3 and GLVIA3 Statements of Clarification.'
- 6.2.16. Additionally, as per ES Chapter 7: Landscape and Visual Effects, Paragraph 7.3.3 of the Environmental Statement per para 7.3.5' 'The assessment was undertaken by two chartered Landscape Architects (LA's) experienced in LVIA and their professional judgement was used in line with GLVIA3.'

National Highways' response: Visual Effect

- 6.2.17. The Applicant notes that a separate methodology is relied upon for the CPRE visual assessment, as per 4.7.48 through to 4.7.50 (REP2-069) (page 82), of the Written Representation and this is not clear (in terms of relevance and basis), and therefore cannot be commented on.
- 6.2.18. As per ES Chapter 7: Landscape and Visual Effects paragraph 7.3.3 'A detailed landscape and visual assessment has been undertaken following the requirements of DMRB LA 107 standard. The assessment is also informed by guidance set out in GLVIA3 and GLVIA3 Statements of Clarification.'
- 6.2.19. Additionally and as per ES Chapter 7: Landscape and Visual Effects Paragraph, Paragraph. 7.3.5: 'The assessment was undertaken by two chartered Landscape Architects (LA's) experienced in LVIA and their professional judgement was used in line with GLVIA3.'

Photomontages

- 6.2.20. In response to issues identified by CPRE in labelling or direction on photomontages and figures the Applicant responds as follows:

- Figure 7.5 showing the location of VPs in the PDNP but no direction for the views is given (This is noted – Please note that locations and directions are shown on Figure 7.9 sheet 1 of 42)
- Fig 7.9 ix Sheet 31/42 is labelled Trans-Pennine Trail (TPT) but appears to be a view from Arnfield Lane. (This is noted The location of the VP 15 photograph is correct, However, Bottoms Reservoir has been mislabelled as Arnfield Reservoir. This will be added to the Errata Log.)
- Fig 7.9xi – The photomontages for VPs 26 and 27 have been transposed. (This is noted, and will be added to the to the Errata log)
- The comment regarding Viewpoint 26 (sheet 41) is noted. However, it is not a photomontage and is an illustrative baseline viewpoint only.
- Fig 7.9xi – VP 27 is described as view from Snake Path. But is a view from Lantern Pike. Hayfield has been labelled Little Hayfield. (This is noted. Please note that Fig 7.9xi - VP27 was corrected in terms of labelling of Hayfield at Deadline 2 (see REP2 0 013) The correction of the title description will be added to the Errata Log).
- Little Hayfield is out of view. No views are shown north of Little Hayfield where there would be good views of the road from network of paths and road noise. (This is noted. However, this viewpoint was agreed with the PDNP, and please note this is an illustrative baseline viewpoint only.)

7. Effects on the PDNP

7.1. CPRE Comments: Effects on the PDNP

- 7.1.1. *As we believe there would be significant adverse effects on the PDNP we have brought all those effects together below.*
- 7.1.2. *The scheme lies 2Km distant from the PDNP boundary but within the setting of the Park. Impacts would arise on the national park setting from the new infrastructure and its traffic. Increased traffic flows would impact on national park landscapes and visual receptors, and on Tintwistle and Langsett Conservation Areas, and listed buildings along the route.*
- 7.1.3. *The nationally important designation of a National Park confers the highest status of protection for landscape and scenic beauty. The statutory purposes of National Parks are:*
- *to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Parks (our emphasis); and*
 - *to promote opportunities for the understanding and enjoyment of the special qualities [of the Parks] by the public.*
- 7.1.4. *The Government takes National Park purposes extremely seriously. Section 62 of the Environment Act 1995 places a general duty on statutory undertakers, such as the Secretary of State, National Highways and Local Councils, to have regard to the purposes of National Parks when coming to decisions or carrying out their activities relating to or affecting land within the Parks.*
- 7.1.5. *The legislation is followed through in policies at the national (NPPF, NPSNN, UK National Park circular), regional (Greater Manchester Joint Plan) and local level (PDNPA Core Strategy and Development Management Policies; Tameside MBC UDP adopted Nov 2004290; High Peak Borough Council Local Plan adopted 2016).*
- 7.1.6. *Increasing trunk road traffic through the Peak Park is contrary to NPSNN 5.152, the English National Parks and Broads UK Government Visions and Circular, and the PDNPA Core Strategy policies T1 and T2. National Highways' proposal is in breach of all these policies. Increasing traffic and its noise and decreasing tranquillity does not conserve and enhance the National Park, nor increase enjoyment of its special qualities. NH uses the already degraded environment along the trans-Pennine routes to argue for their continuing erosion. By underscoring the effects of the scheme on the PDNP NH has failed to reflect its high sensitivity to change. This implies that NH has not had the necessary regard to the duty imposed on it and, if the Secretary of State accepts NH's assessment, he too will have failed to fulfil that duty.*
- 7.1.7. *The impacts of the scheme once operational on the PDNP would be as follows and are significantly adverse.*

7.2. National Highways' response: Increased Noise and Reduced Tranquillity

- 7.2.1. 4.8.19: Paragraphs 11.3.34 and 11.3.35 of the Noise chapter of the ES (REP1-017, REP3-007) provide details on how roads from the traffic model are selected for inclusion in the operation phase road traffic noise assessment. A map showing the locations of the roads within the study area of the Scheme is provided in Figure 11.5 (APP-134), which includes the A57 and A628. Traffic data from other roads located within the Peak District National Park were analysed for inclusion in the assessment, however, they did not meet the DMRB LA 111 requirements for inclusion in the study area as there were not predicted to change by 1 dB or more. Changes of less than 1dB are classified as negligible in the DMRB and would not be perceptible.
- 7.2.2. 4.8.20: Paragraph 11.9.97 of the Noise chapter of the ES (REP1-017, REP3-007) states that minor increases were predicted on the A57 (Sheffield Road, Woodcock Road, Snake Pass and Snake Road) in the short-term and would be perceptible, and that negligible impacts would occur in the long-term. The impact magnitudes stated are based on the DMRB LA 111 assessment criteria reproduced in Table 11.9 of the ES. This would result in a significant adverse effect to 44 dwellings in Glossop (Sheffield Road and Woodcock Road) due to existing noise levels exceeding the significant observed adverse effect level. No significant effects would occur to footpath users at Snake Road/Snake Pass, although the noise changes at sections of footpath close to these roads would be perceptible.
- 7.2.3. The italicised text "The impact would be limited to within approximately 10 m of the road" was identified as errata and has been removed from reissued versions of the Noise chapters (REP1-017, REP3-007).

7.3. National Highways' response: Wildlife Impacts

- 7.3.1. Operational impacts upon biodiversity, which have been highlighted by CPRE (such as lighting, noise, and roadkill) have been assessed within Chapter 8 of the ES with mitigation measures provided as required. For example, closed-border fencing, acoustic fencing and badger proof fencing has been provided across the majority of the Scheme adjacent to the highway which will prevent ground-based terrestrial mammal species such as deer, badgers, and hedgehog from entering the road, and thus, reducing roadkill and providing noise screening. Furthermore, the lighting scheme has been specifically designed to avoid sensitive ecological features (such as the River Etherow). The recommendations from the Bat Conservation Trust and the Institution of Lighting Professionals, titled 'Guidance Note 8 Bats and Artificial Lighting' have been followed when designing the lighting proposals. Vegetation screen planting (including woodland and hedgerow) has been used to provide dark corridors and improved habitat links and quality. Taking these measures into consideration, alongside the net gain in habitats (such as woodland and hedgerow) as a result of the Scheme, it is considered that appropriate measures can be delivered.

National Highways' response: Impacts on Landscape

- 7.3.2. As per Para 7.3.3 'A detailed landscape and visual assessment has been undertaken following the requirements of DMRB LA 107 standard. The assessment is also informed by guidance set out in GLVIA3 and GLVIA3 Statements of Clarification.' The conclusion of the assessment is that for landscape effects it is not considered that there would be any significant indirect effects on the landscape character within the Peak District National Park as a result of the Scheme.
- 7.3.3. The study area is confirmed within the ES chapter 7: methodology, this confirms that landscape assessment study area extends to 1km, this was considered adequate given the nature of the scheme and that 'the presence of existing highway infrastructure generally precludes any likelihood of significant landscape and visual effects occurring over distances of greater than 1km'.
- 7.3.4. To inform the study area for the visual assessment a ZTV covering 10km was produced, this established the theoretical area from which any part of the scheme may be seen. The study area used for the visual assessment is 2 km offset from Scheme limits, this was confirmed by further desktop assessment and field surveys, the study area is considered appropriate as a result of the undulating topography and potential for sensitive receptors to view the Scheme from adjacent higher ground, for instance from within the PDNP.
- 7.3.5. The assessment of indirect visual effects within the Peak District National Park is as per methodology agreed with the stakeholders, as detailed within chapter 7 section 7.3, it focuses on Landscape Character Types within the Peak District National Park and the routes likely to experience potential changes to vehicular flows as a result of the Trans-Pennine Upgrade Scheme during its operation..

7.4. Other matters

National Highways' response: More Carbon Emissions

- 7.4.1. Please refer to the Applicant's response to section 4.4 of the Written Representation.

National Highways' response: Effects on air quality

- 7.4.2. Please refer to the Applicant's response to the "Omission of AQMAs" in section 5.2 above.

8. Cumulative Effects

8.1. CPRE Comments: Cumulative Effects - Context

- 8.1.1. *Schedule 4, paragraph 5 of the EIA Regulations states that an ES should include:*
- 8.1.2. *A description of the likely significant effects of the development on the environment, resulting from inter alia ... (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.*
- 8.1.3. *The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development.*
- 8.1.4. *The EIA Guidance clarifies cumulative effects can arise from can arise from the interaction between all of the different projects in the same area; and the interaction between the various impacts within a single project.*
- 8.1.5. *Paragraph 4.15 of the NPSNN states that 'All proposals for projects that are subject to the European Union's Environmental Impact Assessment Directive and are likely to have significant effects on the environment, must be accompanied by an environmental statement, describing the aspects of the environment likely to be significantly affected by the project'.*
- 8.1.6. *Paragraph 4.16 deals with significant cumulative effects and advises that 'any environmental statement should provide information on how the effects of the Applicant's proposal would combine and interact with the effects of other existing or consented development.'*
- 8.1.7. *PINS advice Note 17 on Cumulative Impacts Assessment, version 2, 2019 provides the criteria for developments to be considered*

8.2. National Highways' response: Cumulative effects on landscape and visual effects

- 8.2.1. National Highways follows the methodology and 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.
- 8.2.2. As per ES Chapter 7: Landscape and Visual Effects (REP2-007) Paragraph 7.3.3 'A detailed landscape and visual assessment has been undertaken following the requirements of DMRB LA 107 standard. The assessment is also informed by guidance set out in GLVIA3 and GLVIA3 Statements of Clarification.'
- 8.2.3. The overall conclusions of ES Chapter 7 were carried through into ES Chapter 15: Cumulative Effects where the cumulative landscape effects were considered for single and different projects. This assessment was carried out in line with DMRB LA 104 and PINS Advice Note 17. Further details of the Cumulative Assessment methodology, along with the conclusions of the cumulative

Landscape and Visual effects assessment, are presented in ES Chapter 15: Cumulative Effects.

8.3. National Highways' response: Carbon Emissions

- 8.3.1. The Applicant considers that the recent response to the SoS's consultation letter (dated 26 January 2022 and 2 February 2022), which is referred to in the response to section 4.4 Effects on Greenhouse Gas Emissions of the Written Representation, is relevant here. It should be noted that in response to requests in Item 6(d) of Issue Specific Hearing 2 (ISH2) to respond in writing with respect to the SoS's consultation, the Applicant will submit this in a Scheme specific response on or before Deadline 6. The appropriate section is as follows:
- 8.3.2. 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.
- 8.3.3. In respect of the assessment of cumulative effects, DMRB Chapter LA 104- Environmental assessment and monitoring 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:*
- *a single project (e.g. numerous different effects impacting a single receptor); and*
 - *different projects (together with the project being assessed).*
 - *Paragraph 3.21.2 The assessment of cumulative effects should report on:*
 - *roads projects which have been confirmed for delivery over a similar timeframe;*
 - *other development projects with valid planning permissions or consent orders, and for which EIA is a requirement; and*
 - *proposals in adopted development plans with a clear identified programme for delivery.*
- Paragraph 3.22 The assessment of cumulative effects shall:*
- *establish the zone of influence of the project together with other projects;*
 - *establish a list of projects which have the potential to result in cumulative impacts; and*
 - *obtain further information and detail on the list of identified projects to support further assessment."*
- 8.3.4. The DMRB LA 114, Climate describes the approach to be undertaken to assess and evaluate the climate impacts and adaptation for schemes. This is set out in Chapter 15 of the environmental statement for the Scheme.
- 8.3.5. 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).

8.3.6. The traffic modelling for the Scheme has been undertaken in line with Transport Appraisal Guidance published by the Department for Transport (DfT). The Transport Assessment Report for the Scheme has been submitted to the DCO examination. 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:

- The proposed scheme and adjoining Strategic Road Network and local road network;
- 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;
- 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 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
- 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/TEMPRO growth factors for car usage, and growth in freight is derived from DfT's National Transport Model .

8.3.7. 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.

8.3.8. 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)."

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