

# **A66 Northern Trans-Pennine Project**

## **4.5 Statement of Common Ground Natural England (Rev 4)**

**APFP Regulations 5(2)(q)**

**Planning Act 2008**

**Infrastructure Planning (Applications: Prescribed Forms and  
Procedure) Regulations 2009**

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A66 Northern Trans-Pennine Project  
Development Consent Order 202X

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**4.5 STATEMENT OF COMMON GROUND WITH  
NATURAL ENGLAND**

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## **1 Introduction**

### **1.1 Purpose of this document**

- 1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed A66 Northern Trans-Pennine project ("the Application") made by National Highways Limited ("National Highways") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").
- 1.1.2 This SoCG seeks to summarise and explain the respective parties' positions on issues but does not seek to replicate in full information which is available elsewhere within the Application documents. All Application documents are available on the Planning Inspectorate website.
- 1.1.3 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it, and where agreement has not been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.

### **1.2 Parties to this Statement of Common Ground**

- 1.2.1 This SoCG has been prepared by National Highways as the Applicant. It has been shared with Natural England for comment prior to the submission of the DCO, at DCO submission and in advance of Deadlines 3, 5 and 8. It is a joint statement by the Applicant and Natural England for submission at Deadline 8. A few issues remain under discussion around air quality, the Habitat Regulations Assessment, and monitoring of the drainage ponds. These issues are detailed in Table 3-2 of this SoCG and a final position will be agreed on these issues with Natural England by Deadline 9. A final, signed SoCG will be issued at Deadline 9.
- 1.2.2 The Applicant has set out the detail of the issues raised by Natural England to date and each of the SoCG parties' respective positions. This is intended to assist the Examining Authority in understanding where discussions have reached.
- 1.2.3 National Highways (formerly Highways England) became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State.
- 1.2.4 Natural England's role in relation to the DCO process derives from the Planning Act 2008 (the 2008 Act) and secondary legislation made under the 2008 Act. The roles and responsibilities of Natural England under the 2008 Act fall into the following categories:

- as one of the prescribed consultees under section 42 of the 2008 Act that applicants are required to consult before submitting a Nationally Significant Infrastructure Projects (NSIP) application.
- as one of the consultation bodies that the Planning Inspectorate must consult before a scoping opinion is adopted in relation to any Environmental Impact Assessment (EIA) and as a prescribed consultee for the environmental information submitted pursuant to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009.
- as a statutory party in the examination of DCO applications
- as a statutory nature conservation body under the Conservation of Habitats and Species Regulations 2010 (Habitats Regulations) in respect of the HRA.
- as a consenting and licensing body/authority in respect of protected species and operations likely to damage the protected features of SSSIs pursuant to the Wildlife and Countryside Act 1981 (as amended) (WCA 1981) and in relation to European protected species under the Habitats Regulations.

1.2.5 National Highways has aimed to address any issues or concerns raised by Natural England through ongoing dialogue and engagement.

## 1.3 Terminology

1.3.1 In the table in the Issues section of this SoCG:

- “Agreed” indicates area(s) of agreement between the Applicant and Natural England
- “Under discussion” indicates area(s) of current disagreement between the Applicant and Natural England perspective, where resolution remains possible, and where parties continue discussing the issue to determine whether they can reach agreement by the end of the examination
- “Not agreed” indicates a final position for area(s) of disagreement between the Applicant and Natural England, where the resolution of divergent positions has not been possible, and parties agree on this point.

1.3.2 It can be assumed that any matters not specifically referred to in the Issues section of this SoCG are not of material interest or relevance to Natural England, and therefore have not been the subject of any discussions between the parties.

## 2 Record of Engagement

2.1.1 A summary of the key meetings and correspondence that has taken place between National Highways (NH) and Natural England (NE) in relation to the Application is outlined in Table 2-1.

Table 2-1 Record of Engagement

Date	Form of correspondence	Key topics discussed and key outcomes
08.02.2021	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the Evidence Plan, scheme overview and the proposed baselines surveys, modelling and assessment to underpin the HRA.
11.02.2021	Online Meeting	Meeting of the Ecological Impact Assessment TWG with NE in Attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the Evidence Plan, scheme overview and the proposed baselines surveys, modelling and assessment to underpin the EclA.
25.02.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the Evidence Plan, environment surveys, approach to mitigation and environmental designated funds.
12.03.2021	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions the Evidence Plan, a scheme-by-scheme overview, viewpoint consultation, landscape character assessment, AONB Management Plan, area of high landscape value, integrated design and Rochdale envelope.
16.03.2021	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on ornithology strategy, bats and red squirrels.
18.03.2021	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussion on site and proximity to schemes, Biodiversity Survey Strategy and HRA Baseline, Baseline Surveys Strategy and introduction to SAC fluvial geomorphology.
25.03.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on the Evidence Plan, project updates, Warcop AONB, Trout Beck and approach to Stat Con and PEIR.

Date	Form of correspondence	Key topics discussed and key outcomes
07.04.2021	Online Meeting	Meeting between NE and the IPT at the regular Geology Soils meeting – Natural England.
22.04.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on programme updates, design updates, the Evidence Plan and sifting matrix.
26.04.2021	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on Zone of Theoretical Visibility (ZTV), definition of North Pennine Area of Outstanding Natural Beauty (AONB) setting, special qualities of the Greta Bridge and Bowes Conservation Areas.
29.04.2021	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on badger bait marking, otter halt monitoring, MoRPH, and air quality and Affected Road Network (ARN).
21.05.2021	Online Meeting	Meeting between NE, the AONB Partnership and the A66 IPT to review the Appleby to Brough Scheme. Meeting included discussions on the Appleby to Brough alignment and alignment at MOD facility.
24.05.2021	Online Meeting	Meeting between NE and the IPT to at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 Junction 40 Penrith, Kemplay Bank Roundabout, Penrith to Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby, Stephen Bank to Carkin Moor and options appraisal.
27.05.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on the Evidence Plan and a scheme-by-scheme design walkthrough.
10.06.2021	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on bat surveys (overview of methods).
16.06.2021	Online Meeting	Meeting between NE, the AONB Partnership and the A66 IPT review the Appleby to Brough Scheme. Meeting included discussions on updates and the alternative Parish Council route.
24.06.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on design updates, the approach to mitigation, the environmental designated funds process, the Scoping Report and the evidence plans.
28.06.2021	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 Junction 40 Penrith, Kemplay Bank Roundabout, Penrith to



Date	Form of correspondence	Key topics discussed and key outcomes
		Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby and Stephen Bank to Carkin Moor.
08.07.2021	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussion on proposed route alternatives for scheme 4/5 & 6, site Trout Beck geomorphology modelling, HRA programme and documentation and Sleastenhaw restoration.
22.07.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussion on environmental designated funds.
10.08.2021	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on ornithology, bats, mammals, terrestrial invertebrates, river corridor survey and macrophytes, aquatic invertebrates, fish surveys, white-clawed surveys and key PEIR findings.
12.08.2021	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on updates on surveys, HRA documentation programme, HRA screening summary and scheme Details.
16.08.2021	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 Junction 40 Penrith, Kemplay Bank Roundabout, Penrith to Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby, Stephen Bank to Carkin Moor and Scotch Corner.
26.08.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on EIA Scoping, PEIR status and assessment process, Statutory Consultation, design updates, Appleby to Brough and Rokeby.
10.09.2021	Online Meeting	Meeting between NE, NP AONB, Defra, NH and A66 IPT to discuss Position Statement. Meeting included discussions on the summary of the Warcop alignment.
03.11.2021	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on survey/assessment updates, response to feedback and requests for specific design elements.
03.11.2021	Online Meeting	Meeting between NE and the IPT discuss issues around Warcop
11.11.2021	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical



Date	Form of correspondence	Key topics discussed and key outcomes
		Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on habitats, reptiles, ornithology, bats, mammals, freshwater ecology and feedback following Stat Con period.
11.11.2021	Online Meeting	Meeting with Natural England, AONB Partnership, National Highways and Project Team to discuss environmental impacts and considerations around Warcop.
25.11.2021	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on programme updates, design change updates and Stat Con updates.
01.12.2021	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on key findings from Stat Con, LVIA update and the landscape design approach.
13.01.2022	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on design change and targeted consultation, approach to environmental mitigation and response to Stat Con design change.
20.01.2022	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on LVIA update and a scheme 6 -9 update.
26.01.2022	Online Meeting	Meeting of the Habitats Regulations Assessment TWG with NE in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on survey updates, assessment updates, construction mitigation and methods, design mitigation and introduction / spread of INNS.
26.01.2022	Online Meeting	Meeting between NE and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on surveys, construction mitigation methods, species specific, design mitigation, scheme-by-scheme mitigation.
31.01.2022	Online Meeting	Meeting between NE and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on LVIA update and a scheme 1 – 5 Update.
10.02.2022	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on project/programme updates and environmental mitigation approach.
10.03.2022	Online Meeting	Meeting between NE, EA, NH and A66 IPT to discuss issues around Warcop. Meeting included discussions on Warcop design.

Date	Form of correspondence	Key topics discussed and key outcomes
24.03.2022	Online Meeting	Meeting of the Statutory Environmental Bodies Focus Group with NE in attendance. Meeting included discussions on Trout Beck, Warcop and Moor Beck.
04.04.2022	Online Meeting	Meeting between NE, EA, NH, CCC and A66 IPT to discuss issues around Warcop. Meeting included discussions on Warcop design and Trout Beck Crossing design.
04.05.2022	Online Meeting	Meeting between NE and National Highways Introductory meeting to discuss the content of the SoCG. Agreed to diarise update session after submission of the DCO.
25.07.2022	Online Meeting	Meeting to discuss and agree forward plan of meetings
08.08.2022	Online Meeting	Check in meeting to discuss progress on SoCGs and response to DCO documents.
05.09.2022	Online Meeting	Check in meeting to discuss progress on SoCGs.
13.09.2022	Online Meeting	Meeting between National Highways and the statutory environmental bodies to discuss the Environmental Management Plan (EMP)
03.10.2022	Online Meeting	Check in meeting to discuss progress on SoCGs.
17.10.2022	Online Meeting	Check in meeting to discuss progress on SoCGs and update on Examination following Rule 6 letter publication.
31.10.2022	Online Meeting	Check in meeting to discuss progress on SoCGs.
03.11.2022	Online Meeting	Meeting between Natural England and National Highways to discuss Natural England's comments on the Environmental Management Plan (EMP)
14.11.2022	Online Meeting	Check in meeting to discuss progress on SoCGs.
28.11.2022	Online Meeting	Check in meeting to discuss progress on SoCGs.
28.11.2022	Email	Natural England email on their position on nutrient neutrality in relation to the Project.
08.12.2022	Online meeting	Meeting between Natural England and National Highways to discuss Natural England's comments on air quality.
15.12.2022	Online meeting	Meeting between Natural England and National Highways to discuss an area of developing fen on the Stephen Bank to Carkin Moor scheme
09.01.2023	Online Meeting	Check in meeting to discuss progress on SoCGs.
06.02.2023	Online Meeting	Meeting with Natural England to discuss revised PADSS submitted at ExA Deadline 3, Written Questions from the ExA and Change consultation. Also the revised SOCG submitted at Deadline 3.
09.02.2023	Online Meeting	Meeting between National Highways and the SEBs to discuss ExA's Written Questions.

Date	Form of correspondence	Key topics discussed and key outcomes
20.02.2023	Online Meeting	Meeting between Natural England and National Highways to discuss and update the content of the SoCG.
06.03.2023	Online Meeting	Meeting between Natural England and National Highways to discuss and update the content of the SoCG.
10.03.2023	Email	Email from Natural England containing comments on their position on issues considered within the draft SoCG.
30.03.2023	Online Meeting	Meeting between the Environment Agency, Natural England and National Highways to discuss the content of the SoCG.
03.04.2023	Online Meeting	Meeting between Natural England and National Highways to discuss and update the content of the SoCG.
13.04.2023	Online Meeting	Meeting between Natural England and National Highways to discuss and update the content of the SoCG in addition to discussions around the Habitat Regulation Assessments.
25.04.2023	Online Meeting	Meeting between Natural England and National Highways to discuss the REIS.
04.05.2023	Email	Email from Natural England outlining their comments on the Ammonia Assessment note.
11.05.2023	Online Meeting	Meeting between Natural England and National Highways to discuss Natural England's comments on the Ammonia Assessment note.
15.05.2023	Email	Email from Natural England containing comments on their position on issues considered within the draft SoCG.

2.1.2 It is agreed that this is an accurate record of the key meetings and other forms of consultation and engagement undertaken between (1) National Highways and (2) Natural England in relation to the issues addressed in this SoCG.

### 3 Issues

- 3.1.1 Tables 3-1, 3-2 and 3-3 provide details of the issues raised between the parties and the status.
- 3.1.2 It should be noted that the numbering of issues has been retained from the Statement of Common Ground with the Environment Agency (Rev 2) submitted at deadline 3 (Document Reference 4.5, REP3-035).
- 3.1.3 Where possible, related issues have been grouped together with signposting provided, as necessary, to where the full details of the positions for each party can be read.
- 3.1.4 To focus this SoCG on the pertinent issues, issues which were stated as under discussion at the time of DCO submission but are no longer considered to be relevant (as the issues are either addressed in the DCO documents or outstanding issues are now recorded under relevant representations) are contained in Appendix A of the Statement of Common Ground with Natural England (Rev 3) submitted at deadline 5 (Document Reference 4.5, REP5-009) and are not repeated in this document. In addition, further detail in relation to historical positions set out by either party in discussing issues where relevant to provide further context to the Examining Authority on the dialogue at deadline 5 are contained in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009) and are not repeated in this document.

Table 3-1: Record of Issues – Agreed Issues

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-1.1 M6 Junction 40 to Kemplay Bank - Wet Woodland Consideration	Natural England Statutory Consultation Response - 22 October 2021 (page 2)	The construction site is in the floodplain, as is the settlement pond. Consideration needs to be given to creating these above the floodplain. The site has been identified for species rich grassland and wetland; however, it would be worth considering wet woodland in this location, particularly the wetland area to help provide some protection to the road if the river moves.  This position is agreed subject to no further design changes. Natural	The Environmental Mitigation Maps (Document Reference 2.8, APP-041) (Map number HE56527-AMY-EGN-S00-MP-LX-200002) identify areas for woodland creation as part of the approach to nature conservation and biodiversity for this Scheme.	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.</p>		
<p>3-1.2 Temple Sowerby to Appleby - River Eden Enhancement</p>	<p>Natural England Statutory Consultation Response - 22 October 2021 (page 3)</p>	<p>The area between the new junction and River Eden could be included as mitigation / enhancement and planted with trees. This would provide more long-term resilience to the road network in the event of river movement.</p> <p>This position is agreed subject to no further design changes. Natural England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.</p>	<p>Full details of the outline mitigation measures associated with the River Eden are included within the Environmental Management Plan (EMP) (Document Reference 2.7, APP-019).</p>	<p>Agreed</p>
<p>3-1.3 Design and function of balancing ponds</p>	<p>Verbal comments in Technical Working Groups</p>	<p>Need reassurance that all of the balancing ponds will be wildlife friendly and can accommodate surface water run-off and that there will be no pollutants entering the SAC watercourse.</p>	<p>The drainage design for the Project ensures that there is no increase in existing flows. Ponds and other drainage features have been designed to store the additional run-off produced by the scheme and restrict the peak flow rate to no greater than the existing run off rates for each catchment. The calculations for this can be found in the Existing and Proposed drainage sections (separate section for each scheme) of Document Reference 3.4 Environmental Statement Appendix 14.2 Flood Risk Assessment and Outline Drainage Strategy, APP-221.</p> <p>The drainage system design includes provision for treating the run-off from the road prior to discharging it to a</p>	<p>Agreed</p>

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>watercourse. No deterioration of water quality is predicted as a result of the Project. During construction measures outlined within the EMP (Document Reference 2.7, APP-019) will be implemented and monitored. During operation the HEWRAT tool has been used to guide the design of the drainage system to be compliant with the Environmental Quality Standards (EQSs) for the receiving watercourses. The HEWRAT assessment undertaken on the drainage design demonstrated no adverse impact. Future revisions of the drainage design will be subject to updated HEWRAT assessments to maintain compliance.</p>	
3-1.4 The project: soil storage	Natural England Statutory Consultation Response - 22 October 2021 (page 3)	NE welcomes the early consideration of space required in the Site Boundary for soil storage, including the programming of material movements to reduce storage periods and subsequent movements after placement.	The Order Limits shown on the General Arrangement Drawings (Document Reference 2.5, APP-011 to APP-018) provide space for the storage of soils.	Agreed
3-1.5 Biodiversity Metric	Natural England Statutory Consultation Response - 22 October 2021 (page 5)	Note that the Environmental Masterplans to be submitted with the DCO application will indicate areas of ecology mitigation and enhancement, including watercourse replaced with two for each one lost. An interesting concept, and the A66 improvements should be designed to ensure that no watercourses are lost. The Defra Biodiversity Metric 2.0 has been	<p>The project had already commenced on the basis of implementing Metric 2.0, and had completed all of the surveys, when Metric 3.1 was released. The project has therefore continued utilising Metric 2.0.</p> <p>Pending the introduction of secondary regulations (which have recently been consulted upon by Government), a biodiversity net gain assessment is not</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		updated this summer (July 2021) – it is now the Biodiversity Metric 3.0	currently a requirement for Nationally Significant Infrastructure Projects and is therefore not included as part of the Application documents.  However, the Applicant is working on a Biodiversity Metric Calculation based on Metric 3.1, which has been shared with Natural England on 02.05.2023.	
3-1.6 Crayfish and Water Environment	Natural England Statutory Consultation Response - 22 October 2021 (page 5)	Appropriate measures also need to be taken to prevent the introduction of signal crayfish and crayfish plague into the watercourses, particularly in the Eden catchment.  This position is agreed subject to no further design changes. Natural England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.	Environmental Management Plan (EMP) (Document Reference 2.7, APP-019) confirms that no part of the project can start until a Landscape and Ecological Mitigation Plan (LEMP) has been prepared, consulted on and approved by. The EMP confirms at D-BD-09 that no part of the Project can start until an Invasive Non-Native Species Management Plan (INNS MP), is developed in detail in substantial accordance with the essay plan included in the EMP (Annex B15, Document Reference 2.7, APP-035) and approved by the Secretary of State as part of a second iteration EMP.  Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009)..	Agreed
3-1.7 Bat Roosts	Natural England Statutory Consultation Response - 22 October 2021 (page 4 and 5)	This (PEI Report) states that “limited bat activity survey data was available at the time of writing” and therefore the assessment of impacts on bats has been undertaken based on desk study	Figure 6.8 of the Environmental Statement (Document Reference 3.3, APP-076) provides the results of the Preliminary Bat Roost Assessment, including locations. Full survey results	Agreed



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>information and phase 1 habitat surveys. However subsequent sections of the report provide information on the number of bat passes recorded on different parts of the project. In light of the fact that some surveys were undertaken in 2020, it is disappointing that there is no quantitative assessment of bat activity from those surveys to inform potential impacts.</p> <p>The results of the surveys make reference to roosts identified in the desk study, confirmed roosts identified during the Preliminary Bat Roost Assessments and structure and trees within moderate or high potential to support bats, however no information is provided on the proximity of these roosts to the Scheme and the locations of these roosts are not provided on any figures. It is therefore not possible to assess the potential impact on these roosts from the construction or operation of the Schemes.</p> <p>Position is agreed dependent on National Highways obtaining relevant licences.</p>	<p>for bats are detailed within Appendix 6.11 (Bats) within Volume 3 of the Environment Statement (Document Reference 3.4, APP-162).</p> <p>The surveys undertaken during the 2021 survey season identified 128 individual bat roosts (trees and structures) across 8 different species.</p> <p>National Highways acknowledges the need to obtain all relevant licences.</p>	
3-1.8 Bats - Habitat Fragmentation	Natural England Statutory Consultation Response - 22 October 2021 (page 6)	The effects of habitat loss and fragmentation in relation to bats is not adequately described. The baseline conditions section of the report notes the identification of a number of potential crossing points along the alignment of the schemes. It is	Chapter 6 (Biodiversity) of the Environmental Statement (Document Reference 3.2, APP-049) provides an assessment of how the scheme would affect wildlife and habitats and sets out mitigation measures proposed to reduce adverse effects. Full survey results for	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>anticipated that habitat clearance works during construction have the potential to affect how bats use the landscape. The potential impacts on bats use of the landscape both on existing road corridors and on new alignments needs to be clearly identified within the Environmental Statement for the Schemes.</p> <p>This position is agreed subject to no further design changes. Natural England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.</p>	<p>bats are detailed within Appendix 6.11 (Bats) within Volume 3 of the Environment Statement (Document Reference 3.4, APP-164).</p> <p>Mitigation is embedded into the design of the Project to minimise habitat loss and fragmentation. These commitments are recorded in the Environmental Management Plan (EMP) (Document Reference 2.7, APP-019) which confirms that no part of the project can start until a Landscape and Ecological Mitigation Plan (LEMP) has been prepared, consulted on and approved by the Secretary of State as part of a second iteration EMP. The LEMP shall be in substantial accordance with the Outline LEMP essay plan set out in Appendix B1 to the EMP (Document Reference 2.7, APP-021) which confirms the embedded mitigation for bats.</p> <p>Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).</p>	
3-1.9 Agricultural Land	Natural England Statutory Consultation Response - 22 October 2021 (page 9)	Based on the information provided with the application documents, it appears that the proposed development comprises soil supporting agricultural land of ALC Subgrade 3a (Best and	ALC field surveys and impacts on agricultural businesses have been undertaken as part of the assessment work to support the completion of the ES. This is reported as part of Appendix	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>Most Versatile (BMV) and 3b (non-BMV); with some Grade 2 (BMV); Grade 4 (non BMV) agricultural land, non-agricultural land and urban land within the route wide study area. The ALC grades have been determined from a desk-based assessment using the MAFF 1988 Guidelines. However, the assumptions are not stated for the desktop assessment of ALC grade; nor has the climatic data used been presented.</p> <ul style="list-style-type: none"> <li>- The detailed ALC and soil survey must be undertaken by suitably qualified and experienced individuals.</li> <li>- Representative soil pits need to be dug to support the ALC grades (to determine subsoil structure (for wetness and droughtiness assessment) or subsoil stone content and rooting for which is also a component of soil droughtiness assessment).</li> <li>- Laboratory assessment of soil particle size should be undertaken as appropriate.</li> </ul>	<p>9.5 (Agricultural Land Classification (ALC) Factual Soil Survey Report) within Volume 3 of the ES (Document Reference 3.4, APP-196).</p> <p>During the survey, soils were examined via a combination of auger borings and soil description pits to a maximum depth of 1.2m. Soils were described using hand texturing to determine the soil type. Laboratory assessment of soil particle size has been undertaken and reported in the survey. The results of the soil survey were used in conjunction with the agro-climatic data given in the sections for each scheme below to classify the land according to the revised guidelines for Agricultural Land Classification issued in 1988 by the Ministry of Agriculture, Fisheries and Food (now Defra).</p>	
3-1.10 Landscape and Visual	Natural England Statutory Consultation Response - 22 October 2021 (page 12)	Our landscape advice in relation to actual effects is at a high level. As a statutory consultee we advise that the views of the North Pennines AONB Partnership are sought and given appropriate consideration and weight given their more detail knowledge of	The landscape and visual impact assessment, which will be set out in Chapter 10 (Landscape and Visual) of the ES (Document Reference 3.2, APP-053), has used representative viewpoints throughout the scheme, as agreed through the Technical Working Groups (which also included attendance	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		the proposed development sites and their wider landscape setting.	from representatives of the North Pennines AONB Partnership). Additional viewpoints, including elevated views from the AONB have been reviewed. The ES will also incorporate a description of the interim mitigation due to growth between year 1 and year 15.	
3-1.11 District Level Licensing	Verbal comment at meeting 08.08.2022	Natural England have agreed the location and payments required for the compensatory ponds through the District Level Licensing Team.	Offsite mitigation has been purchased through a district level licence provided by Natural England (para 6.8.9, Document Reference 3.2, APP-049). The Impact Assessment and Conservation Payment Certificate (IACPC) is provided as an annex to ES Appendix 6.6: Amphibian (Document 3.4, APP-159).	Agreed
3-1.12 Asby Complex SAC and Ravensworth Fell SSSI	Natural England Relevant Representation (NE key issue ref 4.1, RR-180)	<p>Justification needs to be given to understand why the Asby Complex SAC and Ravensworth Fell SSSI has been scoped out of the air pollution assessments given that they are within 200m of the Affected Road Network.</p> <p>Further evidence needs to be provided to understand why this SAC and SSSI have been scoped out and needs to be referenced within section 6.10.469.</p> <p>Natural England will be able to comment on mitigation / compensation if it is needed once the evidence asked for is provided.</p> <p>If needed mitigation and compensation measures will need to be assessed in the HRA and secured within the DCO.</p>	Asby Complex SAC and Crosby Ravensworth Fell SSSI were scoped out of further assessment although the designated site falls within 200m of the ARN. Both locations were modelled to have a positive change as reported in Appendix 5.4 of the Environmental Statement (Document Reference 3.2, APP-153) as a result of changing traffic flows along the ARN. Therefore, they are not expected to exceed the 1% threshold for adverse impacts where a significant adverse effect may occur, and no further assessment is required.	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		Natural England note the assessment and the declining traffic flows		
3-1.13 Biodiversity; 3-1.14 Hydrological impact; 3-2.14 Aquatic macrophytes and aquatic invertebrates; 3-2.15 Otter; 3-2.17 Biodiversity benefits; 3-2.22 Woodland; 3-2.27 Flow control structures	Natural England Relevant Representation (RR-180) and additional commentary in Natural England Written Representation (REP1-035)	<u>Natural England requested various clarifications on Chapter 6 Biodiversity of the Environmental Statement</u> (Document Reference 3.2, APP-049) as detailed in Table 3-1 and Table 3.-2 of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	National Highways have provided clarification to Natural England to address their concerns.  Further detail on the Applicant's position is included in Table 3-1 and Table 3-2 of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Agreed
3-1.15- 16 EMP; 3-1.25 - 30 EMP; 3-1.33 - 34 EMP; 3-1.37 EMP	Natural England Relevant Representation (RR-180)	Natural England have requested various clarifications or updates to the Environmental Management Plan (Document Reference 2.7, APP-019) as detailed in Table 3-1, Table 3-2 and Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	National Highways have provided clarifications and where appropriate have updated the draft EMP (Document Reference 2.7, REP3-004) to address Natural England's concerns.  Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Agreed
3-1.17 - 22 EMP; 3-1.35 - 36 EMP	Natural England Relevant Representation (RR-180)	Natural England have requested various clarifications or updates to Annex C1 Method Statement for Working in and Near the SAC (Document Reference 2.7, APP-036) as detailed in Table 3-1 and Appendix B of the Statement of Common Ground	National Highways have provided clarifications and where appropriate have updated Annex C1 Method Statement for Working in and Near the SAC of the EMP (Application Document 2.7, REP3-019) to address Natural England's concerns.	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	
3-1.23 EMP; 3-1.31 EMP	Natural England Relevant Representation (RR-180)	Natural England have requested various clarifications or updates Annex B1 Outline Landscape and Ecology Management Plan (Document Reference 2.7, APP-021) as detailed in Table 3-1 and Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	National Highways have provided clarifications and where appropriate have updated Annex B1 Outline Landscape and Ecology Management Plan of the EMP (Document Reference 2.7, REP3-003) to address Natural England's concerns. Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Agreed
3-1.24 PDP; 3-1.32 PDP	Natural England Relevant Representation (RR-180)	Natural England have requested various clarifications or updates to the Project Design Principles document (Document Reference 5.11, APP-302) as detailed in Table 3-1 and Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	National Highways have provided clarifications and where appropriate have updated the Project Design Principles document (Document Reference 5.11, REP3-040) to address Natural England's concerns. Further detail on the Applicant's position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Agreed
3-1.38 Nutrient Neutrality	Email from Natural England on 28.11.2022	Natural England can confirm that their nutrient neutrality advice applies to all types of development that would result in a net increase in population served by a wastewater system, including new	National Highways thanks Natural England for the confirmation of their position on nutrient neutrality in relation to the Project.	Agreed



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>homes and student accommodation. The River Eden SAC catchment is currently failing it's Phosphorous targets.</p> <p>We would not expect a highways scheme to fall under the nutrient neutrality criteria as we would expect that the workforce either do not reside on site or are likely to be drawn from the local catchment, we would expect any surface water drainage to be treated through the usual EMP and CEMP criteria.</p>		
3-1.39 Stephen Bank to Carkin Moor: Emerging Fen Habitat:	Verbal comments at meeting 15.12.2023	Based on the information presented at the meeting on 15 <sup>th</sup> December 2022 Natural England concluded that once the changes to the mitigation have been secured (the enhancement of the areas of retained fen instead of woodland planting) the additional area of fen identified within the Order Limit was not considered a material change to the ES and does not change the identified significant effects outlined in ES Chapter 6 Biodiversity (Document Reference 3.2 APP-049).	A meeting was held on 15th December 2022 between National Highways and Natural England to present National Highways' position on an area of emerging fen habitat identified on the Stephen Bank to Carkin Moor scheme. Full detail of National Highways position is included in Appendix B of the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).	Agreed
3-2.1 Appleby to Brough	Natural England Statutory Consultation Response - 22 October 2021 (page 8)	<p>Crossing of Tributaries of the Eden SAC need to be passable for freshwater species such as Salmon, Otter and Lamprey species to avoid species fragmentation.</p> <p>This position is agreed subject to no further design changes. Natural England would wish to be updated on any changes and provided the</p>	Noted: As described in the Environmental Statement Chapter 6 Biodiversity (Document Reference 3.2, APP-049) watercourse crossings have been designed to facilitate the free movement of aquatic and riparian species, for example, through culverts. Watercourse crossings have been designed to support natural river	Agreed



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>opportunity to comment and agree any subsequent changes.</p>	<p>processes in line with CIRIA 2019. Mammal passage will also be maintained where culverts are used on minor watercourses. Design has been led by detailed freshwater ecology surveys including riverine eDNA.</p>	
<p>3-2.3 Alternatives – Table 3.6</p>	<p>Natural England Statutory Consultation Response - 22 October 2021 (page 3)</p>	<p>The climate section states that the crossings for all routes will be at risk of scour in the future. The design of the crossings, and piers within the floodplain need to be designed such that they can withstand such pressures.</p> <p>It is unclear in the road drainage and water section what the design of a crossing would be over Trout Beck for the Orange route. Would this also be open span across the floodplain with no structures on the floodplain?</p> <p>The Route Development Report Volume 1 discusses the route alternatives at Kirkby Thore in more detail. In terms of the impact on the River Eden SAC/SSSI (and on biodiversity/environment more generally) the Orange is slight better, though there would be a need for some floodplain compensation. It is not clear whether this is because there will need to be an embankment on the floodplain. However, we also note that the primary reason for the Blue route being the preferred route is the lesser</p>	<p>A full Environmental Impact Assessment (EIA) has been undertaken, including a detailed assessment of the potential risks to surface water. Further information can be found within Chapter 14 (Road Drainage and the Water Environment) within Volume 1 of the Environmental Statement (Document Reference 3.2, APP-057). This chapter confirms the following approach has been developed in consultation with both Natural England and the Environment Agency (at Section 1.8.65):</p> <p>Details of the design principles which have been incorporated for the relevant crossings so that the scheme designs will not prevent the SAC achieving its target of restoring natural hydrological processes are provided in Issue 3-2-3 in the Statement of Common Ground with Natural England (Rev 3) (Document Reference 4.5, REP5-009).</p>	<p>Agreed.</p>

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>impact on the Scheduled Ancient Monuments at Kirkby Thore.</p> <p>This position is agreed subject to no further design changes. Natural England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.</p>		
3-2.6 Table 6-4: Helbeck and Swindale Woods	Natural England Statutory Consultation Response - 22 October 2021 (page 8)	<p>Aerial pollution has been identified as one of the threats with regard to this site. The Appleby–Brough routes are 500-700m away from the SAC, and therefore potential impacts have been screened out given the site is &gt;200m away in line with LA 105 DMRB standards. The screening out of this site needs to ensure it has taken into consideration the direction of prevailing winds, the local topography, the greater speed and volume of traffic which could potentially results in impacts further afield.</p>	<p>The Helbeck and Swindale Woods SAC has been scoped out of further assessment as the site is located 427m north of the of the Order Limits of Temple Sowerby to Appleby.</p> <p>For the purposes of this assessment we have used the existing guidance (DMRB LA105). We recognise that NE and National Highways are currently discussing the use of DMRB LA105 nationally which would confirm the scoping out of this SAC.</p> <p>Modelling has demonstrated that the zone of potential air quality impacts (i.e. the zone where a change of 1% of the lower critical load for nitrogen was predicted) extended to a maximum of 60m from the ARN.</p>	Agreed
3-2.2 Long Marton Land End Junction	Natural England Response – January 2022	<p>Natural England note that the new road design will be much closer to Troutbeck (River Eden SAC) and that there will be a discharge to the beck. The revised PEIR section should acknowledge this. The Habitats Regulations Assessment will need to assess the new road</p>	<p>The Habitat Regulations Assessment (HRA) Stage 2 Statement to Information Appropriate Assessment (Document Reference 3.6, APP-235) assesses the road design in light of proposed mitigation. This includes assessment and mitigation of discharges. The assessment of potential impacts to Trout</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		design to ensure it avoids adverse impacts to the River Eden SAC.	Beck in the Stage 2 HRA is underpinned by detailed fluvial geomorphological modelling.  Commitments relating to the design of the Trout Beck structure are secured in Project Design Principles (Document Reference 5.11, REP7-103), specifically commitments: GB03 and 0405.04.	
3-2.4 Biodiversity	Natural England Statutory Consultation Response – 22 October 2021 (page 5)	With regards to Troutbeck, within the River Eden SAC, the design of the crossing would need to have a clear span (with piers) across the whole floodplain i.e., not just set back 5m from the river's edge.	Clause 0405.04 from Document Reference 5.11 Project Design Principles, APP-302, secures provision that will ensure the structure crossing of Trout Beck allows for full functionality of normal supporting river processes including flood flows and associated erosion/sediment regime, and the migration of the channel across its floodplain. This is achieved using an open multi-span structure, across the entire floodplain of the watercourse, unless otherwise agreed with the Environment Agency and Natural England. The potential impact of the Trout Beck crossing (an open multi-span structure) is assessed in the Stage 2 HRA using detailed fluvial geomorphological modelling.	Agreed
3-2.5 Table 6-3: Screening Matrix for River Eden SAC	Natural England Statutory Consultation Response – 22 October 2021 (page 7)	There will be land take of functionally linked land to the River Eden for additional schemes than has been identified – M6 Junction 40 to Kemplay Bank. There are minor water course crossing and likely discharges that may impact on the SAC.	Noted. The Habitat Regulations Assessment (HRA) Stage 2 Statement to Information Appropriate Assessment (Document Reference 3.6, APP-235) assesses the road design in light of proposed mitigation. The assessment includes functionally linked	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>Temple Sowerby to Appleby: Extra care must be given if land inside the red line boundary is functionally linked land. Given that there will be a clear span bridge over the Troutbeck, there should not be any land take within the boundary. The temporary land take e.g., for compound area etc, should not be located within the floodplain of Troutbeck or the Eden.</p> <p>HRA should consider Competition from non-native species/ introduction of disease, Change in flow or velocity regime, creation of barriers Habitat/community simplification.</p> <p>This in turn can impact upon the extent and distribution of habits and species; structure and function of the watercourses, habitat mosaics, riparian zone, floodplain, natural flow regimes, natural sediment regimes, thermal regimes; biological connectivity, invasive/introduced species, key distinctive species (in addition to those designated in their own right), vegetation structure of riparian zone and macrophytes, water chemistry and quality and air quality. Table 4.1 does discuss some of these issues, and we agree with the conclusions where a likely significant effect has been identified, however the structure of the table is not that straightforward to follow.</p>	<p>rivers/habitat. Annex C1 - Working in and Near SAC Method Statement of the EMP (Document Reference 2.7, APP-036) includes mitigation specific to the River Eden SAC.</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-2.16 EMP and HRA	Natural England Relevant Representation (NE key issue ref 3.1, page 13, RR-180) and additional commentary in Natural England Written Representation (page 17, REP1-035)	<p>Construction Phase: At present the EMP is in draft form, and specific and detailed mitigation measures are not finalised. Reassurance is also needed that if the project design principles are not adhered to (e.g., the design for an open span bridge with piers across the Troutbeck Floodplain) then the outcomes of the HRA may change. Whilst we agree the outcome of the HRA – that there will be no adverse effect on the integrity of the River Eden SAC, this is dependent on the design principles and mitigation measures in the draft CEMP not changing. Natural England require the design principles and mitigation measures in the draft CEMP to be secured and not change in order for us to agree to the outcomes in the HRA. The mitigation measures have already been drafted but they need to be secured. Any measures used to inform the decision about the effects on the integrity need to be sufficiently secured and likely to work in practice. In the case of the DCO, measures used to inform the decision about the effects on the integrity will be secured through DCO itself, via (for example) the DCO Order Limits, Project Design Principles or Environmental Management Plan (EMP).</p> <p><b>Additional commentary:</b></p>	<p>It is acknowledged that the mitigation measures are based on the preliminary design of the Project as submitted in the DCO Application. They are based on the identified Likely Significant Effects of the Project as identified in the Environmental Statement (Document Reference 3.2, APP-044), which have been used to develop principles set out in the Environmental Management Plan (Document Reference 2.7, APP-019) and the Project Design Principles (Document Reference 5.11, APP-302), both of which will be examined as part of the DCO submission and will become certified documents.</p> <p>These two documents and their annexes will secure the mitigation required. Any future design developments, over the course of the DCO that may occur through the Examination process, will be required to take account of the mitigation outlined in these documents and will not result in any worsening of effects identified within the ES. It should be noted that article 53 of the draft DCO (Document Reference 5.1, APP-285) requires that the EMP is developed into a second iteration EMP (in consultation with various parties) (or EMPs – there may be multiple second iteration EMPs applicable to different parts of the scheme) and then submitted to the Secretary of State for approval prior to the start of works. This second iteration</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>Natural England note that the specific details of construction methodologies and practices were not finalised at the time of the DCO application and will not be until the detailed design is complete, which is currently ongoing. We assume that the detailed design will be complete by the time the second iteration of the EMP is consulted on and agreed by SoS.</p>	<p>EMP will contain detailed management plans (where relevant) that have been informed by the detailed design and construction methodologies that have not yet been developed, including in relation to biodiversity matters. Compliance with an approved second iteration EMP is secured by article 53 and as such is a legally enforceable obligation.</p> <p>National Highways confirm that Natural England's query within their additional commentary is correct. The detailed design will need to have been completed to inform the content of a second iteration EMP.</p>	
<p>3-2.12 Mitigation measures</p>	<p>Natural England Relevant Representation (NE key issue ref 2.1, page 12, RR-180) and additional commentary in Natural England Written Representation (NE key issue ref 2.1, page 10, REP1-035)</p>	<p>The assessments of significant impact, particularly for the SAC and SSSI habitats and species are generally based on draft mitigation measures within a draft CEMP design and mitigation principles, rather than specific design and mitigation.</p> <p>If these principles are not strictly adhered to, then this could change the outcome of the assessments. For example, if the bridge designs were to change over the Troutbeck, within the River Eden SAC, this could change the outcome of the assessments and HRA. The design principles and mitigation measures within the CEMP need to be secured and adhered to during the construction phase of the works.</p>	<p>It is acknowledged that the mitigation measures are considered preliminary and are based on the preliminary design of the Project as submitted in the DCO Application. They are based on the identified Likely Significant Effects of the Project as identified in the Environmental Statement (Document Reference 3.2, APP-043 to APP059), which have been used to develop principles set out in the Environmental Management Plan (EMP) ( Document Reference 2.7, APP-019) and the Project Design Principles (Document Reference 5.11, APP-302), both of which will be examined as part of the DCO submission and will become certified documents. This includes activity around the River Eden SAC &amp;</p>	<p>Agreed</p>



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>The mitigation measures need to progress past the draft stage and be updated to include all of the detailed design information required to understand the impacts of the designated features of the River Eden SAC &amp; SSSI.</p> <p>We have also provided comments on the mitigation proposed for the River Eden SAC below in Table 1 and Table 2 and are satisfied that if our comments are taken on board and the biodiversity priorities are secured, and the design and mitigation principles are adhered to (and not subsequently amended) then there should be no adverse effect on integrity of the River Eden SAC. Further information is needed to understand the impacts and design of the construction works and any temporary structures (in particular the temporary bridge over Troutbeck) in relation to the River Eden SAC and its designated features. It should be noted that our conclusion of no adverse effect on integrity may change if the guidance we have provided on the mitigation and design principals is not followed appropriately.</p> <p><b>Additional commentary:</b>                      Natural England note that the EMP and Project Design Principles will become certified documents. We also note that any future design developments, over the course of the DCO that may occur</p>	<p>SSSI. These two documents and their annexes will secure the mitigation required. Any future design developments, over the course of the DCO that may occur through the Examination process, will be required to take account of the mitigation outlined in these documents and will not result in effects worse than that which was assessed within the ES.</p> <p>It should be noted that Article 53 of the draft DCO (Document Reference 5.1, APP-285) requires that the EMP is developed into a second iteration EMP (in consultation with various parties) (or EMPs – there may be multiple second iteration EMPs applicable to different parts of the scheme) and then submitted to the Secretary of State for approval prior to the start of works. This second iteration EMP will contain detailed management plans (where relevant) that have been informed by the detailed design and construction methodologies that have not yet been developed, including in relation to biodiversity matters. Compliance with an approved second iteration EMP is secured by article 53 and as such is a legally enforceable obligation.</p> <p>National Highways acknowledge the comment made, and will continue to work closely with Natural England to ensure sufficient detail is provided in later iterations of the EMP.</p>	



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>through the Examination process, will be required to take account of the mitigation outlined in these documents and will not result in effects worse than that which was assessed within the ES. We are still concerned that there may be design and mitigation changes after the examination process. However, we recognise that there will be a second iteration of the EMP on which we will be consulted, and that will need SoS approval. This needs to contain more detail and specific mitigation. Any changes in the EMP that relate to the River Eden SAC will need to be addressed in an updated HRA.</p>		
3-2.13 Biodiversity - construction impacts	<p>Natural England Relevant Representation (NE key issue ref 2.2, page 12, RR-180) and additional commentary in Natural England Written Representation (page 14, REP1-035) and comments on the SoCG from Natural England received 15.05.2023.</p>	<p>The temporary works as part of the construction phase of the project need to be assessed and show detailed design information so that the potential impacts can be considered fully. The biodiversity chapter does not currently detail how and where the temporary bridges will be built, and they have therefore not been fully assessed for impacts in the HRA. The designs of the temporary bridge also need to be included and assessed further within the biodiversity chapter. There is a little more additional information in the HRA, however further specific information is required. Additional information is required in the Environmental Statement, as mentioned; detailed design information,</p>	<p>At the time of writing the Environmental Statement (Document Reference 3.2, APP-043 to APP-059) the planning of the construction phase of the Project was ongoing, as outlined in Environmental Statement Chapter 2: The Project (Document Reference 3.2, APP-045). The specific details of construction methodologies and practices were not finalised and will not be until the detailed design is complete, which is currently ongoing. Where construction methodologies and practices were not yet fixed, the EIA considered the full range of approaches that could be taken or considered the worst case for environmental effects. The Environmental Statement therefore assumes a reasonable worst-case</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>location and methodology for the construction of the temporary works. Required mitigation must be secured in the final CEMP. The Mitigation measures and CEMP need to progress past the draft stage and be updated to include all of the detailed design information required to understand the impacts of the designated features of the River Eden SAC &amp; SSSI.</p> <p><b>Additional commentary:</b>                      Natural England note that the specific details of construction methodologies and practices were not finalised at the time of the DCO application and will not be until the detailed design is complete, which is currently ongoing. We assume that the detailed design will be complete by the time the second iteration of the EMP is consulted on and agreed by SoS.</p> <p><b>Additional commentary 15.05.2023:</b>                      While all issues have resulted in updated DPD or EMP revisions. There is no update in the HRA, HRA is recommended to be an iterative document and when final detail is known the HRA should be updated</p>	<p>scenario where the appropriate level of detail was not available at the time of writing in order to allow for a full assessment of the potential impacts. Each technical chapter of the Environmental Statement outlines the assessment assumption and limitations for any such instances to ensure that a reasonable worst-case scenario has been assessed. In turn any variations to the construction approach should not result in likely significant adverse effects over and above those reported within the Environmental Statement. The Environmental Management Plan (EMP) (Document Reference 2.7, APP-019) sets out mitigation and restrictions in construction activities around watercourses (Annex C2 Working in Watercourses Method Statement, Document Reference 2.7, APP-037) and in particular working around the River Eden SAC and SSSI (Annex C1 Working in and Near SAC Method Statement Document Reference 2.7, APP-036). It should be noted that article 53 of the draft DCO (Document Reference 5.1, APP-285) requires that the EMP is developed into a second iteration EMP (in consultation with various parties) (or EMPs – there may be multiple second iteration EMPs applicable to different parts of the scheme) and then submitted to the Secretary of State for approval prior to</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>the start of works. This second iteration EMP will contain detailed management plans (where relevant) that have been informed by the detailed design and construction methodologies that have not yet been developed, including in relation to biodiversity matters. Compliance with an approved second iteration EMP is secured by article 53 and as such is a legally enforceable obligation. National Highways confirm that Natural England’s query within their additional commentary is correct. The detailed design will need to have been completed to inform the content of a second iteration EMP.</p>	
<p>3-2.18 Air quality impacts to River Eden</p>	<p>Natural England Relevant Representation (page 16, RR-180) and additional commentary in Natural England Written Representation (page 18, REP1-035)</p>	<p><u>Environmental Statement Chapter 6: Biodiversity</u>  <b>6.10.11:</b>                  When discussing the air quality impacts to the River Eden, this sections states that: “When considering the results of the air quality modelling it should be noted that whilst change in deposition rate is a useful metric to understand the net increase in pollutants in the air, this metric is less applicable to this aquatic habitat type. Aquatic plants that are a component of the vegetation community are submerged for the majority of the year due to their growth form, consequently they are regularly inundated and flushed during modest flood events.” Natural England</p>	<p><b>6.10.11</b>                  It is noted that the “flushing” argument is currently based on the professional judgment of National Highways. Flushing of nitrogen from exposed macrophytes during moderate high flow river events was discussed as part of the HRA Task Working Group, where it was agreed that this seemed reasonable, but Natural England suggested that further evidence should be sought. As stated in paragraph 1.5.58 of the Statement to Information Appropriate Assessment (Document Reference 3.6, APP-235), the River Eden SAC is listed as a site considered to be in unfavourable condition due to excessive</p>	<p>Agreed</p>

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>understand the argument made, but find this comment to be quite vague, can scientific evidence that can support this comment and highlight why in this case N depositions will not lead to a nutrient impact on the river be provided.</p> <p><b>Additional commentary:</b> 6.10.11, Natural England will continue to check further justifications in the ES and EMP as they become available.</p>	<p>nutrients (in the case of the River Eden SAC, this is listed as being due to phosphorous). Nevertheless, the potential for additional inputs of nitrogen to the River Eden SAC, as a result the Project is considered in the appropriate assessment (in relation to air quality and the dry deposition of nitrogen to exposed macrophytes) where the temporary nature of this impact pathway (due to the plants forming this habitat being submerged for large parts of the year) and the ‘flushing’ argument is made. Additional nitrogen affecting water quality is not considered to have the potential to adversely affect the River Eden SAC, as the system is not considered to be nitrogen limited. Phosphorus is considered to be the “limiting nutrient” in the River Eden SAC, meaning that the available quantity of this nutrient controls growth of algae and aquatic plants. As such additional inputs of nitrogen will not adversely affect the aquatic flora.</p>	
3-2.19 Woodland at Skirsgill	<p>Natural England Relevant Representation (page 17, RR-180)</p> <p>Natural England Written Representation (page 19, REP1-035)</p>	<p><u>Environmental Statement Chapter 6: Biodiversity</u> <b>6.10.27:</b> This section refers to loss of woodland at Skirsgill, including trees on the banks of the River Eden. This ought to be reflected in the River Eden SAC/SSSI section, given that is a loss of riverbank habitat.</p>	<p>National Highways recognise that that riparian trees are an important component of the river habitat. If trees are felled within the site, replacement will be planted on the riverbank as close as possible to where felled. A tree loss and compensation planting report (Document 7.25, REP4-012) was prepared and submitted at Deadline 4. The report quantifies the total number of</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>trees which could be lost to the Project and subsequently determines and set out the total number of trees which could be required to be replanted as part of the mitigation. The replacement planting requirements are secured in the first iteration EMP (Document Reference 2.7, APP-019) in various commitments. This includes the relevant replacement ratios. Commitment ref. D-LV-01 requires an Arboricultural Impact Assessment (AIA) to be undertaken prior to the start of the main works for the Project. Commitment D-BD-05 details requirements for replacement planting.</p>	
3-2.20 Trees	<p>Natural England Relevant Representation (page 17, RR-180)</p> <p>Natural England Written Representation (page 19, REP1-035)</p>	<p><u>Environmental Statement Chapter 6: Biodiversity</u>  <b>6.10.28</b> states that mitigation will be in place, including fencing to protect the remaining trees. In addition, any riverbank trees that are lost should be replaced to continue to provide dappled shade conditions along the river (though not necessarily at the new outfall location). The provision of replaced habitat / trees should be secured within the mitigation and compensation measures.</p>	<p>National Highways recognise that that riparian trees are an important component of the river habitat. If trees are felled within the site, replacement will be planted on the riverbank as close as possible to where felled. A tree loss and compensation planting report (Document Reference 7.25, REP4-012) was prepared and submitted at Deadline 4. The report quantifies the total number of trees which could be lost to the Project and subsequently determines and set out the total number of trees which could be required to be replanted as part of the mitigation. The replacement planting requirements are secured in the first iteration EMP ( Document Reference 2.7, APP-019) in various commitments. This includes the relevant replacement ratios.</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>Commitment ref. D-LV-01 requires an Arboricultural Impact Assessment (AIA) to be undertaken prior to the start of the main works for the Project. Commitment D-BD-05 details requirements for replacement planting.</p>	
3-2.23 Temporary bridges	<p>Natural England Relevant Representation (page 17, RR-180) and additional commentary in Natural England Written Representation (page 19, REP1-035)</p>	<p><u>Environmental Statement Chapter 6: Biodiversity</u> <b>6.10.478:</b> Whilst the main permanent bridges have been designed to be open plan (across the whole floodplain in the case of Troutbeck and a couple of becks in the Appleby – Brough scheme), the impact of the temporary bridge across Troutbeck needs to be assessed. Natural England requires the detailed design and whether a temporary causeway across the floodplain will be necessary to assess the impacts to Troutbeck. <b>Additional commentary:</b> 6.10.478 Natural England acknowledge the points made here, we did agree in the workshop on 22/04/2022 that the temporary bridge should be open span and that the haul road will need to be at flood plain level. We wait to see that this extra detail and information is included within the second iteration of the EMP and the detailed project design.</p>	<p>It is noted that a temporary bridge over Trout Beck and the temporary and construction phase works have the potential to have a detrimental effect of the River Eden SAC. The HRA (Document Reference 3.6, APP-235) assesses the construction phase impacts considering proposed mitigation. The detailed design of the temporary bridge was not available at the time of submission and will form part of the Project detailed design. However, the requirement for a temporary bridge over Trout Beck to facilitate the construction of the permanent viaduct was discussed with Natural England in the construction mitigation workshop (22 April 2022) and it was agreed that this would need to be open span (i.e., from bank top to bank top) and that the haul road would need to be at flood plain level to reduce potential for changes to fluvial geomorphological process during construction. These measures have been included in REAC reference MW-RDWE-09 within the updated Environmental Management Plan (Document</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			Reference 2.7, REP3-004) submitted at deadline 3.	
3-2.24 Monitoring	Natural England Relevant Representation (page 18, RR-180) and additional commentary in Natural England Written Representation (page 19, REP1-035)	<p><u>Environmental Statement Chapter 6: Biodiversity</u>  <b>6.11.5:</b>                      Natural England acknowledge that National Highways recommends monitoring visits during the construction phase be carried out every six months. Natural England suggest that these monitoring visits should be much more frequent through the construction areas with the highest impacts and impact pathways the designated sites. The water quality in terms of sediment and turbidity will need regular, frequent monitoring to ensure that the mitigation measures that are in place are preventing sediment run-off and pollution incidents.</p> <p><b>Additional commentary:</b>                      6.11.5 Natural England would welcome further discussion on this point. Where there is an obvious pathway to the River Eden SAC, and construction, there ought to be frequent measuring of turbidity (sediment) to ensure that the mitigation that is in place is working as it should, and that if high levels of sediment are found within the watercourse, then work is stopped to address any issues.</p>	Note paragraph 6.11.4 4 of Chapter 6 Biodiversity within the Environment Statement (Application Document Reference 3.2, APP-049) "A monitoring visit will be carried out prior to the commencement of construction works at each location to ensure appropriate protective fencing and other required mitigation measures are in place." Subject to this measure being implemented and subsequent visits being carried out on a 6-month rotation, it is considered that suitable safeguards will be in place for the majority of habitats. National Highways will discuss monitoring frequency with Natural England through ongoing engagement.	Agreed



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-2.26 HRA	Natural England Relevant Representation (page 19, RR-180) and additional commentary in Natural England Written Representation (pages 22 and 23, REP1-035)	<p><u>3.6 Habitats Regulations Assessment: Stage 2 Statement to Inform Appropriate Assessment</u></p> <p><b>1.4.5:</b> Further clarification is needed here to understand why all of the ecological receptor locations have been modelled at 0m.</p> <p><b>1.4.19:</b> Natural England would expect no deterioration in water quality, further information is required here to understand whether the Highways England Water Risk Assessment Tool (HEWRAT) takes into consideration water quality when implementing suitable drainage system and mitigation measures.</p> <p><b>1.5.17:</b> The temporary bridge over Troutbeck is mentioned here but there are no available details. Natural England required the detailed design of the bridge and information regarding whether it will affect the natural function of the river to be presented and referred to in the HRA. The temporary and construction phase works do have the ability to have a detrimental effect on the SAC and therefore should be discussed in the HRA.</p> <p><b>1.5.24-1.5.25:</b> This section concludes no land take is required inside the SAC boundary however section 6.10.27 in the</p>	<p>Potential impacts (in consideration of secured mitigation) to the River Eden SAC and River Eden and Tributaries SSSI are assessed 6.10.6 of Chapter 6 Biodiversity (Document Reference 3.2, APP-049), and the Habitats Regulation Assessment (3.6 Habitat Regulations Assessment Stage 2 Statement to Information Appropriate Assessment) (Document Reference 3.6, APP-235). It is considered that the construction phase mitigation and the design of the watercourse crossings, as described in the HRA and secured in the Project Design Principles (Document Reference 5.11, APP-302) will safeguard the aquatic macroinvertebrates and macrophytes assemblage within the project Zone of Influence. No compensation measures are considered to be required for either species group. A height of 0m has been used for modelling ecological receptors as ground level is closer to the road/source of the emissions and is therefore considered a reasonable worst case. No deterioration of water quality is predicted as a result of the Project. During construction measures outlined within the Environmental Management Plan (EMP) (Document Reference 2.7 APP-019) will be implemented and monitored. During operation the HEWRAT tool has been used to guide the design of the drainage system to be compliant with</p>	Agreed

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>Environmental Statement refers to the loss of woodland at Skirsgill, including riparian trees, this should be discussed here.</p> <p><b>1.5.92:</b>                      The statement is vague and whilst a reasonable argument, this requires some evidence/reference/detail to have the necessary level of confidence. However, if we use this argument for all the Diffuse and point source pollution in the river i.e., that it will all be flushed out of the system and therefore not be a problem, why are our rivers unfavourable for nutrient pollution, which can cause changes in macrophyte composition, reduction in Biological Oxygen Demand (BOD), increase in algae which can then have adverse effects on dependent species etc. But Phosphorus tends to be the limiting factor in these freshwater river systems, and the nutrient input from the air pollution is mainly Nitrogen.</p> <p><b>1.5.98:</b>                      An existing exceedance of Nitrogen is not a justification to permit further additional emissions (see Dutch Nitrogen Judgement). However, further evidence and discussion needs to be supplied with regards to the impact on the ecology / biodiversity of Nitrogen in comparison to Phosphorus. Phosphorus is likely to be the limiting factor.</p>	<p>the Environmental Quality Standards (EQSs) for the receiving watercourses. The HEWRAT assessment undertaken on the drainage design demonstrated no adverse impact. Future revisions of the drainage design will be subject to updated HEWRAT assessments to maintain compliance.</p> <p>Regarding <b>1.5.92</b> it is noted that the temporary bridge over Trout Beck and the temporary and construction phase works have the potential to have a detrimental effect on the River Eden SAC. The HRA (Document Reference 3.5, APP-234 and Document Reference 3.6, APP-235) assesses the construction phase impacts considering proposed mitigation. The detailed design of the temporary bridge was not available at the time of submission and will form part of the detailed design. However, the requirement for a temporary bridge over Trout Beck to facilitate the construction of the permanent viaduct was discussed with Natural England in the construction mitigation workshop (22 of April 2022) and it was agreed that this would need to be open span (i.e., from bank top to bank top) and that the haul road would need to be at flood plain level to reduce potential for changes to fluvial geomorphological process during construction. There will be localised alteration of the riparian zone because</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p><b>1.5.514:</b> Please see our comments for section 1.4.19</p> <p><b>1.5.157:</b> The temporary bridge design principles have been included and discussed here, clarification is needed to understand whether these have been secured and firmly agreed</p> <p><b>1.5.519:</b> Importantly, the bridge design should not prevent the river (Troutbeck) achieving favourable condition, and there is a proposed river restoration scheme, that should not be compromised by the design. The design principles described should ensure that this is the case.</p> <p><b>1.5.182:</b> The shape of the flood compensation storage area is very rectangular / regular. Natural England recommend that this takes a much more natural shape, however, if it is changed, it should be taken into consideration that this may impact all of the geomorphological and hydrological modelling</p> <p><b>1.6.31:</b> Please see above 'red' issue in relation to Air quality, a pre-existing breach of 1% does not mean the site can be scoped out of further assessments</p> <p><b>Additional commentary:</b></p>	<p>of the attenuation basin discharges to the River Eamont (M6 Junction 40 to Kemplay Bank) and Trout Beck (Temple Sowerby to Appleby). The discharges will enter these SAC watercourses via the riparian zone. Loss of trees associated with the construction of the drainage channel will be avoided/minimised as far as possible. However, the riparian habitat subject to alteration/ loss of trees was not identified to be qualifying SAC woodland habitat type (i.e., 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>). It is considered that the minor alteration/loss of trees (if required) would not have a significant effect in the function of the woodland and is not considered to have any likely significant effect on any qualifying features of the SAC. The HRA will be updated to reflect the above and the minor loss of habitat inside the SAC boundary. Where outfalls discharge to natural banks these will be designed to be open ditches (i.e., no new hard outfalls will be created). They will be designed to facilitate erosion patterns, to allow the natural migration of watercourses to continue. Where outfalls discharge at a location with existing hard banks, they will be designed to tie into the existing hard structure. It is noted that the flushing argument is currently based on the</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>Natural England acknowledge the comments made in regard to the HRA AA and the temporary crossing over Troutbeck. Please see comments regarding the temporary crossing over Troutbeck and the mitigation and detailed design needed.</p> <p><b>1.5.24-1.5.25</b> Natural England note the comments and agree that the riparian habitat subject to alteration/loss of trees is not the qualifying SAC woodland habitat type (i.e., 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>. However, riparian trees are an important component of the river habitat and provide shade and different habitat niches to many of the SAC species. If trees are felled within the site, replacement trees should be planted on the riverbank as close as possible.</p> <p>The SAC Supplementary Advice document states that “Watercourses with a high degree of naturalness are governed by dynamic processes which result in a mosaic of characteristic physical habitats or biotopes, including a range of substrate types, variations in flow, channel width and depth, in-channel and side-channel sedimentation features (including transiently exposed sediments), bank profiles (including shallow and steep slopes), erosion features (such as cliffs) and both in-channel and</p>	<p>professional judgment of the Project team. Flushing of nitrogen from exposed macrophytes during moderate high flow river events was discussed as part of the HRA Task Working Group, where it was agreed that this seemed reasonable, but Natural England suggested that further evidence should be sought. Engagement will continue with Natural England through the Statements of Common Grounds process to ascertain where there is a lack of clarity on where certain conclusions are documented. The assessment has been made considering the Dutch Nitrogen case. The assessment does not use the exceedance of nitrogen to justify additional inputs. Engagement will continue with Natural England through the Statements of Common Grounds process to ascertain where there is a lack of clarity on where certain conclusions are documented. The design principles for the viaduct and temporary bridge are secured in the Project Design Principles (Document Reference 5.11, APP-302). 1.5.82 – Flood compensation areas have been shown in draft at this stage to prove the concept is viable. These areas will be developed/refined at detailed design stage, so they blend into the natural landscape. This is secured in Table 4.1 of (Document Reference 5.11, APP-302)</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>bankside (woody and herbaceous) vegetation cover. All of these biotopes, and their characteristic patterns within the river corridor, are important to the full expression of the biological community” and “A mosaic of natural and semi-natural riparian vegetation types provides conditions for all characteristic in-channel and riparian biota to thrive, creating patches of tall and short riparian swards, a mixture of light and shade on the river channel, and tree root systems and a supply of large woody debris that add channel complexity. Patchy tree cover provides shade protection against rising water temperatures caused by climate change”.</p> <p>This position is agreed subject to no further design changes. Natural England note the HRA should be an iterative process and it should be updated should there be any design changes. Natural England would wish to be updated on any changes and provided the opportunity to comment and agree any subsequent changes.</p>	<p>Project Design Principles. Flood modelling reports (including flood compensation areas) are in Annex E Environmental Statement Appendix 14.3 Water Quality Assessment, (Document Reference 3.4, APP-222). The site has not been scoped out of further assessment as a result of the 1% breach. Whilst the assessment acknowledges the 1% breach within the affected area of the site, further assessment considers that the actual area of impact in the context of the whole SAC is considered negligible (approximately 0.01% of total blanket bog area).</p> <p>In response to Natural England’s additional commentary on paragraphs 1.5.24-1.5.25 National Highway recognise that riparian trees are an important component of the river habitat and provide shade and different habitat niches to many of the SAC species. If trees are felled within the site, replacement will be planted on the riverbank as close as possible to where felled. A tree loss and compensation planting report has been prepared and was submitted at Deadline 4. The report quantifies the total number of trees which could be lost to the Project and subsequently determines and sets out the total number of trees which could be required to be replanted as part of the</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			mitigation. The replacement planting requirements are secured in the first iteration EMP (Document Reference 2.7, APP-019) in various commitments. This includes the relevant replacement ratios. Commitment ref. D-LV-01 requires an Arboricultural Impact Assessment (AIA) to be undertaken prior to the start of the main works for the Project. National Highways expects further engagement with Natural England on this topic.	

Table 3-2: Record of Issues – Under Discussion Issues

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-2.7 SPA and Air Quality	Natural England Statutory Consultation Response - 22 October 2021 (page 8)	NE agree that LSE cannot be ruled out with regards to atmospheric pollution associated with the affected road network (ARN), and therefore this needs to be considered further in an Appropriate Assessment.  The potential for SPA birds within the schemes and the red line boundary, to be disturbed at different times of year needs to be taken into consideration here. Agree that there is LSE from the proposals on some designated features of this site.	Full details on the potential impacts to birds can be found within Appendix 6.13 (Breeding Birds) and Appendix 6.14 (Wintering Birds), within Volume 3 of the Environment Statement (Document Reference 3.4, APP-166 and APP-167).  The Statement to inform Appropriate Assessment (SIAA) (Document Reference 3.6, APP-235) has not considered wintering birds as disturbance to Annex I species was screened out at Stage 1 for the North Pennine Moors SPA. No North Pennine Moors SPA qualifying species have been recorded breeding within a 500m zone of the order limits.	Under discussion

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>As stated in the ES only two species (notified as part of the SPA for breeding only) were recorded within the Zone of Impact wintering: golden plover (<i>Pluvialis apicaria</i>) and merlin (<i>Falco columbarius</i>). Only two merlin were recorded (not breeding).</p> <p>Flocks of wintering golden plover have been recorded throughout the central schemes of the Project with notable numbers recorded within the Cross Lanes to Rokeby scheme. It should be noted, the majority of wintering UK golden plover flocks consist of birds which move to farmland habitats to forage during the winter (Gillings et al. 2006). In general, golden plover wintering in Britain come from populations breeding in Iceland and Scandinavia/western Russia, and fewer are from populations breeding in Britain, Denmark and Germany (Wernham et al. 2002, Stroud et al. 2004).</p> <p>Notwithstanding the above with respect to the relevance to the HRA, the ES assesses the potential impact of “habitat loss” and “disturbance” on wintering birds. As stated in the ES, the majority of the Project will follow the existing A66 and increases in construction related disturbance is considered to be relatively limited. Where the Project departs significantly offline to the north of Kirkby Thore, disturbance could reduce the suitability of habitats for wintering bird, however, no golden plover were recorded in this areas. It is considered likely that disturbance would result in a minor</p>	



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>adverse effect and is not considered significant.</p> <p>Due to the abundance of suitable wintering habitat for golden plover (e.g. open short grassland and arable) present in the local area and the creation of additional habitat (as secured in the Environmental Management Plan (Document Reference 2.7, REP7-008)) it is considered habitat loss would result in a minor adverse effect and is not considered significant.</p> <p>In relation to birds, the North Pennine Moors SPA is designated for four species of bird: hen harrier (breeding), merlin (breeding), peregrine falcon (breeding) and European golden plover (breeding). The SIAA for the site assessed the potential for adverse effects resulting from a reduction in suitable breeding and foraging habitat (as a result of changes in air quality during operation associated with the affected road network).</p> <p>The potential for any adverse effect on the integrity of the River Eden SAC, North Pennine Moor SAC and North Pennine Moor SPA has been ruled out. The SIAA has concluded that no reasonable scientific doubt remains and in 'the light of the best scientific knowledge in the field', the project will not adversely affect the integrity of any European Site, alone or in combination with other plans or projects.</p>	
3-2.8 Use of LA105	Natural England Relevant	Natural England are disappointed that our advice surrounding the use of LA105 for	National Highways continues to engage with Natural England on the topic of Air Quality	Under Discussion

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
	<p>Representation (page 3 and NE key issue ref 1.1, page 10, RR-180) and additional commentary in Natural England Written Representation (NE key issue ref 1.1, page 8, REP1-035)</p>	<p>assessing the air quality impacts has not been taken on board, we still have fundamental concerns with the air quality assessment section within the environmental statements and do not support the use of LA105.</p> <p>Natural England do not support the use of LA105, as it is not HRA compliant. We therefore cannot not concur with the conclusions drawn in the HRA.</p> <p>Natural England require further clarification to explain the use of LA105 despite our previous written advice stating that we do not support the use of it as an assessment method. We recommend the use of the published Natural England guidance: NEA001 Natural England’s approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations.</p> <p>Natural England need to be able to understand the impacts to the protected sites within 200m of the Affected Road Network (ARN), when assessed by the appropriate assessment method. For example, we do not agree with the conclusions of the HRA as we do not support the use of loss of one species as a metric to identify an adverse effect.</p> <p>The DCO needs to include clarity on the Air Quality impacts and provide clarification for where the mitigation / compensation will be if detrimental effects are found.</p>	<p>methodology and the adequacy of DMRB LA105.</p> <p>The Environmental Statement Appendix 4.2 Environmental Impact Assessment Scoping Opinion (Document Reference 3.4, APP-149) states that ‘The assessment should take account of the requirements of “Natural England’s approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, 2018 (NEA001)”’.</p> <p>Natural England’s advice and consultation responses were fully considered in relation to the assessment of air quality impacts. It is our understanding that the principle area of disagreement is around the use of a metric based on the loss of a single species. We can confirm that neither the Habitats Regulations Assessment (Application Document Reference 3.5 and 3.6, APP-234 and APP-235) or the Environmental Statement (Document Reference 3.2, APP-049) rely on the loss of one species metric (as prescribed by DMRB LA105). The loss of one species metric is reported, in line with DMRB and for consistency with the approach used for other road schemes; however, this metric does not form the basis for assessment, rather the assessment was made using other sources of information including habitat mapping, data on current pressures and condition of the site, professional judgement and ecological principles. No designated sites were</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p><b>Additional commentary:</b>                      In regard to the method followed, Natural England are happy to support the general approach taken throughout the assessment as stated in the recent response to our relevant representations (RR-180). The consultant states that the NEA001 steps have been followed and whilst LA105 is referred to (in line with DMRB requirements), the “loss of one species metric” has not been used in any decision making. Whilst Natural England are supporting National Highways in developing an approach to replace LA105, we agree that the approach taken is a reasonable and appropriate interim in the absence of endorsed guidance published under DMRB for assessing air quality impacts under the Habitats Regulations Assessment.</p>	<p>screened out of further assessment based on the loss of one species metric either at Stage 1 (Screening) or during Stage 2 (Appropriate Assessment). The loss of one species metric was reported in line with National Highways standards but does not form the basis for the assessment. The loss of one species metric was not used to inform the assessment conclusion (i.e. no significant impact for designated sites in the Environmental Statement or no adverse effect on site integrity in the Habitats Regulations Assessment).</p> <p>The assessment process utilised followed that prescribed in NEA001. European sites within 200m of the Affected Road Network (ARN) were screened in for assessment / further consideration where the predicted changes met the threshold of 1000 AADT, or 200 AADT for heavy duty vehicles (NEA001 Step 1). All sites located within 200m of the ARN were considered to be sensitive to air pollution according to APIS. 200m was shown to be an appropriate distance as subsequent modelling demonstrated that the zone of potential air quality impacts (i.e. the zone where a change of 1% of the lower critical load for nitrogen was predicted) extended to a maximum of 60m from the ARN (NEA001 Step 2). Sensitive qualifying features (e.g. bog habitat) that could be exposed to emissions were identified both from existing Natural England habitat mapping and project habitat surveys; non</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
			<p>qualifying features were also identified and mapped within 200m of the ARN (NEA001 Step 3). The 1% change against the lower critical load for nitrogen deposition was then calculated to identify the zone within which a perceptible change may result; this included the consideration of the additional contribution of NH3 emissions from vehicles to deposited nitrogen (NEA001 Step 4). NEA001 Step 4a, 4b and 4c do not apply as the air quality assessment is inherently in combination as it considers other plans and projects when determining the future baseline (do minimum) scenario. The assessment of air quality impacts within the zone where a change of 1% of the lower critical load for nitrogen was predicted was then undertaken (note, the zone where perceptible change may result was up to a maximum of 60m from the ARN). In line with NEA001 'integrity' of a site was taken to mean the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was, or will be, designated or classified.</p> <p>Section 5.10 of the Air Quality Chapter (Document Reference 3.2, APP-048) described the likely significant effects of the project upon air quality and takes account of the mitigation proposed in Section 5.9.</p>	

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-2.9 HRA Appropriate Assessment in combination impact	Natural England Relevant Representation (NE key issue ref 1.2, page 11, RR-180) and additional commentary in Natural England Written Representation (NE key issue ref 1.2, page 11, REP1-035)	<p>The in combination impact in the HRA Appropriate Assessment scopes out any NO<sub>x</sub> changes that are less than 1% of 30µg/m<sup>3</sup> for vegetation.</p> <p>Natural England are in the process of collating advice regarding the approach above in light of the Wealden judgement and potential for multiple “imperceptible” emission concentrations to combine into a significant effect. We recognise and understand the argument made regarding the limits of modelling. This advice will also feed into National Highways new guidance</p> <p>Natural England will continue to discuss this topic with National Highways and feedback into this project with the updated evidence and guidance on this topic.</p> <p>The assessment should continue to use the best available evidence, ensuring the guidance and parameters set out within recent case law are followed.</p> <p><b>Additional commentary:</b></p> <p>Natural England understand that whilst the 0.3ug/m<sup>3</sup> NO<sub>x</sub> threshold has been applied to the assessment, this value is exceeded and therefore both ammonia and nitrogen deposition have been calculated and applied in the final assessment. Whilst the use of an imperceptibility threshold, in particular the dismissal of ammonia and nitrogen deposition where the threshold is not exceeded, is still under discussion – irrespective of this, the necessary</p>	<p>The conversation regarding policy is currently ongoing between National Highways and Natural England.</p> <p>The DMRB LA105 assessment methodology has not currently been amended to account for the ongoing conversations. As such the approach taken and results detailed within the Section 5.1 of the Environmental Statement Chapter 5 Air Quality (Document Reference 3.2, APP-048) are still applicable. No amendments required.</p> <p>The assessment approach is undertaken in accordance with the published standard. It should however be noted that an assessment of the change in N deposition on the SACs within the affected road network has been undertaken. As the change triggered the screening thresholds in DMRB LA105 evidence is required to be presented to determine whether the impacts of the scheme will result in an impact on site integrity. Therefore, the way the Wealden Judgement is set out by Natural England in their submission i.e. multiple small changes triggering that when combined would trigger the need for an assessment. This argument is not engaged in this instance, as an assessment has already been undertaken as the traffic criteria in DMRB LA 105 were already triggered.</p> <p>A meeting was held with Natural England on Thursday 8<sup>th</sup> December 2022 to discuss their concerns on air quality including ammonia</p>	Under Discussion

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>calculations Natural England would expect to see have been completed according to the response provided by the applicant. If this is indeed the case, then NE can support the outcome however would caution that NE is not setting a precedent of supporting this imperceptibility threshold or justification as this is still under discussion. Please could National Highways confirm whether the impact of ammonia has also been assessed separately, aside from as a component of nitrogen deposition. NE require gaseous ammonia to be compared against the 1% critical level threshold, depending on whether the ecological community has an important bryophyte/ lichen component or not. We note this was also suggested by the IAQM reviewers of the National Highways ammonia model.</p>	<p>concentrations. A technical note which sets out National Highways position is being produced and will be shared with Natural England during the week commencing 13<sup>th</sup> March 2023.                      National Highways will continue to engage with Natural England on this matter.</p>	
3-2.10 Air Quality	<p>Natural England Relevant Representation (NE key issue ref 1.3, page 11, RR-180) and additional commentary in Natural England Written Representation (NE key issue ref 1.3, page 9, REP1-035)</p>	<p><b>Operation Phase: Section 1.5.297 states that:</b> <i>“The air quality assessment is inherently in combination as it considers other plans and projects when determining the future baseline (do minimum) scenario.”</i></p> <p>Natural England require clarification that the in combination assessment includes a reasonable search for sources of emissions to air from other sectors; particularly, agricultural. This will not already be captured in the background or modelling approach.</p> <p>The in-combination approach needs to include details of all of the emissions sources identified and screened in/out to ensure the</p>	<p>The Air Quality assessment has used the most recent information from Defra for future background. It contains data on emission sources from different sectors but not for specific point source emissions in line with DMRB methodology. As such the background maps utilised for modelling does incorporate in combination emissions from other sectors.</p> <p>The assessment findings set out in the Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048) are therefore considered to be accurate and complete. No further assessment or</p>	Under Discussion



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		<p>assessment has considered the impacts to the protected sites fully.</p> <p>If impacts are found, then the appropriate mitigation / compensation should be included in the HRA, and mitigation measures will need to be secured in the CEMP.</p> <p>The DCO needs to ensure that all proposed mitigation / compensation is detailed, deliverable and secured.</p> <p><b>Additional commentary:</b></p> <p>Regarding the in-combination assessment, NE recognise that the DMRB model does include other sources of emissions aside those from roads. However, the response also states that the DMRB methodology does not require point sources to be assessed. Please could this be explained further as NE require that when considering the potential for in combination effects, a competent authority should recognise that different proposal types ('sectors') and different pollutants (e.g., ammonia (NH3), nitrogen oxides (NOx and NO2)) can combine together to have the same or similar effect on a given area of habitat.</p> <ul style="list-style-type: none"> <li>o It is generally well-established that the scope of an in-combination assessment is restricted to plans and projects which are 'live' at the same time as the assessment being undertaken. NE apply the following guidance to the scope of an in-combination assessment. The incomplete or non-</li> </ul>	<p>amendments including updates to proposed mitigation are required.</p> <p>A meeting was held with Natural England on Thursday 8<sup>th</sup> December 2022 to discuss their concerns on air quality including this issue. It was demonstrated that suitable consideration of in-combination effects was included in the assessment.</p> <p>A technical note which sets out National Highways position is being produced and will be shared with Natural England during the week commencing 13<sup>th</sup> March 2023.</p> <p>National Highways will continue to engage with Natural England on this matter.</p>	



Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>implemented parts of plans or projects that have already commenced</p> <ul style="list-style-type: none"> <li>▪ Plans or projects given consent but not yet started</li> <li>▪ Plans or projects currently subject to an application for consent or proposed to be given effect</li> <li>▪ Projects that are the subject of an outstanding appeal</li> <li>▪ Ongoing plans or projects that are the subject of regular review and renewal</li> <li>▪ Any draft plans being prepared by any public body</li> <li>▪ Any proposed plans or projects that are reasonably foreseeable and/or published for consultation prior to application</li> <li>▪ Installations that were authorised after the most recent update of background pollution data on APIS</li> <li>▪ Is the site known to receive high levels of nutrient inputs from other non-atmospheric sources E.g., via water pathway?</li> </ul>		
3-2.11 Air Quality	Natural England Relevant Representation (page 18, RR-180)	<p>Natural England note that it was confusing to find the air quality conclusions spread throughout several different documents, it is also difficult to identify which stage of operation is being referred to in each of these conclusions as it is not clear which approach has been taken in which section.</p> <p>Natural England recommends that the air quality chapter includes references to all</p>	A full assessment of the Air Quality effects is provided within the Environmental Statement (ES) Chapter 5 Air Quality (Document Reference 3.2, APP-048) and the supporting Chapter 5 Appendices (Document Reference 3.4, APP-150 to APP-153). The conclusions of significant effects are detailed within the Chapter 5 of the ES with supporting findings detailed within the Appendices. The conclusions set out in the Air Quality Chapter	Under Discussion

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
		<p>conclusions drawn in relation to air pollution – describing which stage of the HRA these assessments have been carried out for or whether they are assessing for particular pollution types against certain habitat types.</p> <p>The process contribution of ammonia, NOx and N deposition are not always presented and there seems to be no consideration of direct toxic effects of ammonia and NOx against the critical levels. Natural England recommends that both the process contribution and direct toxic effects are assessed for all three pollutants and included in the assessments within the air quality chapter.</p> <p>The HRA includes assurance that because there is already an existing exceedance that a further breach from additional emissions is okay – this is not the case and should be corrected. The Dutch Nitrogen Case explains that every breach of emissions thresholds should be assessed for detrimental impacts to the protected sites.</p> <p>The air quality assessment concludes there will be various impacts through its chapter, even though there is a conclusion of no adverse effect on integrity in the appropriate assessment. Where impacts are found and assessed mitigation needs to be provided, this mitigation needs to ensure it is modelled and effective at providing appropriate mitigation for the specific pollutant type.</p>	<p>referenced above are those made to receptors identified in the Air Quality assessment methodology DMRB LA105. The effects upon ecological receptors to determine the significance of effect is discussed in more detail within ES Chapter 6 Biodiversity (Document Reference 3.2, APP-049) and the Habitats Regulations Assessment Stage 2 Statement to Information Appropriate Assessment (Document Reference 3.6, APP-302) Engagement will continue with Natural England to ascertain where there is a lack of clarity on where certain conclusions are documented.</p> <p>Both NOx critical levels and N deposition critical load were considered within the assessment as outlined in Table 1 in Appendix 5.2 Air Quality Assessment Methodology for NOx (Document Reference 3.4, APP-151) Section 5.4.(Application Document Reference 3.3, APP-069) in Chapter 5 of the ES states that nitrogen deposition (N dep) at designated ecological sites within 200m of the ARN has been assessed.</p> <p>The consideration of ammonia was included through the National Highways ammonia tool, as a function of the NOx emissions only as set out in the Chapter 5 Air Quality referenced above Section.</p> <p>It should be noted that discussions are currently ongoing between Natural England</p>	

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		<p>Consequently, it is not yet clear as to whether the assessment will capture, with scientific certainty/no reasonable scientific doubt, all the potential impacts of the project to sensitive ecological features/ prevent or significantly slow restoration to the conservation objectives. Further clarification is needed within the air quality chapter and appropriate assessment to ensure the conclusions can be drawn and are of sound scientific evidence</p>	<p>and National Highways regarding the DMRB LA105 air quality assessment methodology.</p>	
<p>3-2.21 Use of LA105</p>	<p>Natural England Relevant Representation (page 17, RR-180)</p>	<p><u>Environmental Statement Chapter 6: Biodiversity</u>  <b>6.10.315:</b>                      Natural England do not support the use of LA105 as it not HRA compliant. The approach to the air quality assessment for the project has been accepted.</p>	<p>In regard to the use of DMRB LA105 it is acknowledged that there is ongoing engagement between National Highways and Natural England on the topic of Air Quality methodology and the adequacy of DMRB LA105. The wider use of LA 105 in National Highways projects is outside of the scope of project level discussions.</p>	<p>Under Discussion</p>

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status
3-2.25 Monitoring	Natural England Relevant Representation (page 18, RR-180) and additional commentary in Natural England Written Representation (page 20, REP1-035)	<p><u>Environmental Statement Chapter 6: Biodiversity</u>  <b>6.11.7:</b>                      Natural England welcome the need to monitor habitat creation schemes and recommend that the effluent from the attenuation ponds needs to be monitored to ensure that the ponds continue to function as they should.</p> <p><b>Additional commentary:</b>                      6.11.7 Natural England have not seen a National Highways response to this point. Natural England still recommends that the effluent from the attenuation ponds is monitored regularly to ensure that the ponds continue to function as they should.</p>	National Highways has an established routine maintenance regime for all its drainage assets to ensure that they perform as they should do.	Under Discussion

Table 3-3: Record of Issues – Not Agreed Issues

Issue	Document References (if relevant)	Natural England Position	National Highways Position	Status