

# **A1 in Northumberland: Morpeth to Ellingham**

**Scheme Number: TR010059**

## **Applicant's Response to ExA's First Written Questions**

Infrastructure Planning (Examination Procedure) Rules 2010, Rule 8(1)(b)

Planning Act 2008

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

Infrastructure Planning

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

**The A1 in Northumberland: Morpeth to  
Ellingham**

Development Consent Order 20[xx]

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# 1 APPLICANT'S RESPONSE TO EXA'S FIRST WRITTEN QUESTIONS

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## 1.1 PURPOSE OF THIS DOCUMENT

- 1.1.1. This document relates to an application for a Development Consent Order (DCO) made on 7 July 2020 by Highways England (the 'Applicant') to the Secretary of State for Transport via the Planning Inspectorate (the 'Inspectorate') under section 37 of the Planning Act 2008 (the '2008 Act'). If made, the DCO would grant consent for the A1 in Northumberland: Morpeth to Ellingham (the 'Scheme').
- 1.1.2. The Scheme comprises two sections known as Part A: Morpeth to Felton (Part A) and Part B: Alnwick to Ellingham (Part B), a detailed description of which can be found in Chapter 2: The Scheme, Volume 1 of the Environmental Statement (ES) [APP-037].
- 1.1.3. The purpose of this document is to set out the Applicant's response to the Examining Authority's First Written Questions (WQs) as set out in the Rule 6 letter issued on 19 November 2020.

**Table 1-1 - General Written Questions**

Ref. No.	Question to:	Question	Applicant's Response
GEN.1.1	Applicant	Responding to paragraph 4.3.1 in the National Policy Statement for National Networks (NNNPS) Accordance Table [APP-345], the Applicant asserts that the Scheme has been designed in accordance with the Applicant's 'Roads to Good Design' report which sets out ten principles of good road design. Demonstrate how the Proposed Development has incorporated the 10 principles of good road design. Has the design development taken account of the National Design Guide? If so, demonstrate how; if not, why not? Has the design development taken account of the National Infrastructure Commission Design Principles? If so, demonstrate how; if not, why not? How can the Applicant ensure that the Proposed Development is beautiful?	<ol style="list-style-type: none"> <li>1. The requirement for good road design to be incorporated into road schemes is set out in paragraph 4.3.1 of NNNPS. Design is not just about aesthetics but also functional requirements, visual and landscape implications. To ensure that the technical requirements of the DMRB are delivered, but also good design, Highways England have gone further than the NNNPS and prepared "Roads to Good Design." This document sets out 10 principles of good road design, which follow the themes of people, places and processes. The purpose of establishing these principles is to deliver "better, more beautiful roads." Hence, compliance with these principles will ensure that the proposed development is "beautiful" or "elegant" within the meaning of "Roads to Good Design." There is no further guidance in this context.</li> <li>2. The Scheme design addresses the National Design Guide (NDG) and National Infrastructure Commission (NIC) wider industry requirements by incorporating the road specific principles of good road design.</li> <li>3. The NIC identifies four principles to guide the planning and delivery of major infrastructure projects: climate, people, places and value. These principles align directly with the Roads to Good Design themes of people places and processes and by association the 10 design principles.</li> <li>4. The NDG is based on the National Planning Policy Framework and addresses how we recognise well-designed places in the form of ten characteristics within three themes; Community, Character and Climate. These themes, and by association the ten characteristics, align directly with the Roads to Good Design themes of people places and processes and by association the 10 design principles.</li> <li>5. A detailed response demonstrating how the ten principles of good road design have been taken in account is set out in Appendix GEN.1.</li> </ol>
GEN.1.2	Applicant	'The Road to Good Design' describes the role of Highway England's Strategic Design Panel as overseeing the independent design review of individual Highways England projects. To what extent has the Strategic Design Panel been involved in the design of the Proposed Development and in particular new interchanges / junctions? Is the Panel likely to be involved in reviewing detailed design proposals?	<ol style="list-style-type: none"> <li>1. Highways England's Strategic Design Panel was set up in 2017 and is intended to focus on strategic input rather than scheme specific details targeting where its expertise, insight and guidance will have most positive impact and wider benefit, such as standards, procurement and evaluation. As such, the Strategic Design Panel is not of direct applicability to the Scheme.</li> <li>2. The Scheme, in line with "The Road to Good Design" was reviewed by the Applicant's internal design panel, which confirmed it would not be required during the design stages of the Scheme as the design was not considered complex or contentious. There are no plans to engage a panel for the remaining stages of the Scheme.</li> </ol>
GEN.1.3	Applicant	Under the general heading of Relevant Planning Policy, Chapter 1 of the ES [APP-036] identifies Highways England Guidance and Standards at paragraphs.1.3.21 to 1.3.26. Being the Applicant's own guidance and standards, what weight would the Applicant suggest these documents are given?	<ol style="list-style-type: none"> <li>1. Highways England is the Strategic Highways Company as set out in Part 1 of the Infrastructure Act 2015. It is a government owned company and therefore it's guidance and standards draw upon and build on Government policy and therefore carry similar weight to Government policy. For example, Biodiversity net gain, although not required to be delivered as part of an NSIP, is an objective of Highways England as set out in its Biodiversity Metric to be delivered on the Strategic Road Network as a whole and therefore each Scheme seeks opportunities to include net gain where possible to support this objective.</li> </ol>
GEN.1.4	Applicant	Paragraph 2.1.10 of the ES [APP-037] refers to the Road Investment Strategy (RIS). Why is there no reference to RIS2 in Chapter 2 of the ES?	<ol style="list-style-type: none"> <li>1. Paragraph 2.1.10 of Chapter 2: The Scheme [APP-037] does refer to the periods of RIS for both 2015-2016 which is RIS1 and 2020-2025 which is RIS2. The reference for RIS2 is Department for Transport (2020) Road Investment Strategy 2: 2020 – 2025 [online]. Available at: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872252/road-investment-strategy-2-2020-2025.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872252/road-investment-strategy-2-2020-2025.pdf</a></li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			2. The Scheme is included in both RIS1 and RIS2 demonstrating the Government's continued commitment to the Scheme.
GEN.1.5	Applicant	Scheme objectives are set out in paragraph 2.2.1 of the ES [APP-037]. How were these objectives determined? Why is there no explicit reference to design quality?	<ol style="list-style-type: none"> <li>Objectives are determined at the inception stage of a scheme, to ensure that the solution addresses the problems identified and that the scheme will deliver the desired outcomes whilst addressing those problems. The Objectives once determined are also used to assess the merits of any options and alternatives identified to ensure the delivery of an optimum solution. Therefore, the Objectives need to be measurable in order to ensure robust assessment can be undertaken. The Objectives determined for the Scheme were identified as a result of the A1 North of Newcastle Feasibility Study (the Study) undertaken in 2015. Further information on the outcome of the Study can be found in the Case for the Scheme [APP-344].</li> <li>In addition, the Objectives must align with the Roads Investment Strategy (RIS). The RIS description for the Scheme states that is for <i>"upgrading multiple sections of the A1 to dual carriageway to provide continuous high quality dual carriageway from Newcastle to Ellingham, north of Alnwick"</i>.</li> <li>The Scheme Objectives also align with local, regional, national policy and Highways England's Key Performance Indicators (KPIs), to ensure the Scheme addresses the RIS and the agreed problems are set out below:               <ul style="list-style-type: none"> <li>Improving the resilience of the network.</li> <li>Improving journey times.</li> <li>Improving accessibility.</li> <li>Improving safety.</li> <li>Facilitating economic growth and development</li> </ul> </li> </ol> 1. Design quality would not be a matter which would address the identified problems which the Scheme is designed to address and is therefore not a Scheme objective. However, GEN .1.5 describes how the Scheme seeks to deliver good design quality.
GEN.1.6	Applicant	Paragraph 2.5.9 of the ES [APP-037] refers to the existing A1 (including the existing bridge over the River Coquet) which would form the new northbound carriageway while a new southbound carriageway (including construction of a new bridge over the River Coquet) would be constructed on the eastern side. A new bridge over the River Coquet would be constructed parallel and to the eastern side of the existing bridge as set out in paragraph 2.5.94. The existing bridge would carry A1 northbound traffic and the new bridge would carry A1 southbound traffic. Does this conflict with the DCO where Work No. 3A involves alteration of the existing carriageway and Work No.3B, to the east of Work No. 3A provides for the creation of a new carriageway? The Applicant is asked to provide plans for both Part A and Part B which show the existing carriageway and the proposed carriageway, ideally distinguished in different colours.	<ol style="list-style-type: none"> <li>The Applicant confirms that paragraph 2.5.9 of Chapter 2: The Scheme [APP-037] does not conflict with Work No. 3A for the alteration to the existing carriageway for the northbound and Work No. 3B for the new southbound carriageway. Works to the bridges themselves are covered under Work No. 4, separate to Works Nos. 3A and 3B and is highlighted on the Works Plans [APP-007] as non-linear works.</li> <li>Please also refer to Appendix GEN.2 for plans showing the existing and proposed carriageways.</li> </ol>
GEN.1.7	Applicant	The de-trunked A1 would be extended northwards between Felmoor Park and the proposed West Moor	<ol style="list-style-type: none"> <li>The link road provides connectivity between the northern extent of the de-trunked A1 and the new A1 dual carriageway via the proposed West Moor junction. Traffic wishing to join the A1 between Fenrother and West</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		Junction / Felton Road, by the construction of a proposed link road parallel to the east of Part A according to paragraph 2.5.47 of the ES [APP-037]. What is the purpose of the proposed link road?	Moor junctions, will route north to West Moor junction for northern destinations on the new A1 (e.g. Alnwick) or south to Fenrother junction for southern destinations (e.g. Newcastle). It also provides resilience in case of emergency or planned closures on the new A1 between West Moor and Fenrother junctions.
GEN.1.8	Applicant	A new segregated footway / cycleway would be provided along the length of the eastern side of the proposed link road, between the de-trunked A1 and Felton Road as set out in paragraph 2.5.47 of the ES [APP-037]. Is this proposal secured through Work No. 16I? If not, how is it secured? Demonstrate how this footway / cycleway links into other walking / cycling networks.	<ol style="list-style-type: none"> <li>1. The new segregated footway / cycleway will form part of Work Nos. 16I, 16J and 16L set out in the Works Plans [APP-007] and as confirmed in Schedule 3 Part 6 of the draft DCO [APP-014].</li> <li>2. The new segregated footway / cycleway is a future proofing measure. It is not required to mitigate the impacts of the Scheme and does not link to other walking or cycling networks at this stage. Measures to promote sustainable transport choices are outside the remit of the Scheme and is not the responsibility of the Applicant – or within its ability to deliver. Designated Funds proposals are currently being pursued outside of this Application to tie into this cycle infrastructure from the de-trunked A1 to the south.</li> <li>3. The Applicant will continue to work with local authority and identify initiatives around sustainable transport. Designated Funds is a series of ring-fenced funds provided by Government to address a range of issues over and above the traditional focus of road investment and may be available to deliver additional enhancements, for example, cycling provision to enhance safety, connectivity and integration. The Applicant will liaise with the local authority and other groups to identify possible enhancements for which Designated Funds can be applied for.</li> <li>4. Subject to funding availability and meeting set criteria, such as being able to demonstrate it is an activity deemed beyond business as usual, there may be opportunities to make use of Designated Funds to deliver cycle infrastructure alongside the Scheme.</li> </ol>
GEN.1.9	Applicant	In order to construct the new bridge over the River Coquet a temporary haul road would be installed to construct the north pier as described in paragraph 2.5.98 of the ES [APP037]. Has the location of this haul road been determined and is it shown on a plan? Why does it need to be a permanent structure if it is not anticipated to be used for access in the future?	<ol style="list-style-type: none"> <li>1. The Main Contractor will make use of the area proposed for the southbound carriageway on the northside of the river to provide a temporary haul road to access the north pier. This is under the footprint of the permanent works and is not shown on the drawings. This access road can be reinstated on completion and is therefore temporary.</li> <li>2. Paragraph 2.5.98 of the ES [APP037] also describes the access to the south pier. This is deemed permanent as the cutting into the steeply sloped rock face will be impractical to reinstate.</li> <li>3. The Applicant has submitted, at Deadline A, notice of a proposed change to the Application which will affect these accesses. The northern access would require the temporary acquisition of additional land to the east of the land presently required to allow for the plant required to install the stabilisation works and the temporary bridge but the southern access would be reduced in extent.</li> </ol>
GEN.1.10	Applicant	Paragraph 2.5.168 of the ES [APP-037] states that some utilities' assets will be diverted, and this may be underground. Can the Applicant explain the approach which would be taken when diverting assets underground and have the potential effects from these works been assessed in the ES?	<ol style="list-style-type: none"> <li>1. The approach that would be taken is for new underground ducts and chambers to be installed by open trench excavation or by directional drilling if required. Where necessary ducts would be incorporated within new bridge structures. Where existing overhead services are to be diverted the existing services would be intercepted at the appropriate poles and diverted underground through the new ducts and chambers.</li> <li>2. The potential environmental effects as a result of the proposed works associated with diverting existing utilities assets underground have been assessed inherently as part of the overall Scheme design within the ES. Each environmental topic has assessed the proposed works set out in paragraphs 2.5.172 to 2.5.180 of Chapter 2: The Scheme [APP-037]. Where necessary and specifically relevant, some environmental topics refer to the proposed works as part of the assessment, for example Appendix 8.6: Written Scheme of Investigation for an Archaeological Strip, Map and Sample Excavation (National Grid Diversion Works) Part A [APP-226] which outlines archaeological investigation proposed to confirm the presence and value of the currently unknown below ground archaeological remains in the area.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
GEN.1.11	Applicant	<p>Paragraphs 2.5.174-2.5.180 of the ES [APP-037] describe how the construction of Part A will require the diversion of a National Grid gas transmission pipeline and diversion of a Northern Gas Networks pipeline and a Northern Powergrid overhead electricity line. Can the Applicant provide further details regarding how these utilities are anticipated to be moved and clarify where the effects of these diversions have been assessed in the ES?</p>	<ol style="list-style-type: none"> <li>1. The relevant Works comprise the diversion of approximately 500m of existing 1050mm diameter National Grid High-Pressure Gas Main underground pipeline (HPGM). These works are presently being undertaken under National Grid powers. However, as they are not yet complete, power need to be included to do so if required.</li> <li>2. The works comprise the construction of approximately 650 m of new pipe length, which allows the National Grid High-Pressure Gas Main underground pipeline (HPGM) to cross the line of the Scheme at a 90° angle. Excavations for the HPGM reach a depth of 3 to 4 m below current ground level. From the western tie-in point, the HPGM was routed north by approximately 350 m, and then directly east by approximately 300 m to achieve a perpendicular crossing of the new alignment, reconnecting at the eastern tie-in point. The existing section of HPGM between the tie-in points was then abandoned.</li> <li>3. To facilitate this, the diversion of a section of Northern Powergrid (NPG) overhead electricity line and a section of a Northern Gas Networks (NGN) medium pressure below ground gas pipeline were required. The NGN and NPG services extend in a north-south direction approximately 400m west of the existing A1 alignment, crossing the offline Section of the Scheme (and the route of the proposed HPGM diversion). The re-routing of the NGN gas pipe required open cut excavation up to 1.2m deep over a length of approximately 430m for the diverted gas pipeline. The rerouting of the NPG overhead cable required the excavation of a 1.2 m deep trench and the diversion of the cable into ducts and chambers placed within this trench. The total length of the diverted cable route is approximately 1050m.</li> <li>4. The potential environmental effects as a result of the diversion of the National Grid gas transmission pipeline, the Northern Gas Networks pipeline and the Northern Powergrid overhead electricity line have been assessed inherently within the overall Part A design and therefore have been considered in Chapter 5 to Chapter 17 of the ES [APP-040 to APP-063]. Where a specific potential impact or effect associated with the above diversions has been identified, it is stated clearly in the relevant technical chapter of the ES [APP-040-063]. For example, paragraph 8.7.15 of Chapter 8: Cultural Heritage Part A [APP-046] states that a cropmark of a rectilinear enclosure (HER 11367) is located within the area of the National Grid works and has the potential for permanent direct adverse impacts (paragraph 8.8.8). Appendix 8.6: Written Scheme of Investigation for an Archaeological Strip, Map and Sample Excavation (National Grid Diversion Works) Part A [APP-226] outlines archaeological investigation proposed to confirm the presence and value of the currently unknown below ground archaeological remains in the area and to mitigate the impacts on archaeological remains present.</li> <li>5. The Applicant has submitted at Deadline 1 a proposed change to the earthworks strategy which will re-use the footprint of the working area of the diversion.</li> </ol>
GEN.1.12	Applicant	<p>According to paragraph 2.5.181 of the ES [APP-037] the lighting assessment [APP is confidential? Please explain the reason for confidentiality</p>	<ol style="list-style-type: none"> <li>1. The Applicant confirms that Appendix 2.1 Lighting Assessment of the ES [APP-187] was incorrectly marked confidential and is content that this can be published. Appendix 2.1 Lighting Assessment [APP-187] is submitted at Deadline 1 with the confidentiality marking removed.</li> </ol>
GEN.1.13	Applicant	<p>Paragraph 2.5.197 and 2.5.198 of the ES [APP-037] refer to the construction of Part A potentially generating surplus material with landscape and biodiversity mitigation bunds proposed in order to use the excess material and avoid potential effects associated with its transport and disposal off-site. An opportunity for the likely surplus material generated to be used for Part B is also identified. Is the purpose of the proposed landscape and biodiversity bunds to use the excess material or for landscape and biodiversity mitigation?</p>	<ol style="list-style-type: none"> <li>1. Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] contains essential and non-essential bunds and earthworks. The primary purpose for the essential bunds would be to reduce potential landscape and biodiversity effects, with the secondary benefit that they would also dispose of some of the excess material on site. The primary purpose of the additional non-essential bunds or slackening of embankment slopes would be to dispose of excess material on site.</li> <li>2. However, some of the proposed non-essential bunds have dual purpose and would potentially further reduce landscape and biodiversity effects. For Part A, these proposed features have been identified on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095]. The proposed bunds and slackened slopes that are not required for mitigation are considered as Assessment Parameters and are referred to in Parameter 4 and 5 in Chapter 7: Landscape and Visual Part A [APP-044] and Chapter 2: The Scheme [APP-037].</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>Specific measures to dispose of excess material have been identified for Part B, with the intention to slacken slopes to reduce the disposal of material off site in Table 7-2 – National Planning Policy Relevant to Landscape and Visual, Chapter 7: Landscape and Visual Part [APP-045].</li> <li>The disposal of material, either in the form of bunds or through slacker slope profiles, provides an opportunity to reinforce the screening of the features of the Scheme; to integrate the proposed slopes more effectively; or to lift planting to achieve screening earlier in the operational phase of the Scheme.</li> </ol>
GEN.1.14	Applicant	<p>Two residential dwellings would need to be demolished to accommodate the proposed Charlton Mires Junction. These properties include East Cottage and Charlton Mires Farm according to paragraph 2.5.181 of the ES [APP-037]. Relevant Representations have been submitted by the owners of these properties [RR-020] [RR-029]. Was an alternative alignment of the A1 considered in order to avoid demolition? If not, why not? If so, why was it rejected? The Applicant is also asked to respond to the comments in the Relevant Representations which relate to these properties.</p>	<ol style="list-style-type: none"> <li>As stated in paragraph 2.5.216 of Chapter 2: The Scheme [APP-037] both East Cottage and Charlton Mires Farm are proposed to be demolished as part of the Scheme.</li> <li>Three options were considered for Part B as part of the development of the Scheme. Two of those routes (the green and blue Options) included offline sections that bypassed Charlton Mires altogether, and therefore avoided the demolition of the Charlton Mires Farm and East Cottage buildings. However, the estimated cost of these two options were outside the Scheme budget and therefore unaffordable. In addition, the offline options were predicted to result in greater environmental impacts In particular the Green Option would result in the greatest loss of habitat and agricultural land, would have a greater impact on some protected species and would run closer to the area of high landscape value. Similarly, the blue option would result in a greater loss of habitat when compared to the preferred orange Option and would also have potentially had a greater impact on some protected species. Therefore, both options were discounted. The remaining option to be progressed was the online widening option identified as the 'Orange Route' in the Preferred Route Announcement, published in September 2017.</li> <li>Table 3.4 of Chapter 3: Assessment of Alternatives [APP-038] presents options development of Part B in relation to the location of the proposed Charlton Mires junction four different options are described. Appendix GEN.1 to the response to GEN.1.33 shows these options in plan.</li> <li>Options 1 and 3 were discounted based on consultation with landowners. For Option 1 the proposed overbridge and link road location would have had a greater impact on both the residential property at West Mires and an existing paddock to the south east of Charlton Mires Junction. For Option 3 the road connecting to the skewed bridge crossing the A1 would still come close to Charlton Mires Farm and would result in the loss of around 70% of the garden.</li> <li>Option 2 was taken forward as it was deemed to be in the optimal position based on connectivity with the surrounding local road network and access considerations for the residents, properties, and businesses at East Linkhall and West Linkhall.</li> <li>Option 4 would require increased diversion routes of 2km for East Linkhall and 900m for West Linkhall. A new 800m length of road between Rock Lodge and Rock Midstead would need to be constructed for Option 4 to connect the existing B6347 and the proposed junction. Option 2 therefore reduces the length of new side required and offers better value for money when compared to Option 4.</li> </ol>
GEN.1.15	Applicant	<p>Paragraph 2.8.36 of the ES [APP-037] states that there would be no borrow pits within the boundaries of the Scheme and all imported materials would be sourced from an operational quarry, as locally as possible, where available. Why was it decided not to use borrow pits?</p>	<ol style="list-style-type: none"> <li>In developing the earthworks strategy for the Scheme, it was established that borrow pits would not be required because there is a surplus of excavated fill on the Scheme as a whole. However, this involves moving excavated materials for the earthworks from Part A to Part B as described in paragraph 2.5.198 of Chapter 2: The Scheme [APP-037]. The statement regarding imported materials being sourced from local operational quarries relates to granular materials such as Type 1 sub base, 6F2 Capping materials, filter materials for drainage etc rather than the general fill materials required for the earthworks.</li> <li>The Applicant has submitted, at Deadline A, notice of a proposed change to the Application which reduces the volume of earthworks materials to be transported between Part A and Part B but will maximise the re-use of materials within the existing Scheme extents. This recent review of the earthworks strategy has been</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			proposed as one of the formal changes to the scheme which will require the use of borrow pits to exchange and win additional materials suitable for construction.
GEN.1.16	Applicant	Tables 3.3 and 3.4 of the ES [APP-038] set out the environmental considerations in the evolution of the scheme design for Part A and Part B. Paragraph 3.4.3 of the ES [APP-038] describes how the development of the design for Part A has been informed by a number of factors and paragraph 3.4.6 adopts a similar approach for Part B. How was design quality addressed for each of the infrastructure elements identified through this exercise?	<ol style="list-style-type: none"> <li>Chapter 3: Assessment of Alternatives [APP-038] lists out in Tables 3.3 and 3.4 the groups of infrastructure elements for each part of the Scheme and presents how environmental factors have contributed to each preferred option selection. Whilst it does not detail design, the response to question GEN.1.1 above demonstrates how design has indeed been taken into account in this Scheme.</li> <li>Design quality is considered to be addressed through the application of DMRB which contains information about current standards relating to the design, assessment and operation of motorway and all-purpose trunk roads in England. Paragraph 3.4.3b of Chapter 3: Assessment of Alternatives [APP-038] refers to the engineering design covered by these standards.</li> <li>Furthermore, the design of the Scheme has been iteratively developed with consideration of the integration of the Scheme into the environment through good design following the principles set out within DMRB from the earliest stage, and continuing as the EIA has been progressed.</li> </ol>
GEN.1.17	Applicant	Table 3.4 of the ES [APP-038] describes the proposed accommodation overbridge as providing 'safe passage' for Walkers, Cyclists and Horse-riders (WCHs) as well as agricultural movements across the A1. Is such an outcome acceptable or should the objective for WCHs be more ambitious?	<ol style="list-style-type: none"> <li>A solution serving both WCHs as well as agricultural movements is acceptable because the chosen location of the grade separated cross is deemed to have potential for tying into the existing PRow network as well as an optimal crossing point for agricultural vehicles and the provision of a grade separated crossing will improve the amenity and enhance the attractiveness of the connecting PRow network for use by pedestrians, cyclists and equestrians.</li> <li>The provision of an overbridge across the A1 within Part B meets the "Improve safety" Scheme objective (section 3.7.1 of the Case for the Scheme [APP344]). For WCHs, this is achieved by improving safety through the removal of an at-grade crossing of the trunk road and the potential conflict with vehicular traffic. The bridge will incorporate parapets at the correct design height for horse-riders. This provision is greater than the parapet height required for cyclists or pedestrians.</li> <li>There is no justification for a greater WCH provision as there are very few movements and low usage, and therefore no need for a segregated solution given the additional impacts that would result and the additional material resources required.</li> </ol>
GEN.1.18	Applicant	Chapter 16 of the ES [APP-062] (Assessment of Cumulative Effects) assesses both combined and cumulative effects. Table 16.3 shows the criteria for identifying 'other developments' for inclusion in the assessment for cumulative effects. Other developments were identified from the Northumberland County Council website. The short list of sites is presented in Appendix 16.1 [APP-327]. Can the Applicant confirm if any other proposed sites have been identified since the cutoff point? Has the short list of sites been agreed with Northumberland County Council?	<ol style="list-style-type: none"> <li>The Applicant has not identified any other proposed sites, as the Applicant has not undertaken a review of other proposed sites since the cut-off point in February 2020, as there is no requirement to do so. Northumberland County Council (NCC) was not consulted on the finalised short list of sites, however the methodology and long-list were consulted upon and therefore the content of the short list was considered sufficiently robust to inform the assessment.</li> </ol>
GEN.1.19	Applicant	Tables 17.2 and 17.3 of the ES [APP-063] indicate the monitoring requirements for Part A and Part B respectively. In spite of significant adverse effects having been identified for several residential receptors due to noise and vibration, no noise monitoring measures are proposed in respect of these receptors. Can the	<ol style="list-style-type: none"> <li>The significant adverse operational noise effects are identified within Chapter 6: Noise and Vibration [APP-042] and are located at:                     <ul style="list-style-type: none"> <li>New Houses Farm</li> <li>The Cottage, Causey Park</li> <li>Joiners Cottage, Causey Park</li> </ul> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>Applicant confirm the location of these properties and explain why no noise monitoring measures are proposed? Details of how the monitoring measures would be secured is not provided for every case where monitoring is proposed. Can the Applicant provide clarification where such detail is absent?</p>	<ul style="list-style-type: none"> <li>• Northgate Farm (a significant adverse operational noise effect as a result of the Updated DMRB LA 111 guidance)</li> </ul> <ol style="list-style-type: none"> <li>2. New Houses Farm, The Cottage and Joiners Cottage, Causey Park are shown as significant adverse operational noise effects on Figure 6.6 Receptor Groups Part A [APP-084] as groups 7 and 8.</li> <li>3. Northgate Farm is shown as a potential significant adverse operational noise effect on the Figure contained within Appendix 6.10 Noise and Vibration DMRB Sensitivity Test Part A [APP-216].</li> <li>4. The above four properties are also identified as significant adverse effects in the Noise Addendum (Document Reference 6.22). Within the Noise Addendum an additional six receptors in Fenrother are identified as likely to experience significant adverse operational noise effects as a result of the Scheme. All of these ten receptors are shown on Figure 6 Determination of Significance - Receptor Groups – Part A within Appendix D Noise Addendum Figures – Part 2 (Document Reference 6.22.3).</li> <li>5. The approach to the operational phase assessment was to follow the appropriate guidance set out within the DMRB HD213/11. This guidance prescribes, as does its successor DMRB LA 111, a predictive approach to assessment which relies upon provided traffic data applicable to annual average conditions both with and without the Scheme. This approach ensures like-for-like comparison. It is not possible to replicate this assessment through monitoring within reasonable timescales.</li> <li>6. To compare measured noise levels with and without the Scheme, it would be necessary that without Scheme monitoring be completed before the start of any construction works and would therefore be a number of years before the with-Scheme monitoring. The assessment presented in the Noise Addendum (Document Reference 6.22) is based on with and without Scheme scenarios for the same year (predicted opening year, 2024. It would not be possible to make this like-for-like comparison using measured noise levels. Monitoring of noise levels post construction is not routinely undertaken for road schemes and therefore is not proposed in this situation.</li> <li>7. The assessment completed is based on calculated road traffic noise levels only and is therefore not influenced by other noise sources and possible variables. Variables including, but not limited to, daily fluctuations in vehicle movements, the influence of meteorological conditions, and the influence of sources other than road traffic noise, can all affect measured noise levels making it difficult to undertake a like-for-like comparison with and without the Scheme.</li> <li>8. The Outline Construction Environmental Management Plan (Outline CEMP) [APP-346] includes details of the proposed maintenance of assets, including the noise mitigation measures (low noise road surface and proposed noise barriers) following the opening of the Scheme. Paragraph 5.2.2. states: <i>“In the longer term, expected planned maintenance will include activities such as resurfacing the road and replacement of assets when they become life expired.”</i></li> </ol>
GEN.1.20	Applicant	<p>ES Appendix 4.3 [APP-195] (Major Accidents and Disasters Assessment) describes the 'risk' of events occurring, although it does not explain how in this context risk relates to significance. Can the Applicant confirm that the findings of the major accidents and disasters assessment [APP-195] in relation to risk, demonstrate no likely significant effects?</p>	<ol style="list-style-type: none"> <li>1. Paragraph 2.4.12 of Appendix 4.3 Major Accidents and Disasters Assessment [APP-195] indicates that risk events that have potential to be a major event, have potential to lead to a significant effect. Paragraph 2.4.22 of Appendix 4.3 Major Accidents and Disasters Assessment [APP-195] indicates that where significant effects are identified mitigation measures must be in place, and the assessment considers where the risk can be managed to As Low as Reasonably Practicable (ALARP) with the mitigation measures proposed, which would include implementation of a surface water drainage strategy, attenuation of surface water run-off, implementation of construction traffic management and a construction health and safety plan. As all major events identified can be managed to ALARP, it is considered there are no likely significant effects.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
GEN.1.21	Applicant	The application includes an outline Construction Environmental Management Plan (CEMP) which includes a Register of Environmental Actions and Commitments (REAC). The application also provides for the preparation of a Handover Environmental Management Plan (HEMP). Has the Applicant considered the need for a Code of Construction Practice and a Landscape Environmental Management Plan or have the matters which would be covered by such documents been incorporated into the CEMP, REAC and HEMP?	<ol style="list-style-type: none"> <li>1. Paragraph 1.1.3, bullet b, of the Outline CEMP [APP-346] indicates that the scope includes all the measures that would be expected within A Code of Construction Practice (CoCP). The Applicant therefore considers that there is no requirement for a CoCP.</li> <li>2. The Outline CEMP (reference S-L110) [APP-346] requires a Landscape Management Plan to be implemented once the Scheme is operational.</li> </ol>
GEN.1.22	Applicant	Paragraph 5.2.5 of the Case for the Scheme [APP-344] states that an Appraisal Summary Table has been produced for the Scheme which is a summary for decision makers containing key economic, environmental and other information drawn from existing documents such as cost benefit analysis with a summary of the monetised economic, environmental and social benefits of the Scheme provided in Table 29. Where is the evidence for the summary figures contained in Table 29?	<ol style="list-style-type: none"> <li>1. The evidence for the accident benefits is described in Section 4.10 of the Case for the Scheme [APP-344]. The evidence for the Wider Impacts benefits is described in Appendix C of the Case for the Scheme [APP-344].</li> <li>2. User benefits have been calculated using the DfT's TUBA (Transport User Benefits Appraisal) program. TUBA compares the economic costs for the do something (with Scheme) situation with the costs for the do minimum (without Scheme) situation to establish the value of forecast savings in travel time and vehicle operating costs. It also provides an estimation of greenhouse gas and indirect taxation benefits.</li> <li>3. Journey time reliability benefits have been calculated in line with guidance within WebTAG Unit A1.3 using the stress-based approach. The method generates an indication of the impact of the Scheme on reliability, which is then monetised by applying a percentage uplift to the forecast journey time savings from TUBA.</li> </ol>
GEN.1.23	Applicant	Paragraph 5.3.12 of the Case for the Scheme [APP-344] states that the Scheme delivers a biodiversity net gain for certain habitats. Should biodiversity net gain take account of all habitats?	<ol style="list-style-type: none"> <li>1. Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246] and Appendix 9.11 Biodiversity No Net Loss Assessment Part B [APP-309] consider all habitats, with a focus on individual Habitats of Principal Importance (HPI) in line with the aims of the Scheme.</li> <li>2. Biodiversity no net loss or net gain is not claimed for the Scheme as a whole (for all habitats), due to the loss of ancient woodland; an irreplaceable habitat (Section 9.5; CIEEM, CIRIA, IEMA (2019)<sup>1</sup>) and the net loss for some HPI (see Table 1 of Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246] and Table 5-12 of Appendix 9.11 Biodiversity No Net Loss Assessment Part B [APP-309]). However, it is reasonable to identify those instances where the Scheme does contribute towards biodiversity no net loss and/or net gain.</li> <li>3. The statement made in paragraph 5.3.12 of the Case for the Scheme [APP-344] refers to individual habitats where a measurable net gain has been identified as part of Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246] and Appendix 9.11 Biodiversity No Net Loss Part B [APP-309]. The Scheme contributes to net gains for biodiversity (outside of ancient woodland) by achieving a net gain for area-based Habitats of Principal Importance (HPI) for Part A (principally lowland mixed deciduous woodland, lowland meadow and ponds; see Table 1 of Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246]) and area-based HPI and non-HPI for Part B (see Table 5-12 of Appendix 9.11 Biodiversity No Net Loss Assessment Report Part B [APP-309]).</li> </ol>

<sup>1</sup> CIEEM, CIRIA, IEMA (2019). *Biodiversity Net Gain. Good practice principles for development. A practical guide.*

Ref. No.	Question to:	Question	Applicant's Response
GEN.1.24	Applicant	In commenting on the summary of the monetised economic, environmental and social benefits of the Scheme provided in Table 29, paragraphs 5.3.10 to 5.3.24 of the Case for the Scheme [APP-344] address the environmental and social benefits in operational terms. Have the construction effects been taken into account in this analysis?	1. No. It is agreed that paragraphs 5.3.10 to 5.3.24 address the environmental and social benefits in operational terms.
GEN.1.25	Applicant	Paragraph 5.2.5 of the Case for the Scheme [APP-344] states that the monetised user benefits for commuters and other users (for example, leisure) are forecast to be £58.2 million. Where has this been factored into Table 29?	1. The £58.2m is the total of the £13.5m 'commuting' and £44.7m 'other' benefits which are both included in Table 29 of the Case for the Scheme [APP-344].
GEN.1.26	Applicant	Table 29 of the Case for the Scheme [APP-344] provides a figure for Greenhouse Gas Emissions. This is not addressed in the commentary accompanying the table. Please explain how this figure has been derived. Why is the travel time benefit listed three times? Greater clarity is required to explain the figures in Table 29.	<ol style="list-style-type: none"> <li>1. The travel timing benefits are broken down by business, commuting and other users thus three different numbers are presented in Table 29 of the Case for the Scheme [APP-344] Further explanation of the evidence base for the figures in table 29 is given in response to GEN 1.22.</li> <li>2. Monetary values for the appraisal of greenhouse gas emissions have been generated using the methodology set out in TAG Unit A3 - Environmental Impact Appraisal. The regional emissions (i.e. the mass of Carbon Dioxide emitted in both the Scheme opening year and the design year) are set out in Chapter 5: Air Quality Part A [APP-040] and Part B [APP-041].</li> </ol>
GEN.1.27	Applicant	Table 30 of the Case for the Scheme [APP-344] concludes that the Scheme has a Benefit Cost Ratio of 0.8. Greater clarity is required to explain the figures in Table 30 and to explain the significance of 0.8.	1. Table 30 of the Case for the Scheme [APP-344] summarises the total present value (i.e. discounted and deflated to a common 'price year', in this case 2010) of monetised benefits (PVB) and costs (PVC) associated with the Scheme over its construction period and a service life of 60 years. The ratio of PVB divided by PVC gives the Benefit Cost Ratio (BCR) and is one indicator of the Scheme's economic value. The relative value of impacts included in the PVB (and therefore their weighting i000n undertaken, driven by the Applicant's lifecycle governance with the moving the Scheme from preliminary design into planning phase. The BCR of the Scheme has improved somewhat to 0.95. Details of the revised methodology used to calculate the 0.95 value are included in Appendix GEN.5 submitted at Deadline 1. Under the DfT's Value for Money Framework this still indicates Poor value for money, but this should also be balanced with the non-monetised benefits for this scheme as set out in the Case for the Scheme [APP-344 section 5.4].
GEN.1.28	Applicant	Figures 32 and 33 of the Case for the Scheme [APP-344] purport to show the extent of Policy TRA3 for Part A and Part B. Is Figure 32 correct in showing the A1 north of Alnwick?	1. Figure 32 in the Case for the Scheme [APP-344] is incorrect. An updated version of Figure 32 that does illustrate the point is provided at Deadline 1 at Appendix GEN.6.
GEN.1.29	Applicant NCC	Figure 34 of the Case for the Scheme [APP-344] is titled 'Inner and Outer Green Belt Boundary Preferred Options Map' sourced from the NCC Morpeth Outer Green Belt Boundary Report, October 2013. It shows existing Green Belt and Proposed Green Belt Extension. Figure 7.10 of the ES [APP-097] shows the existing Green Belt as for Figure 34 and Saved Policy S5 Green Belt Extension. Paragraph 6.4.1 references Policy S5 of the Structure	<ol style="list-style-type: none"> <li>1. The Scheme would involve development within the Green Belt as defined in Policy S5 of the Structure Plan and in the emerging NCC Local Plan. However, the section of the Scheme which involves development within the Green Belt is limited to Part A in the area near to Morpeth. Policy S5 is a saved policy from the Northumberland Structure Plan that was published in 2005. As a 'saved' policy it is considered to form part of the development plan for determination planning applications.</li> <li>2. Policy S5 set out a general intention to extend to the north the existing Green Belt around Morpeth, which the broad geographic boundary described in the text of the policy.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		Plan and the emerging NCC Local Plan. What is the status of Structure Plan Policy S5? What is the status of the Green Belt in the emerging NCC Local Plan as described in paragraph 6.4.1? Is the Scheme within the Green Belt? Please clarify.	<ol style="list-style-type: none"> <li>Figure 34 in the Case for the Scheme [APP-344] illustrates the point that there are no options for the dualling of the A1 in Northumberland that would avoid the Green Belt around Morpeth.</li> <li>The emerging NCC Local Plan seeks to confirm and define the boundaries of the Green Belt in Northumberland, including to the north of Morpeth. This emerging policy should be given some weight in accordance with paragraph 48 of the National Planning Policy Statement, although the Applicant acknowledges that this emerging policy is not yet adopted and as such does not yet form part of the development plan.</li> </ol>
GEN.1.30	Applicant	Paragraph 6.5.2 of the Case for the Scheme [APP-344] describes the benefits of the Scheme as being demonstrated by its inclusion within the RIS and within national, regional and local transport and planning policy. Explain how the inclusion of the Scheme within a policy can be termed a benefit.	<ol style="list-style-type: none"> <li>It is not the case that the inclusion of the Scheme within policy is seen as a benefit in itself. The argument being made here is rather that the fact that the Scheme is seen as beneficial by local and national government is demonstrated by the fact that it is supported in local, regional and national transport and planning policy. The Scheme is delivering an infrastructure project which is a strategic aim of such policy.</li> </ol>
GEN.1.31	Applicant	Paragraph 6.5.4 of the Case for the Scheme [APP-344] sets out the adverse impacts of the Scheme. No mention is made of the impact on Greenhouse Gas Emissions or the loss of ancient woodland. The Applicant is asked to review its summary of adverse impacts and the conclusions on the planning balance.	<ol style="list-style-type: none"> <li>The Applicant acknowledges that the Scheme will have some negative environmental impacts, which are identified and assessed in Chapter 5 to Chapter 17 of the ES [APP-036 to APP-063]. These include some loss of ancient woodland around the River Coquet, but it is considered that Appendix 9.21 Ancient Woodland Strategy Part A [APP-247] will help to mitigate this impact.</li> <li>A negative impact of the Scheme on Greenhouse Gas Emissions is also acknowledged. The Applicant is aware of the guidance at paragraph 5.16 of the NPS NN that: <i>'the impact of road development on aggregate levels of emissions is likely to be very small'</i> and that emission reductions will be delivered through a system of five-year carbon budgets rather than through decisions on individual schemes.</li> <li>Even in light of the negative impacts the planning balance for the Scheme remains in favour of approval.</li> </ol>
GEN.1.32	Applicant	Paragraph 13.9.2 of the ES [APP-056 and APP-057] describe a process of off-site construction to maximise the use of prefabricated structures and components and encourage a process of assembly rather than construction. Does this approach conflict with the achievement of good quality design?	<ol style="list-style-type: none"> <li>The processes of off-site construction and assembly rather than construction on site contributes to the achievement of good quality design as opposed to conflicting with it through making designs safer to build, through construction in controlled environmental conditions which provides for greater certainty that quality is achieved and through standardising designs to provide consistency and uniformity of appearance.</li> <li>The Treasury's 2018 National Infrastructure and Construction Pipeline report [<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759222/CS207_CCS1118987248-001_National_Infrastructure_and_Construction_Pipeline_2018_Accessible.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759222/CS207_CCS1118987248-001_National_Infrastructure_and_Construction_Pipeline_2018_Accessible.pdf</a>] set the challenge of the government's increasing use of prefabrication and other offsite construction methods in public-funded schemes. The Construction Sector Deal: one year on [<a href="https://www.gov.uk/government/publications/construction-sector-deal/construction-sector-deal-one-year-on">https://www.gov.uk/government/publications/construction-sector-deal/construction-sector-deal-one-year-on</a>] includes offsite construction as an aspect of progress in implementing the commitments made. The Applicant is seeking to address these initiatives through encouraging more computer-led design and pre-assembly in construction. As well as increasing productivity and efficiency the benefits include improving the safety of construction workers and the travelling public, improving the quality of the finished product and reducing the duration of construction activities and thereby the resulting delays and frustration for road users passing through the construction works.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
GEN.1.33	Applicant	Table 3.4 of the ES [APP-038] presents Environmental Considerations in the Evolution of the Scheme Design (Part B). In relation to the location of the proposed Charlton Mires junction four different options are described. The Applicant is asked to present plans of each of the four options which should also indicate the land interests of M E Beal & Sons [RR-020] and proposals for development on their land.	<ol style="list-style-type: none"> <li>The drawings for the four junction options described in Table 3-4 Chapter 3: Assessment of Alternatives [APP-038] of the ES are included in Appendix GEN.3:               <ul style="list-style-type: none"> <li>Option 1 - HA551459-JAC-GEN-Section B-WD-C-162</li> <li>Option 2 - HA551459-JAC-GEN-Section B-WD-C-163</li> <li>Option 3 - HA551459-JAC-GEN-Section B-WD-C-164</li> <li>Option 4 - HA551459-JAC-GEN-Section B-WD-C-169</li> </ul> </li> <li>Option2 was selected as the preferred option and was further developed during the Preliminary Design stage to ensure that the geometrical alignment complied with design and safety standards. The consequences of these developments were to provide a larger radius and improvement to visibility on the approach to the junction from the north in compliance with the design standards which resulted in the centreline of the new carriageway being moved to the east. This in turn required demolition of some of the Charlton Mires Farm buildings to accommodate the layout.</li> </ol>
GEN.1.34	Applicant	Paragraph 2.8.50 of the ES [APP-037] states that the Lionheart Enterprise Park Compound would occupy approximately 40,000 m2 . In paragraph 2.2.7 of the Construction Traffic Management Plan it is stated that the compound would occupy approximately 50,000m2 . Please clarify. What is the area of the Order Limits at the Lionheart Enterprise Park Compound?	<ol style="list-style-type: none"> <li>The Lionheart Enterprise Park Compound (plot 19/1a as shown on the Land Plans [APP-006]) would occupy approximately 40,000 m2. The area quoted in the Construction Traffic Management Plan was misquoted.</li> <li>The area of Order limits for plot 19/1a which consists of the temporary acquisition at Lionheart Enterprise Park for a proposed construction compound is 102,129m2 as listed in the Book of Reference [APP-020]. This larger area was used for the environmental assessment of the Application. The Applicant has confirmed with the landowner the option to only occupy part of the plot, which allows for the landowners recent planning application. The ES is therefore considered to be robust by the Applicant.</li> </ol>
GEN.1.35	Applicant	Table 17-2 of ES Chapter 17: Summary [APP-063] shows that mitigation measures have been proposed for all aspects where significant effects are anticipated. Where significant adverse effects remain after mitigation measures have been employed, it is not apparent whether any additional measures can be introduced to achieve a level of effect which is deemed not significant. For example, if the mitigation measures would not bring noise levels down to a level of effect which is deemed not significant, then could measures such as compensation or enhanced glazing be used. The Applicant is requested to justify the significant residual adverse effects shown in the technical chapters of the ES and provide explanation if any further measures can be introduced.	<ol style="list-style-type: none"> <li>Appendix GEN.4 provides justification for the significant residual adverse effects shown in Chapter 5 to Chapter 17 [APP-040 to 062] of the ES and confirms that no further measures can be introduced.</li> </ol>

**Table 1-2 - Air Quality and Emissions**

Ref. No.	Question to:	Question:	Applicant's Response:
<b>Part A</b>			
AQ.1.1	Applicant	Table 5.3 of the ES [APP-040] references Highway England's Air Quality Strategy 'Our strategy to improve air quality'. What is the status for the Examination of this Highways England policy document?	<ol style="list-style-type: none"> <li>1. Highways England's Air Quality Strategy (Strategy) sets out Highways England's support of Defra and the Department for Transport (DfT) in their work to deliver nitrogen dioxide compliance at the roadside.</li> <li>2. The Strategy communicates Highways England's approach to key stakeholders as it works to improve air quality. It is a corporate document, which sets out Highway England's stated aims in the field of air quality.</li> <li>3. While the Strategy is not national planning policy for the purposes of the Examination, it is relevant to the Scheme as assessment against the Strategy ensures that Highways England meets its stated aims in the field of air quality. These aims are based on national planning policy aims such as sustaining and contributing towards compliance with national limit values and national objectives for pollutants and, as a result, the Scheme's compliance with the Strategy (as evidenced in Table 5-3: National Planning Policy Relevant to Air Quality of Chapter 5: Air Quality Part A [APP-040]) is also indicative of compliance with those national policies.</li> </ol>
AQ.1.2	IP's	Paragraph 5.4.9 of the ES [APP-040] identifies the data sources used for the assessment. Are IPs content with the range of data used?	
AQ.1.3	IP's	Paragraph 5.4.9 of the ES [APP-040] states that based on the Affected Road Network (ARN), 25 representative human receptors have been selected. These receptors represent worst-case locations with likely relevant human exposure to air pollutants from the ARN. Are IPs content with the identification of these receptors in terms of the number and location?	
AQ.1.4	Applicant	Figure 5.2 of the ES [APP-076] Human and Ecological Receptors Assessed, refers in the title to Part A. The plans show both Part A and Part B. Similarly Figure 5.3 [APP-077] Air Quality Monitoring, refers in its title to Part A while the plans show both parts. Please clarify.	<ol style="list-style-type: none"> <li>1. Questions AQ1.4 and AQ1.5 have been reviewed and to improve the clarity of the figures in relation to the spatial extents of the plots and the points raised, the following figures have been amended: <ul style="list-style-type: none"> <li>• Figures 5.1 [APP-075], 5.2 [APP-076], and 5.3 [APP-077] for Part A</li> <li>• Figures 5.1 [APP-123], 5.2 [APP-124], and 5.3 [APP-125] for Part B</li> <li>• Figure 16.3 [APP-186] (not referenced directly in the response, but included as has been updated for consistency)</li> </ul> </li> <li>2. It should be noted that the spatial extent of the figures is a function of <ul style="list-style-type: none"> <li>• The Order Limits for Part A and Part B of the Scheme</li> <li>• The roads affected by traffic changes with Part A and Part B of the Scheme individually (termed Affected Road Network(s)) and as a whole, and</li> <li>• The extent of the dispersion model</li> </ul> </li> <li>3. With regards the final bullet point, to ensure a consistent approach to the modelling of the impacts of the Scheme and its constituent parts, the modelled extent was derived from the Scheme Affected Road Network (ARN). The Scheme ARN covers a greater extent than the ARNs for Part A and Part B alone. Therefore, in the Figures relating to Part A [APP-075] [APP-076], and [APP-077], and to Part B [APP-123], [APP-124], and [APP-125], data are presented in the context of the full modelled extent where relevant.</li> <li>4. Details of the specific changes to the figures are provided for Part A in response to AQ1.4; changes to the figures for Part B are detailed in response to AQ1.5</li> </ol>



Ref. No.	Question to:	Question:	Applicant's Response:
			<p><b>Figure Changes for Part A</b></p> <ol style="list-style-type: none"> <li>Figures 5.1 [APP-075], 5.2 [APP-076], and 5.3 [APP-077] for Part A have been amended to improve clarity and are submitted at Deadline 1 in Appendix AQ.1, AQ.2 and AQ.3.</li> </ol> <p><b>Figure 5.1</b></p> <ol style="list-style-type: none"> <li>Title changed to remove reference to scenario (Do Something 2023 and Cumulative 2023). Scenario reference added to the Key (i.e. Page 1 now reads ARN for Part A of the Scheme, whereas Page 2 reads ARN for the Scheme). The Part A ARN and Scheme ARN are now shown in different colours.</li> <li>Revised Figure provided in Appendix AQ.1</li> </ol> <p><b>Figure 5.2</b></p> <ol style="list-style-type: none"> <li>The spatial extent of this figure has been reduced to show the extent of the ARN for Part A alone. This affected road network extends beyond the physical works to be undertaken for Part A.</li> <li>Title changed to include reference to Part A of the Scheme. Reference to Part A of the Scheme added to the Key for Order Limits.</li> <li>Revised Figure provided in Appendix AQ.2</li> </ol> <p><b>Figure 5.3</b></p> <ol style="list-style-type: none"> <li>The spatial extent of Figure 5.3 is unchanged and relates to the extent of the model (which, as stated above, covers the ARN for the Scheme as a whole). Since Figure 5.3 [APP-077] is presented for Part A of the Scheme, only the order limits for Part A are shown. The key was updated to reflect Part A of the Scheme for Order Limits.</li> <li>Page 1 of 3 provides an overview of the modelled extent, page 2 of 3 shows the monitoring alongside Part B of the Scheme, and page 3 of 3 shows the monitoring alongside Part A of the Scheme. However, to reiterate, the full spatial extent of the Figure is determined by the extent of the air quality model.</li> <li>Revised Figure provided in Appendix AQ.3</li> </ol>
<b>Part B</b>			
AQ.1.5	Applicant	<p>Figure 5.1 of the ES [APP-123] ARN refers to Part B in the title, but the plans show both Part A and Part B. Similarly Figure 5.3 [APP-125] Air Quality Monitoring, refers in its title to Part B while the plans show both parts. Please clarify.</p>	<ol style="list-style-type: none"> <li>Questions AQ1.4 and AQ1.5 have been reviewed and to improve the clarity of the figures in relation to the spatial extents of the plots and the points raised, the following figures have been amended: <ul style="list-style-type: none"> <li>Figures 5.1 [APP-075], 5.2 [APP-076], and 5.3 [APP-077] for Part A</li> <li>Figures 5.1 [APP-123], 5.2 [APP-124], and 5.3 [APP-125] for Part B</li> <li>Figure 16.3 [APP-186] (not referenced directly in the response, but included as has been updated for consistency)</li> </ul> </li> <li>It should be noted that the spatial extent of the figures is a function of <ul style="list-style-type: none"> <li>The Order Limits for Part A and Part B of the Scheme</li> <li>The roads affected by traffic changes with Part A and Part B of the Scheme individually (termed Affected Road Network(s)) and as a whole, and</li> <li>The extent of the dispersion model</li> </ul> </li> <li>With regards the final bullet point, to ensure a consistent approach to the modelling of the impacts of the Scheme and its constituent parts, the modelled extent was derived from the Scheme Affected Road Network (ARN). The Scheme ARN covers a greater extent than the ARNs for Part A and Part B alone. Therefore, in the Figures relating to Part A [APP-075] [APP-076], and [APP-077], and to Part B [APP-123], [APP-124], and [APP-125], data are presented in the context of the full modelled extent where relevant.</li> </ol>

Ref. No.	Question to:	Question:	Applicant's Response:
			<p>4. Details of the specific changes to the figures are provided for Part A in response to AQ1.4; changes to the figures for Part B are detailed in response to AQ1.5</p> <p><b>Figure Changes for Part B</b></p> <p>1. Figures 5.1 [APP-123], 5.2 [APP-124], and 5.3 [APP-125] for Part B have been amended to improve clarity and are submitted at Deadline 1 in Appendix AQ.1, AQ.2 and AQ.3.</p> <p><b>Figure 5.1</b></p> <p>1. Scenario reference changed in the Key (i.e. Page 1 previously said 'A2E' ARN, now reads ARN for Part B of the Scheme, whereas Page 2 previously said 'M2E' ARN, now reads ARN for the Scheme). The Part B ARN and Scheme ARN are now shown in different colours.</p> <p>2. Revised Figure provided in Appendix AQ.1</p> <p><b>Figure 5.2</b></p> <p>1. The spatial extent of this Figure has been reduced to show the extent of the ARN for Part B alone. This affected road network extends beyond the physical works to be undertaken for Part B.</p> <p>2. Title changed to include reference to Part B of the Scheme. Reference to Part B of the Scheme added to the Key for Order Limits.</p> <p>3. Revised Figure provided in Appendix AQ.2</p> <p><b>Figure 5.3</b></p> <p>1. The spatial extent of Figure 5.3 is unchanged and relates to the extent of the model (which, as stated above, covers the ARN for the Scheme as a whole). Since Figure 5.3 [APP-125] is presented for Part B, only the Order Limits for Part B are shown. The key was updated to reflect Part B of the Scheme for Order Limits.</p> <p>2. Page 1 of 3 provides an overview of the modelled extent, page 2 of 3 shows the monitoring alongside Part B, and page 3 of 3 shows the monitoring alongside Part A. However, to reiterate, the full spatial extent of the Figure is determined by the extent of the air quality model.</p> <p>3. Revised Figure provided in Appendix AQ.3</p>

**Table 1-3 - Biodiversity and Habitats Regulation Assessment**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
BIO.1.1	Applicant	Paragraph 2.2.3 of the ES [APP-037] states that the Scheme would seek to support the aim of no net loss of biodiversity. Where does this aim derive from?	<p>1. There is no legal requirement for a Nationally Significant Infrastructure Project (NSIP), such as the Scheme, to achieve no net loss or net gains in biodiversity. This differs from the position expected to apply to applications for projects under the Town and Country Planning Act 1990.</p> <p>2. The aim of working towards no net loss of biodiversity relates to the Applicant's own internal requirements (as detailed within Action 3.2, Outcome 3 of the Highways England Biodiversity Action plan; <a href="https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf">https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf</a>), which applies to all schemes cumulatively (at a national scale), in addition to national and local policies and strategies. For example, the Government's Road Investment Strategy 2 (RIS2) states by 2025, the Applicant must deliver no net loss of</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>biodiversity on its estate and progress towards the target of delivering a net gain in biodiversity by 2040. The National Policy Statement for National Networks (NPS NN), the national policy for NSIPs, also refers to, but does not require, the maintaining no net loss of biodiversity (paragraph 5.25 and footnote 75). The policies used to inform the Biodiversity No Net Loss Assessments are detailed within Section 1.4 of the respective reports (Part A [APP-246] and Part B [APP-309]).</p>
BIO.1.2	IPs	<p>Paragraph 9.1.4 of the ES [APP-048] explains that the Phase 1 survey for Part A had an extent of 500m while that for Part B was 50m. What implications, if any, arise from these different areas?</p>	
BIO.1.3	Applicant	<p>Table 9.2 of the ES [APP-048] highlights the Highways England Biodiversity Action Plan. It is stated that the design, avoidance and mitigation measures detailed within Chapter 9 work towards achieving the action plan outcome targets. Demonstrate whether or not these outcomes have been achieved for the Scheme as a whole.</p>	<p>1. The Highways England Biodiversity Action Plan can be accessed via the following link: <a href="https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf">https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf</a>. The Plan details five outcomes and related actions to enable Highways England to contribute to the areas for action listed below, taken from the Government's Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services:</p> <ol style="list-style-type: none"> <li>1. A more integrated large-scale approach to conservation on land and at sea,</li> <li>2. Putting people at the heart of biodiversity policy,</li> <li>3. Reducing environmental pressures,</li> <li>4. Improving our knowledge.</li> </ol> <p>2. The below provides a narrative for each outcome of the Highways England Biodiversity Action Plan and its related actions, explaining those that are relevant to the Scheme and how the Scheme achieves the outcome.</p> <p><b>Outcome 1: Highways England and our suppliers are equipped to produce good biodiversity performance</b></p> <p>3. Outcome 1 comprises seven actions (1.1 to 1.7), which all relate to internal processes or actions within Highways England, rather than project/scheme specific actions. This includes: development of a biodiversity technical working group (Action 1.1), development of criteria to guide the allocation of Environment Designated Funds (Action 1.2), undertaking an awareness raising exercise (Action 1.3), development of written technical guidance (Action 1.4), review the operational requirements given to service providers (Action 1.5), explore how measures to improve biodiversity can be integrated with Highways England's litter strategy (Action 1.6) and undertake an annual awareness exercise to maintain staff and supplier knowledge of the plan (Action 1.7).</p> <p>4. As such, there are no actions that relate to the Scheme. Nonetheless, the Applicant continues to pursue these actions through its ongoing management of the strategic road network.</p> <p><b>Outcome 2: The Strategic Road Network is managed to support biodiversity</b></p> <p>5. Outcome 2 comprises five actions (2.1 to 2.5). The following actions represent internal processes or actions within Highways England and are not relevant to the Scheme. Nonetheless, the Applicant continues to pursue these actions through its ongoing management of the strategic road network. These actions include: Action 2.1 (use of the Regional Programme Board to work with local wildlife partners), Action 2.2 (service providers to liaise with Natural England and local partners to identify actions required to achieve, maintain and/or enhance the favourable conservation status of Sites of Special Scientific Interest and other statutory designated sites and submit a management plan for 2017-2020 to Highways England for review), Action 2.3 (commission arrange and undertake targeted baseline studies to improve the understanding of the biodiversity status of the network and monitor effects of management on biodiversity; baseline studies complete by December 2016)., Action 2.4 (using the Regional Programme Board and local wildlife partner engagement, service providers to identify and implement revised management activities to improve biodiversity and monitor progress against the baseline) and Action 2.5 (negotiation with land owners and managers to identify significant areas of land that could be managed to achieve biodiversity gains).</p> <p>6. Whilst Action 2.2 relates to service providers and is not specific to highways improvement projects, the Applicant has consulted with Natural England regarding impacts to the River Coquet and Coquet Valley Woodlands Site of Special Scientific Interest (SSSI) and its ancient woodland habitat. The advice obtained from Natural England was used to inform the development of the bespoke Appendix 9.21: Ancient Woodland Strategy Part A [APP-</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>247], for which the Applicant has received positive responses from Natural England following their review of the strategy. This is evidenced within an email dated 08 August 2019, presented on page 106 of Appendix 4.2 Environmental Consultation 1 of 2 [APP-193]. This consultation is also captured within the Natural England Statement of Common Ground.</p> <p><b>Outcome 3: We have delivered biodiversity enhancements whilst implementing a capital programme of network improvement</b></p> <p>7. Outcome 3 comprises five actions (3.1 to 3.5). These include: ensuring proposals within the biodiversity plan and supporting technical guidance are incorporated within network improvement projects (Action 3.1), network improvement projects will mitigate and compensate their biodiversity impacts in order to achieve no net loss of biodiversity as far as reasonably possible (Action 3.2), project teams to liaise with local wildlife partners to identify how the project could best contribute towards landscape-scale biodiversity gains (Action 3.3), potential biodiversity investment opportunities that meet the criteria of the Environmental Designated Funds to be submitted to the technical working group (Action 3.4) and to monitor and ensure the delivery of agreed enhancements under Action 3.4 (Action 3.5).</p> <p>8. In accordance with Action 3.1, the Applicant has ensured that the proposals within the biodiversity plan have been incorporated into the Scheme. This includes liaison with Natural England regarding impacts to the SSSI (see Outcome 2, Action 2.2 above), the development of appropriate mitigation and compensation to address the impacts of the Scheme (see Action 3.2 below), liaison with local wildlife partners as part of the project design and development (see Action 3.3 below), identification of opportunities for biodiversity enhancement (see Action 3.4 below), proposed post-completion monitoring for an appropriate period (see Outcome 4, Action 4.2 below) and completion of Biodiversity No Net Loss Assessment Reports to inform the Applicant's internal biodiversity reporting (see Outcome 5, Action 5.2 below). The supporting technical guidance (DMRB) has also been used to inform the ecological impact assessment, as detailed in paragraphs 9.4.25 to 9.4.32 of Chapter 9: Biodiversity Part A [APP-048] and paragraphs 9.4.21 to 9.4.28 of Chapter 9: Biodiversity Part B [APP-049].</p> <p>9. In relation to Action 3.2, the design, avoidance and mitigation measures detailed within Section 9.9 of Chapter 9: Biodiversity Part A [APP-048] and Chapter 9: Biodiversity Part B [APP-049] have been developed to mitigate and compensate for the impacts of the Scheme on biodiversity. In addition, opportunities for biodiversity enhancement have been identified and detailed within paragraph 9.9.11 of Chapter 9: Biodiversity Part A [APP-048] and paragraph 9.9.9 of Chapter 9: Biodiversity Part B [APP-049].</p> <p>10. The Applicant has liaised with local wildlife partners as part of the project design, in accordance with Action 3.3. The production of the Ancient Woodland Strategy Part A [APP-247] was developed in consultation with Natural England and liaison with Northumberland County Council. The Strategy includes the creation of a large area of woodland (8.16ha) that has strategically been located adjacent to the existing ancient woodland corridor, making a positive contribution to ancient woodland at a landscape scale. In addition, the Applicant liaised with Northumberland County Council and the Northumbria Bird Ringing Group to identify suitable receptor sites for mitigation barn owl boxes for Part A, considered on a wider landscape scale than the Order limits of the Scheme.</p> <p>11. Opportunities for biodiversity enhancement have been identified and detailed within Chapter 9: Biodiversity Part A [APP-048] and Chapter 9: Biodiversity Part B [APP-049], although none have been identified as investment opportunities that meet the criteria of the Environment Designated Funds (as referenced in Action 3.4).</p> <p>12. Action 3.5 relates to the monitoring and delivery of agreed enhancements (under Action 3.4), which is not relevant at this stage of the Scheme.</p> <p><b>Outcome 4: We have addressed the legacy of biodiversity problems on our network via a targeted programme of investment</b></p> <p>13. Outcome 4 comprises two actions: in locations outside committed network improvement projects, to work with local wildlife partners and other stakeholders to identify a programme of potential biodiversity investment</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>opportunities that meet the Environmental Designated Funds (Action 4.1) and all projects to monitor their biodiversity performance post-completion for an appropriate period (Action 4.2).</p> <p>14. Action 4.1 relates to works outside of committed network improvement projects, such as the Scheme, and is therefore not relevant. Nonetheless, the Applicant continues to pursue this action through the identification of potential biodiversity investment opportunities that meet the criteria of the Environment Designated Fund.</p> <p>15. In accordance with Action 4.2, post-completion monitoring has been identified, as detailed in Section 9.11 of Chapter 9: Biodiversity Part A [APP-048] and Chapter 9: Biodiversity Part B [APP-049].</p> <p><b>Outcome 5: We are fully transparent about our biodiversity performance</b></p> <p>16. Outcome 5 comprises four actions (5.1 to 5.4). All actions relate to internal processes or actions within Highways England, rather than project/scheme specific actions. Nonetheless, the Applicant continues to pursue this action through interpretation and reporting of the Applicant's biodiversity performance. These include a commitment to collating and interpreting data (Action 5.1), to develop and adopt an appropriate biodiversity metric (Action 5.2), to report on the success of the biodiversity plan (Action 5.3) and to produce an annual non-technical public report (Action 5.4).</p> <p>17. Whilst there are no actions required by the Scheme specifically, Biodiversity No Net Loss Assessments (Appendix 9.20 Part A [APP-246] and Appendix 9.11 Part B [APP-309]) have been completed to inform the Applicant's internal biodiversity reporting. These include an assessment in accordance with the Applicant's Chief Highways Engineer (CHE) Memorandum 422/18 Supporting Transparency Around Our Biodiversity Performance, in accordance with Action 5.2.</p>
BIO.1.4	Applicant IPs	<p>In addressing Policy ENV2 of the Castle Morpeth District Local Plan in Table 9.3 of the ES [APP-048] it is stated that woodland is an irreplaceable habitat and has not been considered in the context of the biodiversity no net loss assessment. Why has ancient woodland been excluded? Explain how biodiversity enhancement, rather than compensation, has been achieved for the Scheme. What is the response of IPs to this approach?</p>	<ol style="list-style-type: none"> <li>1. For clarification, Policy ENV2 relates to the Northumberland Draft Local Plan (Publication Draft Plan (Regulation 19), January 2019). The Scheme complies with Policy ENV2 as detailed in Table 9-3 of Chapter 9 Biodiversity for Part A [APP-048] and Part B [APP-049]. As set out in this response, the Applicant has also secured biodiversity enhancement through the Outline CEMP, to ensure that this is achieved for the Scheme.</li> <li>2. It is not possible to offset impacts to irreplaceable habitats, such as ancient woodland (Principle 2; CIEEM, CIRIA, IEMA (2006)<sup>1</sup>). As such, irreplaceable habitats are excluded from biodiversity no net loss assessments. The impacts to ancient woodland have been considered separately and an Ancient Woodland Strategy Appendix 9.21 Part A [APP-247] has been developed in consultation with Natural England. This is in accordance with the approach detailed in good practice guidance (see the Executive Summary and Table 2.1; CIEEM, CIRIA, IEMA (2019)<sup>2</sup>).</li> <li>3. The difference between biodiversity mitigation or compensation and enhancement is that mitigation or compensation addresses an adverse effect through the provision of measures such as habitat creation. Enhancement measures go above and beyond the requirements of mitigation or compensation. The Scheme proposes opportunities for biodiversity enhancement within paragraph 9.9.11 of Chapter 9: Biodiversity Part A [APP-048] and paragraph 9.9.9 of Chapter 9: Biodiversity Part B [APP-049]. These include the installation of bat and bird boxes on structures and trees, use of cleared deadwood, felled trees and arisings to create habitat piles; enhancement of detention basins through aquatic, marginal and adjacent terrestrial planting, enhancement to the Woodland Creation Area (as detailed in the Ancient Woodland Strategy Part A [APP-247] and the installation of energy dissipaters at box culvert outlets. The Applicant has committed to develop a strategy of biodiversity enhancement, based on the opportunities identified within paragraph 9.9.11 of Chapter 9: Biodiversity Part A [APP-048] and 9.9.9 of Chapter 9: Biodiversity Part B [APP-049]. The strategy will be developed in consultation with relevant stakeholders. This is identified in S-B20 of the updated Outline CEMP, which is issued at Deadline 1.</li> </ol>
BIO.1.5	NE	<p>Paragraph 9.4.10 of the ES [APP-048] indicates that during consultation, Natural England (NE) confirmed that the location and size of the proposed woodland planting area to address the loss of ancient woodland was</p>	<ol style="list-style-type: none"> <li>1. Natural England confirmed during a meeting on 01 March 2019 that they are satisfied with the area (8.16ha) and location of the proposed compensation woodland planting as part of the Ancient Woodland Strategy Part A [APP-247]. This consultation is recorded within the Natural England Statement of Common Ground (SoCG) (document reference 7.5C).</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		acceptable. NE is asked to confirm its position and to explain how it came to its view.	
BIO.1.6	Woodland Trust	The Woodland Trust is asked to expand on the comment in paragraph 9.4.20 of the ES [APP-048] which states that it does not support ancient woodland translocation or salvage as this inherently requires the damage of ancient woodland.	
BIO.1.7	Applicant IPs	Paragraph 9.4.52 of the ES [APP-048] describes how a biodiversity no net loss calculation has been carried out. How does this relate to the principle of biodiversity net gain? Explain how the principle of biodiversity net gain applies to the Scheme. In responding the Applicant should have regard to Policies QOP1 and ENV2 of the Castle Morpeth District Local Plan in Table 9.3 which seek to achieve net gains for biodiversity rather than no net loss. This should be addressed for the entire Scheme. What is the response of IPs to this approach?	<ol style="list-style-type: none"> <li>1. As detailed in the response to BIO.1.1, there is no legal requirement for a Nationally Significant Infrastructure Project (NSIP), such as the Scheme, to achieve no net loss or net gains in biodiversity. This is evident from both the lack of an existing legal requirement and the omission of NSIPs from the regime envisaged under Schedule 14 to the Environment Bill, the applicability of which is limited to the Town and Country Planning Act 1990.</li> <li>2. The "Biodiversity No Net Loss" assessment (rather than "Biodiversity Net Gain") relates to the Applicant's commitments, as driven by their own policy (detailed within the Highways England Biodiversity Action Plan, which can be accessed via the following link: <a href="https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf">https://highwaysengland.co.uk/media/yp1cj1kf/biodiversity-plan.pdf</a>), in addition to national and local policies and strategies. such as RIS2 and the NPS NN. However, the principles of biodiversity net gain (in terms of the approach taken and metrics used) are also applicable and have informed the Applicant's Biodiversity No Net Loss Assessments completed for the Scheme, as detailed within the associated reports at Appendix 9.20 Part A [APP-246] (see paragraphs 1.1.3, 1.3.1 and 5.6.3) and Appendix 9.11 Part B [APP-309] (see paragraphs 1.1.2, 1.3.1 and 5.5.2). A Biodiversity No Net Loss Report for the Scheme as a whole is being prepared and will be issued at Deadline 2.</li> <li>3. Planning policy within the Northumberland Draft Local Plan (such as Policies QOP1 and ENV2) does not make the distinction between the requirements for biodiversity net gain with respect to NSIPs and other development covered by the Environmental Impact Assessment regime. Pursuant to section 104(2)(d) of the Planning Act 2008, Local Plan policies can be an important and relevant consideration in the determination of an application for an order granting development consent, particularly to the extent that compliance/non-compliance can be shown. However, NSIPs are not directly subject to the local plan, as decisions are taken under section 104 of the Planning Act 2008 rather than section 38(6) of the Planning and Compulsory Purchase Act 2004. Thus, the local plan is not directly applicable. With this in mind, the below analysis explains how the Scheme complies with policies QOP1 and ENV in relation to biodiversity loss and gains:</li> </ol> <p><b>QOP 1 Design principles</b></p> <ol style="list-style-type: none"> <li>1. As detailed in Table 9-3 of Chapter: 9 Biodiversity Part A [APP-048] and Part B [APP-049], Policy QOP 1 states that proposals will be supported where design respects and enhances the natural and built environment and incorporates green infrastructure and opportunities to support wildlife and contribute to net gains for biodiversity.</li> <li>2. The Scheme incorporates green infrastructure and opportunities to support wildlife through habitat reinstatement and creation; see Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] and Figure 7.10: Landscape Mitigation Plan Part B [APP-144].</li> <li>3. Net gain cannot be claimed for the Scheme as a whole due to the loss of ancient woodland associated with Part A, an irreplaceable habitat. However, the Scheme contributes to net gains for biodiversity (outside of ancient woodland) by achieving a net gain for area-based Habitats of Principal Importance (HPI) for Part A (principally lowland mixed deciduous woodland, lowland meadow and ponds; see Table 1 of Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246]) and area-based HPI and non-HPI for Part B (see Table 5-12 of Appendix 9.11 Biodiversity No Net Loss Assessment Report Part B [APP-309]).</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p><b>ENV 2 Biodiversity and Geodiversity</b></p> <ol style="list-style-type: none"> <li>As detailed in Table 9-3 of Chapter: 9 Biodiversity Part A [APP-048] and Part B [APP-049], Policy ENV 2 states that adverse impacts affecting biodiversity and geodiversity will be minimised and net gains for biodiversity sought. This will be secured by:           <ul style="list-style-type: none"> <li>Avoiding significant harm through location and/or design. Where significant harm cannot be avoided, applicants will be required to demonstrate that adverse impacts will be adequately mitigation or, as a last resort compensated for.</li> <li>Securing net biodiversity gains and/or wider ecological enhancement through new development.</li> </ul> </li> <li>In relation to the first bullet point above, the Scheme has been designed to avoid and/or reduce significant harm to biodiversity where possible. For example, the Scheme design carefully considered the siting of the Scheme alignment to minimise the extent of ancient woodland loss associated with the new bridge over the River Coquet. Scheme design included reducing the extent of the Order limits to retain woodland habitat; to constrain the extent of construction and infrastructure, including the drainage outflow location and diversion of the public right of way beneath the bridges (as detailed in paragraph 3.2.3 of the Ancient Woodland Strategy Part A [APP-247]). As significant harm to ancient woodland could not be avoided whilst achieving the objectives of the Scheme, a bespoke strategy was developed in consultation with Natural England to first mitigate, then compensate for the impacts of the Scheme (full details presented within the Ancient Woodland Strategy Part A [APP-247]).</li> <li>The design, avoidance and mitigation measures detailed within Section 9.9 of Chapter 9: Biodiversity Part A [APP-048] and Chapter 9: Biodiversity Part B [APP-049] have been developed to mitigate the impacts of the Scheme on biodiversity or, as a last resort, provide compensation. The mitigation hierarchy (avoidance, mitigation, compensation) has been applied throughout the Scheme design.</li> <li>Regarding the second bullet point, the Scheme proposes opportunities for biodiversity (ecological) enhancement as required by Policy ENV2; see paragraph 9.9.11 of Chapter 9: Biodiversity Part A [APP-048] and paragraph 9.9.9 of Chapter 9: Biodiversity Part B [APP-049]. In addition, as detailed above for Policy QOP 1, net gain cannot be claimed for the Scheme as a whole due to the loss of ancient woodland associated with Part A, an irreplaceable habitat. However, the Scheme contributes to net gains for biodiversity (outside of ancient woodland) by achieving a net gain for area-based HPI for Part A (principally lowland mixed deciduous woodland, lowland meadow and ponds; see Table 1 of Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246]) and area-based HPI and non-HPI for Part B (see Table 5-12 of Appendix 9.11 Biodiversity No Net Loss Assessment Report Part B [APP-309]).</li> </ol>
BIO.1.8	IPs	<p>In paragraph 9.5.1 of the ES [APP-048] it is stated that surveys are typically valid for two years unless otherwise specified, and that the validity of surveys greater than two years old, such as breeding birds, to inform the impact assessment has been discussed and agreed with NE. Paragraph 9.7.5 indicates that the Phase 1 habitat survey was undertaken in June 2016. Appendices 9.12 to 9.17 all record surveys from 2017 or earlier. Do IPs consider surveys which are older than 2 years to be still valid?</p>	<ol style="list-style-type: none"> <li>Ecological surveys for Part A were undertaken between 2016 and 2019. Whilst the surveys conducted in 2018 and 2019 are accepted as current and valid, data of the 2016 and 2017 surveys is potentially less accurate. As such, the Applicant has undertaken a series of verification surveys. A verification survey involves the completion of survey effort to validate the previous findings, identify changes to the baseline data and verify the impact assessment and mitigation (detailed within Chapter 9: Biodiversity Part A [APP-048]).</li> <li>The Applicant has completed verification surveys for Part A for the following species:           <ul style="list-style-type: none"> <li>Breeding birds (original surveys from 2016) – a single survey visit of nine transects across the Order limits of Part A plus 100m to record the number and distribution of breeding birds (with a focus on protected and notable species),</li> <li>Great crested newts (original surveys in 2016 and 2017) – an updated Habitat Suitability Index (HSI) assessment and eDNA survey of each of the previously assessed waterbodies to confirm the presence/likely absence of great crested newts,</li> <li>Badger (original surveys in 2016 and 2017) – a walkover of the Order limits of Part A plus 100m to record badger field signs and setts (where a badger lives); and</li> </ul> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<ul style="list-style-type: none"> <li>• Roosting bats (original surveys in 2016 and 2017) – a walkover of the Order limits of Part A plus 100m to assess buildings and trees and confirm their roosting suitability. In addition, a single survey visit (dusk emergence/dawn re-entry) of each building and tree previously surveyed in 2016/17 that may be impacted by Part A.</li> </ul> <ol style="list-style-type: none"> <li>3. These verification surveys are submitted at Deadline 1 (document references 6.17 to 6.21).</li> <li>4. Original Phase 1 habitat data was collected in 2016, with additional areas assessed in 2018. During ecological survey effort undertaken between 2016 and 2019 across the extent of Part A, no significant changes to habitat type or distribution were recorded. There are also no known changes to land use since the original surveys. The Phase 1 habitat plan (presented on Figure 9.1 [APP-105]) is considered accurate and a 2020 verification survey was not undertaken.</li> <li>5. A verification survey for wintering birds was completed in February 2020 and included as part of the ES (Appendix 9.26 Wintering Bird Verification Survey Report Part A [APP-252]).</li> <li>6. Verification surveys of Part A were not undertaken for the following as the data/assessment is considered valid. A brief justification has also been provided:               <ul style="list-style-type: none"> <li>• Bats and habitats (transects and Defra studies; original surveys in 2017/18) – there have been no significant changes to habitat distribution and use,</li> <li>• Barn owl (original surveys in 2017) - mitigation considered sufficient (exclusion zones and timing of works to reduce disturbance to nesting/roosting sites, bunding to encourage flight at height over the road, compensation for functional loss of breeding/roost sites) and there have been no significant changes to habitat distribution and use,</li> <li>• Reptiles (original surveys in 2017) - previously recorded likely absent and there have been no significant changes to habitat distribution and use. Reptiles are generally slow to colonise new areas,</li> <li>• Red squirrel (original surveys in 2017) - mitigation considered sufficient (felling of woodlands known to support red squirrel or those connected outside the breeding season, pre-commencement inspections) and there have been no significant changes to habitat distribution and use,</li> <li>• Water vole and otter (original surveys in 2016 and 2017) – mitigation considered sufficient (pre-commencement inspections, mammal ledges in culverts and inclusion of crossing points),</li> <li>• Fish (original surveys in 2017) – mitigation considered sufficient (work at distance from watercourses, dewatering and fish rescue for in channel works, timing of works where appropriate, design of culverts for fish passage),</li> <li>• White-clawed crayfish (original surveys in 2017) – recorded likely absent and signal crayfish recorded (known to decimate white-clawed crayfish populations),</li> <li>• Aquatic macroinvertebrates (original surveys in 2017) – mitigation considered sufficient (habitat creation/improvement works), and</li> <li>• Terrestrial invertebrates (original surveys in 2017) - mitigation considered sufficient (habitat creation).</li> </ul> </li> <li>7. The scope of the verification surveys (including survey effort and those species scoped out) was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that “<i>given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken.</i>” Natural England confirmed during a meeting on 15 December 2020 that the ecological surveys undertaken to date for the Scheme as a whole were appropriate, including methodologies, timing and extent. This consultation will also be recorded within the Natural England Statement of Common Ground (SoCG).</li> </ol>
BIO.1.9	IPs	Are IPs content with the search / study areas identified in paragraph 9.6.2 of the ES [APP-048]?	



Ref. No.	Question to:	Question	Applicant's Response
BIO.1.10	Applicant NE	Table 9.10 of the ES [APP-048] indicates that breeding bird surveys were undertaken in 2016 while paragraph 9.7.63 states that wintering bird surveys were recorded during 2016 /17. Paragraph 9.4.9 indicates that NE confirmed that the surveys for breeding birds were sufficient to inform the impact assessment. Were the surveys repeated? If not, why not? Can NE confirm its position with regard to the breeding bird surveys which are now 4 years old? Can the Applicant provide evidence of agreement with NE regarding the date of all ecological surveys carried out for Part A and Part B of the Proposed Development?	<ol style="list-style-type: none"> <li>1. As detailed in BIO.1.8 above, the Applicant completed a verification wintering bird survey in February 2020, which is set out at Appendix 9.26: Wintering Bird Verification Survey Report Part A [APP-252]. The survey comprised nine transects distributed across Part A, which were visited on a single occasion. As stated in paragraph 9.7.69 of Chapter 9: Biodiversity Part A [APP-048], the 2020 verification survey did not identify any significant changes to the 2016/17 surveys. As such, the 2016/17 survey data is considered accurate and reliable.</li> <li>2. The Applicant completed a verification breeding bird survey in 2020, which is submitted at Deadline 1 (document reference 6.17). The 2020 verification survey did not identify any significant changes to the 2016 surveys. As such, the 2016 survey data is considered valid.</li> <li>3. The scope of the verification surveys (including survey effort and those species scoped out) <del>above</del> was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that "given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken." Natural England confirmed during a meeting on 15 December 2020 that the ecological surveys undertaken to date for the Scheme as a whole were appropriate, including methodologies, timing and extent. This consultation will be documented within the Natural England SoCG (document reference 7.5C).</li> </ol>
BIO.1.11	Applicant	Table 9.20 of the ES [APP-048] indicates that the total loss of hedgerow would be 23,263m out of a pre-development total of 33,254m. Explain why such a length of hedgerow would need to be removed and explain how much would be permanent and how much temporary.	<ol style="list-style-type: none"> <li>1. For the online section of Part A, the existing hedgerows are located parallel to the existing A1. Lengths of hedgerow would be removed to enable the online widening of the existing carriageway (either to the west, east or both sides of the carriageway as necessary).</li> <li>2. Part A also includes the construction of a new offline section of dual carriageway to the west of the existing A1 (as detailed in paragraph 2.5.7 of Chapter 2: The Scheme [APP-037]). The offline section of Part A is located within a rural setting, with the majority of the Order Limits comprising agricultural fields (arable and grazed grasslands) bordered by hedgerows. These hedgerows will be affected wherever the alignment crosses a field margin currently comprising a hedgerow. As such, the loss of hedgerow for the offline section of Part A is attributable to the rural location and the habitat composition within the Order Limits.</li> <li>3. Nevertheless, the principles of the mitigation hierarchy (see paragraph 9.4.53 of Chapter 9: Biodiversity Part A [APP-048]) have been applied when designing the Scheme, with avoidance and mitigation (paragraph 9.9.4(a), 9.9.4(b) and EM002 and EM018 of Table 9-23 [APP-048]) as the first priority (before compensation (paragraph 9.9.4(c), 9.9.4(f) and EM046 of Table 9-23 [APP-048]) was considered).</li> <li>4. For the purposes of the assessment, temporary loss is attributed where a habitat can be reinstated at the same location following construction. Due to the nature of Part A (online widening and construction of a new offline section), hedgerows are lost as they are located beneath the proposed alignment of the Scheme. As such, all hedgerow loss is considered permanent for Part A. The same principle applies to other Habitats of Principal Importance (HPI) lost as a result of Part A. For clarity, it is acknowledged that the column headers of Table 9-19 and Table 9-20 of Chapter 9: Biodiversity Part A [APP-048] should be entitled "Permanent Habitat Loss".</li> </ol>
BIO.1.12	Applicant	In paragraph 9.9.2 of the ES [APP-048] the terms mitigation and compensation are defined. How does enhancement relate to mitigation?	<ol style="list-style-type: none"> <li>1. Mitigation and compensation measures aim to reduce the adverse effects as a result of the Scheme to a non-significant level. Enhancement measures go above and beyond the requirements of mitigation and compensation, and have not been considered when assessing the significance of effects.</li> </ol>
BIO.1.13	Applicant	Paragraph 9.9.6 of the ES [APP-048] indicates that watercourse creation would be a total of approximately 540m while paragraph 9.8.9 indicates that there would be a loss of 750m including 35m of national importance. Explain the basis of the amount of replacement watercourse.	<ol style="list-style-type: none"> <li>1. As detailed in paragraph 9.9.6 of Chapter 9: Biodiversity Part A [APP-048], watercourse creation is as a result of the need for new channels associated with watercourse diversion works (approximately 540m of new channel).</li> <li>2. Unlike terrestrial habitat creation (for example grassland), it is not viable to readily create new lengths of watercourse to replace all that would be lost as a result of the Scheme as this would rely on a water source to create the habitat. Therefore, in the absence of a natural source or diversion of water from an existing watercourse (which could have adverse effects on the existing water course and/or flood management), a watercourse cannot be readily created. Therefore, in addition to the creation of new channels, complimentary mitigation and compensation measures have been designed to address the net loss of approximately 200m of</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>watercourse. Improvements to approximately 850m of Longdike Burn would be undertaken, which would include nutrient management measures to address adverse impacts of run-off from agricultural land, aquatic planting and bankside stabilisation. Measures will be developed further at detailed design, supported by a targeted walkover survey to confirm appropriateness of enhancement opportunities. Actions would be developed in partnership with the Environment Agency, with reference to the WFD status and reasons for deterioration (see EM047 of Chapter 9: Biodiversity Part A [APP-048]). New channels would also be designed to increase their biodiversity value (see EM041 of Chapter 9: Biodiversity Part A [APP-048]). This would include the design of channels that are of greater biodiversity value than those lost to Part A.</p>
BIO.1.14	Applicant	<p>Table 9.22 of the ES [APP-048] indicates that the total loss of hedgerow of 23,263m would be mitigated through the provision of 32,594m of habitat creation. Why is it proposed to provide so much new hedgerow? What are the ecological implications of such additional provision?</p>	<p>3. Part A includes hedgerow creation at a ratio of approximately 1.4:1 to that lost. This is due to hedgerow creation within Part A not only being designed to compensate for the loss of hedgerow habitat. Hedgerows have also been incorporated into Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] for the following reasons:</p> <ul style="list-style-type: none"> <li>• to compensate for the loss of habitat in relation to protected and notable species (such as barn owl and nesting birds; see EM039 and EM040 respectively of Chapter 9: Biodiversity Part A [APP-048]);</li> <li>• to create linear features that will maintain and improve connectivity (to mitigate the effects of habitat loss and fragmentation for protected species, such as bats and badger) (see point 'f' of paragraph 9.9.4 of Chapter 9: Biodiversity Part A [APP-048]);</li> <li>• to create features to direct and guide wildlife to suitable crossing points incorporated into the design (see EM028 of Chapter 9: Biodiversity Part A [APP-048]); and</li> <li>• to conserve landscape character and conserve views (screening planting) (see point 'd' of paragraph 7.9.4 of Chapter 7: Landscape and Visual Part A [APP-044]).</li> </ul> <p>4. In relation to the ecological implications of such provisions, as detailed in paragraph 9.10.7 of Chapter 9: Biodiversity Part A [APP-048], hedgerow creation for Part A would result in a slight beneficial effect to hedgerow habitat. This would not incur any negative ecological implications for other habitats.</p>
BIO.1.15	Applicant	<p>Paragraph 9.9.7 of the ES [APP-048] describes the Ancient Woodland Strategy which has been developed to address the loss of ancient woodland habitat and impacts to retained woodland as a result of Part A. How would this be secured through the DCO?</p>	<p>1. Appendix 9.21: Ancient Woodland Strategy Part A [APP-247] will be secured through the Outline CEMP [APP-346]. The Ancient Woodland Strategy and associated tasks are captured within the Outline CEMP [APP-346] in A-B3, A-B42, A-B43 and A-B44. In turn, the measures within the Outline CEMP [APP-346] are secured through requirement 4 contained within Schedule 2 to the dDCO [APP-014].</p>
BIO.1.16	Applicant	<p>In Table 9.23 - Design and Mitigation Measures and their Delivery Mechanisms of the ES [APP-048], Measure EM041 states that Part A includes approximately 800m of new or reinstated watercourse. Does this statement conflict with paragraph 9.9.6 or is the additional watercourse in addition to the 540m indicated there, reinstated watercourse?</p>	<p>1. The 800m of new or reinstated watercourse referred to at Measure EM041 of Table 9.23 - Design and Mitigation Measures and their Delivery Mechanisms of the ES [APP-048] includes the 540m of new channel referred to in paragraph 9.9.6 of Chapter 9: Biodiversity Part A [APP-048], plus an approximate 260m diversion (reinstatement) of the unnamed tributary that flows into Earsdon Burn (as referred to in paragraph 9.2.6 of Appendix 10.2: Water Framework Directive Assessment Part A [APP-255]).</p>
BIO.1.17	Applicant	<p>In Table 9.23 of the ES [APP-048], Measure EM048 states that barn owl boxes have been installed at locations outside of the Order Limits. As the barn owl boxes have already been installed how can they be considered as mitigation in terms of the EIA?</p>	<p>1. The barn owl boxes are mitigation for the purpose of the EIA as they have been installed specifically to mitigate the potential effects of the Scheme, as identified by the assessment reported in the ES. The potential effects of the Scheme mitigated by the barn owl boxes are the potential functional loss of three breeding and roosting sites within the Part A Study Area and the fragmentation of a connection between an occupied breeding site and active roost/potential breeding site (as detailed in EM048 of Chapter 9: Biodiversity Part A [APP-048]). Part A does not result in the direct loss of any barn owl roosting or nesting sites and therefore the potential impact is considered indirect. The four compensatory barn owl boxes have already been installed as agreements were able to be secured with private land/farm owners for installation of the boxes within their barns. In doing so, and in anticipation of the requirements of the Scheme, the Applicant has taken early steps to provide</p>

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			nesting/breeding opportunities to make the barn owl population more robust. As a result, this would reduce the significant impacts of the Scheme on the barn owl population.
BIO.1.18	Applicant	Paragraph 9.10.3 of the ES [APP-048] states that Part A would result in the loss of 0.41 ha of woodland within the Coquet River Felton Park Local Wildlife Site (LWS). It indicates that whilst not designated as ancient woodland, the broadleaved woodland of the LWS supports ancient woodland indicator species. Therefore, for the purposes of the assessment, the LWS woodland was treated as ancient woodland. On that basis explain why the effect was assessed as moderate.	<ol style="list-style-type: none"> <li>1. The woodland of the Coquet River Felton Park Local Wildlife Site (LWS) was assessed as an ecological receptor of Local importance. However, for the purposes of mitigation only the woodland was treated as ancient woodland.</li> <li>2. Whilst the woodland of the Coquet River Felton Park Local Wildlife Site (LWS) supports ancient woodland indicator species, it is not designated as an ancient woodland. As such, the LWS was assessed as an ecological receptor of Local importance (Table 9-7 of Chapter 9: Biodiversity Part A [APP-048]).</li> <li>3. In accordance with the methodology of the ecological impact assessment, as set out in Table 9-5 of Chapter 9: Biodiversity Part A [APP-048], an impact to a receptor of Local importance would have an effect of Slight significance. However, effects determined to be Slight or Neutral are deemed to be not significant (see paragraph 4.5.4 of Chapter 4: Environmental Assessment Methodology [APP-039]). In consideration of the ancient woodland indicator species that the LWS woodland supports, professional judgement determined that the classification of the impact of the Scheme as not significant would not be appropriate and therefore a moderate effect classification was attributed. This effect classification is considered proportionate to the impact of the Scheme, the local wildlife status LWS and the characteristics of the woodland.</li> <li>4. However, within the approach to mitigation, the woodland of the LWS was treated as ancient woodland on a conservative and precautionary basis. This was informed by consultation with Northumberland County Council (NCC) (paragraph 9.4.17 of Chapter 9: Biodiversity Part A [APP-048]) and agreed with Natural England through their review of Appendix 9.21: Ancient Woodland Strategy Part A [APP-247].</li> </ol>
BIO.1.19	Applicant	According to paragraph 9.10.7 of the ES [APP-048] Part A includes hedgerow creation at a ratio of approximately 1.4:1 to that lost and the increase in hedgerow linear length would result in a slight beneficial effect. Explain whether this is mitigation, compensation or enhancement.	<ol style="list-style-type: none"> <li>1. Hedgerow creation is provided within Part A both as compensation for the loss of hedgerow habitat and as mitigation in relation to habitat and species connectivity. Further detail as to the compensatory and mitigatory aspects of hedgerow provision is presented in the response to BIO.1.14 above.</li> <li>2. The entirety of the hedgerow creation detailed in paragraph 9.10.7 of Chapter 9: Biodiversity Part A [APP-048] relates to compensation for the loss of hedgerow habitat and mitigation in relation to habitat and species connectivity. As such, it is not considered as an enhancement.</li> </ol>
BIO.1.20	Applicant	Paragraph 9.10.8 of the ES [APP-048] states that Part A would result in the direct, permanent net loss of approximately 200m of watercourse length, excluding ditches. This includes the loss of approximately 165m of watercourses of local importance and approximately 35m of watercourse of national importance. In relation to direct impacts to watercourses of local importance, Part A would result in a slight adverse effect. What mitigation is proposed to reduce the effect on the watercourse of national importance from very large to slight? Clarify what is meant by "the temporary boundary of Part A".	<ol style="list-style-type: none"> <li>1. Mitigation for the loss of approximately 35m of Longdike Burn, a watercourse of National importance, is detailed in EM047 of Chapter 9: Biodiversity Part A [APP-048]. This includes the improvement of approximately 850m of Longdike Burn. This would include nutrient management measures to address adverse impacts of run-off from agricultural land, aquatic planting and bankside stabilisation. Measures will be developed further at detailed design, supported by a target walkover survey to confirm appropriateness of enhancement opportunities. Actions would be developed in partnership with the Environment Agency, with reference to the WFD status and reasons for deterioration. In addition, the replacement of the wooden baffles is proposed within the retained Burgham Culvert of Longdike Burn with more permanent structures to improve the lifespan of the feature. This would sustain fish (which were a significance criteria of the watercourse) passage in the long-term along the watercourse.</li> <li>2. As an ecological receptor of National importance, the loss of habitat associated with Longdike Burn would initially be classified as Very Large in accordance with the methodology (Table 9-5) presented within Chapter 9: Biodiversity Part A [APP-048]. However, the extent of the impact is experienced over a small length of the watercourse only (approximately 35 m). The section of watercourse impacted is located adjacent to the existing culvert and the loss would not result in the severance of the watercourse for its significance criteria (namely fish – lamprey, European eel and brown trout). As such, the impacts to the watercourse would not significantly affect the integrity of the watercourse or its ecological function. In addition, the mitigation proposed involves the improvement of a significantly larger length of Longdike Burn in comparison to that impacted by the Scheme (approximately 850 m). As such, the significance is downgraded on the basis of professional judgement in line with Highways England Interim Advice Note (IAN) 130/10, and, following</li> </ol>

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			<p>implementation of mitigation, Part A would result in a Slight direct, permanent adverse effect (not significant) in relation to the loss of habitat associated with Longdike Burn.</p> <p>3. The term "temporary boundary" in this instance is synonymous with Order limits for Part A. As such, paragraph 9.10.9 of Chapter 9: Biodiversity Part A [APP-048] proposes to improve the approximately 850m length of Longdike Burn that passes within the Order limits.</p>
BIO.1.21	Applicant NE	Paragraphs 9.11.7 and 9.11.8 of the ES [APP-048] state that no post-completion monitoring requirements have been identified, subject to agreement with NE as part of the European Protected Species Licences. Additionally, Appendix A of the Consents and Agreements Position Statement [APP-016] describes the status of negotiations with NE with regard to the European Protected Species Licences which are required. The Applicant and NE are asked to provide an update on the progress made towards obtaining Letters of No Impediment since the application was submitted.	<p>1. Letters of No Impediment (LONIs) with caveats were provided by Natural England for Part A in May 2020. The Applicant is liaising with Natural England to update the referenced NSIP name stated on the LONIs, as this is currently incorrect. It is not anticipated that the main content of the LONIs will change.</p>
BIO.1.22	Applicant	Appendix 9.1 of the ES [APP-227] – Extended Phase 1 Habitat Survey, refers only to Part A on the cover. The report itself addresses both Part A and Part B. The Applicant should clarify the scope.	<p>1. Appendix 9.1: Extended Phase 1 Habitat Survey Part A [APP-227] was written at an early stage of the Scheme's development, when Part A and Part B were under consideration as two separate schemes (referred to in the report as Section A and Section B, respectively). Whilst the report contains survey information relevant to both Part A and Part B of the Scheme, the content of Appendix 9.1: Extended Phase 1 Habitat Survey Part A [APP-227] has been used specifically to inform Chapter 9: Biodiversity Part A [APP-048]. The equivalent report for Part B is Appendix 9.1: Habitats and Designated Sites Part B [APP-298].</p>
BIO.1.23	Applicant	Appendix 9.4 of the ES [APP-230] – 'GCN Environmental eDNA and HSI Survey Report' recommends that Great Crested Newt (GCN) surveys should be repeated if development is deferred for over 12 months from the date of the initial survey. It records that surveys were conducted between the 18th and 20th of April 2016 and further GCN surveys were undertaken in 2017 and in April to June 2018. Have further surveys been undertaken? If not, why not?	<p>1. The Applicant completed a verification great crested newt survey in 2020, which is submitted at Deadline 1 (document reference 6.20). The 2020 verification survey comprised an updated Habitat Suitability Index (HSI) assessment and environmental DNA (eDNA) survey of each of the waterbodies previously assessed (where access was granted).</p> <p>2. The scope of the verification survey was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that "given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken." This consultation will be documented within the Natural England SoCG.</p> <p>3. The verification survey did not identify any significant changes to the baseline information presented within Section 9.7 of Chapter 9: Biodiversity Part A [APP-048], with assumptions and justification provided for four waterbodies that could not be accessed as part of the verification survey. The 2020 great crested newt verification survey did not change the outcome of the assessment presented in Chapter 9: Biodiversity Part A [APP-048].</p>
BIO.1.24	Applicant	Appendix 9.7 of the ES [APP-233] – Bat Roost Potential Survey Report 2017 indicates that buildings B4A (North Gate House) which has low bat roost potential was assessed from a distance due to access restrictions. Appendix 9.8 confirms further surveys were carried out in 2017. Have further surveys been undertaken since 2017? If so, what were the results, if not, why not?	<p>1. The access restrictions experienced for building B4A related to the initial preliminary bat roost assessment in 2016 (reported within Appendix 9.7: Bat Roost Potential Survey Report 2017 [APP-233]). However, access was granted in 2017 for the completion of three dusk emergence/dawn re-entry surveys, thereby overcoming the previous access limitation.</p> <p>2. The Applicant completed verification bat surveys of buildings and trees in 2020, dusk emergence/dawn re-entry, which included a single survey of building B4A. The scope of the verification survey was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that "given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken." This consultation will be documented within the Natural England SoCG.</p>

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			<ol style="list-style-type: none"> <li>3. The report detailing the findings of the 2020 verification dusk emergence/dawn re-entry bat survey<sup>s</sup> is submitted at Deadline 1 (document reference 6.19). No roosting activity was recorded in relation to building B4A during the 2020 survey.</li> <li>4. In addition, in accordance with DM005 of Chapter 9: Biodiversity Part A [APP-048], updated pre-commencement surveys of building B4A would be undertaken to support a bat European Protected Species (EPS) licence (to be informed by Appendix 9.22: Bat Method Statement Part A [APP-248]). These surveys have not yet been undertaken as surveys to inform a licence must be up-to-date and conducted within the current or most recent optimal survey season.</li> </ol>
BIO.1.25	Applicant NE	<p>Paragraph 2.4 of Appendix 9.10 of the ES (Badger Survey Report) [APP-236] states that surveys were carried out in November and December 2016. It goes on to state that the report reflects the site conditions up to April 2017 and notes that it is considered good practice for wildlife surveys to be repeated should development be deferred for over 12 months from the date of the initial survey. Similarly, paragraph 2.2.7 of the Badger Bait Marking Survey Report [APP-237] records that the survey reflects site conditions up to April 2017 noting that it is considered good practice for wildlife surveys to be repeated should development be deferred for over 12 months from the date of the initial survey. On this basis, should the surveys be considered reliable? Should further surveys be carried out?</p>	<ol style="list-style-type: none"> <li>1. The Applicant completed a verification badger survey in 2020, which is submitted at Deadline 1 (document reference 6.21). The 2020 verification survey comprised a walkover of the Order limits of Part A plus 100m. The scope of the verification survey was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that <i>“given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken.”</i> This consultation will be documented within the Natural England SoCG.</li> <li>2. The verification survey did not identify any significant changes to the baseline information presented within Section 9.7 of Chapter 9: Biodiversity Part A [APP-048]. The 2020 badger verification survey did not change the outcome of the assessment presented in Chapter 9: Biodiversity Part A [APP-048].</li> </ol>
BIO.1.26	Applicant NE	<p>Appendix 9.18 of the ES [APP-244] – Otter Monitoring Survey Report was based on surveys undertaken in August / September 2018 but was not published until October 2019. Appendix 9.17 recommends that surveys should be repeated if development is deferred for over 12 months from the initial survey. Similarly, Appendix 9.19 - Terrestrial Invertebrate Survey Report indicates that good practice is to repeat surveys after 12 months. Is there a need for further survey work? If not, why not?</p>	<ol style="list-style-type: none"> <li>1. An update or verification survey in 2020 for otter and terrestrial invertebrates has not been undertaken as the mitigation developed following the original surveys is considered sufficient by the Applicant, as agreed with Natural England.</li> <li>2. For otter, the 2016/17 survey (Appendix 9.17: Water Vole and Otter Survey Report Part A [APP-243]) recorded four potential otter resting places (holts). The four potential resting places were surveyed in 2018 and no signs of use by otter were recorded. Mitigation includes a walkover survey of watercourses crossed by Part A prior to the start of construction to confirm that baseline conditions remain accurate (DM008 of Table 9-23 of Chapter 9: Biodiversity Part A [APP-048]). In the event that an active resting place (such as a holt) is recorded that may be damaged or disturbed by construction of the Scheme, Natural England would be consulted, and a licence obtained for any actions that would otherwise constitute an offence. Mitigation also includes the provision of suitable crossing points incorporated into Part A to facilitate safe crossing of otter beneath the Scheme during its operation (EM028, EM029 and EM032 of Table 0-23 of Chapter 9: Biodiversity Part A [APP-048]).</li> <li>3. For terrestrial invertebrates, there has been no known changes in land use or habitat composition since the original survey in 2017. As such, it is reasonable to state that it is unlikely that the terrestrial invertebrate assemblage has significantly changed since the original survey and the assemblage remains of Local importance. Mitigation includes habitat creation, such as woodland and species rich grassland, that is of higher value to terrestrial invertebrates than those habitats lost (EM042 of Chapter 9: Biodiversity Part A [APP-048]).</li> <li>4. The scope of the 2020 verification surveys, including those surveys for which a verification survey would not be required, was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that <i>“given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken.”</i> This is documented within the Natural England SoCG.</li> </ol>

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BIO.1.27	Applicant	Appendix 9.20 of the ES [APP-246] – Biodiversity No Net Loss Assessment Covers Part A while Appendix 9.11 [APP-309] covers the same issue for Part B. Has an assessment been undertaken for the Scheme as a whole? If not, why not?	1. The Applicant is completing a biodiversity no net loss assessment for the Scheme. The Scheme biodiversity no net loss assessment is proposed to be submitted at Deadline 2.
BIO.1.28	Applicant NE	Appendix 9.21 of the ES [APP-247] – Ancient Woodland Strategy and paragraph 9.10.3 of the ES [APP-048] propose compensation based on a 12:1 ratio in terms of planting to loss. On what basis was it decided to use a ratio of 12:1?	1. As stated in the Executive Summary of Appendix 9.21: Ancient Woodland Strategy Part A [APP-247], there is no set guidance for the ratio for woodland compensation in relation to ancient woodland, with assessments made on a case-by-case basis. The 12:1 ratio for the provision of compensatory woodland planting was decided in consultation with Natural England (see the Natural England Statement of Common Ground, document reference 7.5C), in consideration of the relatively small area of ancient woodland impacted by the Scheme (0.68ha; paragraph 2.1.2 [APP-247]) in comparison to Duke's Bank ancient woodland as a whole (approximately 9.4ha), the efforts to avoid or reduce the extent of the impacts through Scheme design (paragraphs 3.2.2 to 3.2.5 [APP-247]) and the efforts to mitigate impacts by implementing protective and salvage measures (paragraphs 3.2.6 to 3.2.15 and Section 4 Mitigation and Compensation Delivery [APP-247]) (implementation of the mitigation hierarchy).
BIO.1.29	IPs	In section 5.2 of Appendix 9.21 of the ES [APP-247] – Ancient Woodland Strategy high level thoughts for the management strategy are presented including for years 11+ management actions every few years. Are IPs content with the scope of the management strategy?	
BIO.1.30	Applicant NCC	Paragraph 9.4.8 of the ES [APP-049] sets out the organisations consulted in respect of baseline surveys and mitigation proposals. Why were the consultees on Part B not the same as for Part A? Does Northumberland County Council (NCC) wish to respond on these matters?	<ol style="list-style-type: none"> <li>1. As highlighted within paragraph 4.3.27 of Chapter 4: Environmental Assessment Methodology [APP-039], Part A and Part B were initially considered separately. This meant that the assessments and consultation focussed on elements appropriate to each part. This resulted in separate stakeholder and consultee liaison for each Part of the Scheme at different times, although consultation on the combined Scheme was undertaken from May 2020.</li> <li>2. Consultation for both Part A and Part B has been appropriate and relevant to the ecological considerations specific to that part of the Scheme. Part A consultation included contact with the Northumberland Coast Area of Outstanding Natural Beauty (AONB) Partnership, Northumberland National Park, Barn Owl Trust and Northumbria Bird Ringing Group to request assistance in identifying suitable receptor sites for proposed barn owl mitigation boxes only. Additionally, the Woodland Trust was consulted on Part A to discuss matters arising from impacts to areas of ancient woodland and associated mitigation. As the above matters were not relevant to Part B, these organisations were not contacted in respect of Part B.</li> </ol>
BIO.1.31	Applicant	In paragraph 9.4.5 of the ES [APP-049] it is stated that an assessment in relation to ecological receptors and impacts arising as a result of air quality is scoped into the assessment. Is there a conflict with the statement in paragraph 9.4.42 that as there are no ecological receptors within the Study Area for impacts as a result of air quality, detailed assessment methodology for air quality impacts on ecological receptors has been omitted from this chapter?	<ol style="list-style-type: none"> <li>1. Paragraph 9.4.5 of Chapter 9: Biodiversity Part B [APP-049] was intended to provide clarity regarding the scope of the assessment for Part B, aligning with paragraph 6.3.13 of the Scoping Report Part B [APP-339] which states: "<i>The assessment of ecological receptors will be re-visited upon review of the ARN where affected links may be adjacent to sensitive ecological receptors</i>". Paragraph 9.4.5 of Chapter 9: Biodiversity Part B [APP-049] was included for transparency to evidence air quality was a consideration for Part B, in line with the Scoping Report for Part B [APP-339].</li> <li>2. However, owing to an absence of ecological receptors within the Study Area for air quality (200m from affected roads, as set out at paragraph 9.6.6 of Chapter 9: Biodiversity Part B [APP-049]), the detailed methodology for an assessment of impacts on ecological receptors arising as a result of air quality was not needed in Chapter 9: Biodiversity Part B [APP-049], as the dearth of receptors meant the assessment itself was not required.</li> </ol>
BIO.1.32	Applicant	In Table 9.9 of the ES [APP-049] the references to terrestrial invertebrates specify that the desk study recorded two notable species while the following column refers to three notable species. Please clarify.	1. The text within the 'Rationale for Valuation' column within Table 9-9 of Chapter 9: Biodiversity Part B [APP-049] should read 'two notable species'.

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BIO.1.33	Applicant	Table 9.11 of the ES [APP-049] provides details of the mitigation for the loss of Habitats of Principal Importance. Explain the basis of the creation / reinstatement areas / lengths compared to the areas / lengths lost.	<p>1. Table 9.11 Chapter 9 Biodiversity Part B [APP-049] presents the mitigation for the loss of the following HPI: <b>Woodland (Broadleaved woodland – semi-natural – A1.1.1 and Mixed woodland – seminatural – A1.3.1)</b></p> <p>2. The response to BIO.1.35 below provides an explanation regarding the reason woodland habitat creation is greater in comparison to habitat loss. The creation of 10.13ha of broadleaved woodland has also been provided to account for the loss of a small area of mixed woodland (0.24ha). Whilst 0.01 ha of mixed woodland is proposed to be reinstated, the planting mixture required would include a small number of pine tree species, predominantly comprising broadleaved species the same as those used for the broadleaved woodland creation. -</p> <p><b>Running water – G2</b></p> <p>3. Where possible, watercourses have been reinstated (realignments). However, as discussed within the response to BIO.1.13 above, it is not practicable to readily create new lengths of watercourse, as this would rely on a water source to create the habitat. Therefore, in the absence of a natural source or diversion of water from an existing watercourse (which could have adverse effects on the existing water course and/or flood management), a watercourse cannot be readily created. Whilst new watercourses cannot be created, measures have been included within the Scheme design to improve existing habitats where practicable, including providing gravel beds as summarised in the Culvert Mitigation Summary (Annex A of Appendix A of Applicant's Responses to Relevant Representations, document reference 7.9.2.1) submitted at Deadline 1. Additionally, a step-weir within the Shipperton Burn will be removed as part of the works to aid fish passage through the watercourse and culvert. This has been updated in the Outline CEMP [APP-346], see measures S-W12 and B-W1, and submitted at Deadline 1.</p> <p>4. Measures will be developed further at the detailed design stage, supported by a targeted walkover survey to confirm appropriateness of enhancement opportunities.</p> <p><b>Hedgerows (J2.1.1 Hedgerow – native species rich (intact); J2.1.2 Hedgerow – native species poor (intact); J2.2.1 Hedgerow – native species rich (defunct); J2.2.2 Hedgerow – native species poor (defunct); J2.3.1 Hedgerow with trees – native species rich (intact); and J2.3.2 Hedgerow with trees – native species poor (intact))</b></p> <p>5. Hedgerows to be temporarily and permanently lost during construction, totalling 17,217.1m, are to be reinstated on a like-for-like basis (i.e. habitat type to be replaced) where possible. To mitigate the permanent loss of hedgerows as a result of construction of Part B, 12,499.3m of new species-rich intact hedgerows with trees are included within the landscape design (see Figure 7.10 Landscape Mitigation Plan Part B [APP-144]). In total 17,128.48m of hedgerow will be either reinstated or created, resulting in a marginal deficit of 88.62m of hedgerow length across the Scheme. However, created hedgerows will be of better quality than those hedgerows lost to the Scheme, comprising the planting of species-rich, intact hedgerows with trees and to a much greater extent than of baseline levels. The reinstatement of 4,629.18m of hedgerow predominantly comprises species poor intact hedgerow and species poor intact hedgerow with trees (Table 9-11 of Chapter 9: Biodiversity [APP-049]).</p>
BIO.1.34	Applicant	Table 9.23 of the ES [APP-049] - Design and Mitigation Measures and their Delivery Mechanisms for Part B has similarities with Table 9.23 of the ES [APP-048] for Part A. Explain the differences between the tables in terms of format, for example the delivery mechanism and preliminary activities' measure references. Are all measures in both tables included in the REAC / CEMP? If not, why not and how would they be secured?	<p>1. As highlighted within paragraph 4.3.27 of Chapter 4: Environmental Assessment Methodology [APP-039], Part A and Part B were initially considered separately.</p> <p>2. This has resulted in minor differences in the format of the tables between Table 9-23 of Chapter 9: Biodiversity Part A [APP-048] and Table 9-12 of Chapter 9: Biodiversity Part B [APP-049]. Table 9-12 is split into two categories: 'Delivery Mechanisms and Preliminary Activities' and 'Design and Mitigation'; whilst Table 9-23 includes 'Delivery Mechanism and Preliminary Activities', 'General Mitigation' and 'Ecological Receptor Specific Mitigation' categories. The use of 'Delivery Mechanisms and Preliminary Activities' is used similarly in both tables. The use of 'General Mitigation' and 'Ecological Receptor Specific Mitigation' in Table 9-12 is comparable to the use of 'Design and Mitigation' within Table 9-23.</p> <p>3. Minor differences in the nomenclature used within the 'Measure Reference' column between Table 9-23 of Chapter 9: Biodiversity Part A [APP-048] and Table 9-12 of Chapter 9: Biodiversity Part B [APP-049] are also</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>present. Within Table 9-23, footnote 43 details nomenclature used: 'DM' referring to a delivery mechanism/process, (captured under the 'Delivery Mechanism and Preliminary Activities' category only) and 'EM' referring to ecological mitigation or design (all items captured under the 'Design and Mitigation' category).</p> <p>4. Within Table 9-12 of Chapter 9: Biodiversity Part B [APP-049] this footnote is absent with 'Delivery Mechanism and Preliminary Activities' and 'General Mitigation' items afforded a measure reference moniker of 'EC', comparable to the 'DM' moniker of Table 9-23 of Chapter 9: Biodiversity Part A [APP-048]. 'Ecological Receptor Specific Mitigation' items are afforded several measure reference monikers to denote the receptor the item pertains to (e.g. 'HABXX' in reference to mitigation items for habitats) and is comparable to the 'EM' moniker of Table 9-23 of Chapter 9: Biodiversity Part A [APP-048].</p> <p>5. The mechanism by which these measures are delivered is consistent, with all measures from both tables captured within the REAC contained in the Outline CEMP [APP-346].</p>
BIO.1.35	Applicant	<p>Paragraph 9.4.8 of the ES [APP-049] states that Part B includes the reinstatement / creation of compensatory woodland at a quantity significantly greater than that lost (10.14 ha created in comparison to 0.69 ha lost). Explain why the compensatory woodland is so much greater than the area lost.</p>	<ol style="list-style-type: none"> <li>1. Paragraph 9.4.8 [APP-049] relates to organisations that were contacted during consultation. It is assumed that the question relates to paragraph 9.10.2 of Chapter 9: Biodiversity Part B [APP-049].</li> <li>2. Woodland creation is not only to compensate for the loss of woodland habitat and has been incorporated into Figure 7.10: Landscape Mitigation Plan Part B [APP-144] to mitigate other impacts of the Scheme. Woodland creation, greater than the amount of woodland being lost to the Scheme, has primarily been provided to conserve landscape character and conserve views (provide screening of the road) (see paragraph 7.9.13 of Chapter 7: Landscape and Visual Part B [APP-045]), but also to reduce fragmentation of habitats and create habitat connectivity to the wider landscape (see paragraph 9.9.3 of Chapter 9: Biodiversity Part B [APP-049], and to provide 'hop overs' for bats and birds, including barn owl, in an attempt to prevent road traffic collisions of bats and birds whilst crossing the A1 carriageway (see Table 9-12 [APP-049]).-These are included within the Outline CEMP for the Scheme (see Table 3-1 of Chapter 7.3 Outline CEMP [APP-346], see B-L1, B-B2, B-B3, and B-B4.</li> </ol>
BIO.1.36	Applicant	<p>Appendix 9.6 of the ES [APP-304] - Breeding and Wintering Birds Report Part B includes Appendix A which cross references to Appendix 9.13 – Breeding Bird Survey Report Part A [APP-239]. Similarly, Appendix B cross references to Appendix 9.14 – Wintering Bird Survey Report Part A [APP-240]. While the titles of Appendix 13 and Appendix 14 indicate that the surveys are limited to Part A the content of both appendices appears to encompass Part B. Clarify the position with respect to surveys for Part B.</p>	<ol style="list-style-type: none"> <li>1. The Applicant can confirm Appendix 9.13: Breeding Bird Survey Report Part A [APP-239] and Appendix 9.14: Wintering Bird Survey Report Part A [APP-240] includes survey data used to inform the assessments for Part A and Part B (referenced within the reports as Section A and Section B, respectively). These appendices have been packaged within Volume 7 of the ES (Chapter 9 Part A appendices), which is the reason for the naming convention. The title of these reports should simply read "Breeding Bird Survey Report" and "Wintering Bird Survey Report".</li> </ol>
BIO.1.37	Applicant IPs	<p>Paragraph 6.2.2 of Appendix 9.11 [APP-309] refers to Highways England (2018) Chief Highways Engineer Memorandum 422/18, Supporting Transparency around our Biodiversity Performance. An assessment in accordance with this memo is included in Appendix C of Appendix 9.11. The Applicant is asked to explain why the approach adopted in its own guidance is more appropriate than other methodologies to assess biodiversity performance. IPs are invited to comment on this methodology.</p>	<ol style="list-style-type: none"> <li>1. The inclusion of Appendix C within Appendix 9.11: Biodiversity No Net Loss Assessment Report Part B [APP-309] has been included for transparency only, evidencing the completion of an internal Highways England requirement. As presented in para 1.4.4: "<i>Highways England produced a Chief Highways Engineer (CHE) memorandum (Ref. 5) which guides the standardised reporting of biodiversity information on The Applicants projects. The CHE Memo does not follow the full Defra metric and is only for internal reporting by The Applicant.</i>" The inclusion of Appendix C has not been included to supplant nor support the Biodiversity No Net Loss Assessment contained within the main body of Appendix 9.11 Part B [APP-309] that follows industry good practice principles and assessment methodology. The Highways England internal CHE Memo was produced as interim guidance prior to the release of the Defra Metric 2.0. A BNNL assessment for the Scheme, conforming to the Defra Metric 2.0 methodology will be submitted at Deadline 2 to supersede both Appendix 9.20 Biodiversity No Net Loss Assessment Part A [APP-246] and Appendix 9.11 Biodiversity No Net Loss Assessment Report Part B [APP-309] and will not include an assessment in accordance with the CHE Memo.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
BIO.1.38	Applicant	Table 2.1 of the HRA Report [APP-342] states that upon completion, two-way traffic along the dualled A1 would be approximately 36,400 AADT (for Part A) and approximately 20,150 AADT (for Part B), plus 3,000 AADT for the de-trunked section of the existing A1 (Part A). The report refers to the Case for the Scheme (Chapter 4) [APP-344] for further details, however the figures provided in Tables 9 and 18 do not appear to match those in Table 2.1. Can the Applicant explain this apparent discrepancy?	<ol style="list-style-type: none"> <li>1. The annual average daily traffic (AADT) values presented within the Habitat Regulations Assessment (HRA) Report [APP-342] related to each individual part of the Scheme separately. The values presented within the Case for the Scheme [APP-344] represent those for the Scheme as a whole and were updated when Part A and Part B were combined but were not transposed into the HRA Report.</li> <li>2. When considering the Scheme as a whole, traffic modelling indicates that two-way traffic along the dualled A1 of Part A would be approximately 38,300 AADT, plus 3,000 AADT along the de-trunked section of the existing A1 (Part A), and approximately 20,900 AADT along Part B, as presented in Tables 9 (Part A) and 18 (Part B) of the Case for the Scheme [APP-344]. Using the higher values presented in the Case for the Scheme [APP-344] does not change the conclusions of the assessment presented in the HRA Report [APP-342]. The position remains that the Scheme would not result in likely significant effects to the European Sites detailed within the HRA Report [APP-342].</li> <li>3. An updated HRA Report has been produced in response to BIO.1.50 below, which also updates the forecast traffic values presented within the Case for the Scheme [APP-344]. The updated HRA is issued at Deadline 1 (Appendix BIO.2).</li> </ol>
BIO.1.39	Applicant	Referencing Appendix 5.2 of the ES [APP-199] (Construction Traffic Assessment Part A) and Appendix 5.2 of the ES [APP-270] (Construction Traffic Assessment Part B) the HRA Report [APP-342] Table 2.1 of the HRA Report [APP-342] states that traffic volumes are forecast to increase during construction by between 336 and 401 vehicles per day. The figures provided in these appendices do not appear to match those reported in the HRA Report. Can the Applicant explain this discrepancy?	<ol style="list-style-type: none"> <li>1. The Applicant can confirm that forecasted construction traffic volumes (annual average daily construction traffic flow) are a maximum of approximately 406 for Part A (Table 5-1 Appendix 5.2 Construction Traffic Assessment Part A [APP-199]), approximately 392 along the A1 between Part A and Part B (Table 5-1 Appendix 5.2 Construction Traffic Assessment Part A [APP-199]) and approximately 255 for Part B (Table 5-1 Construction Traffic Assessment Part B [APP-270]). An updated HRA Report has been produced in response to BIO.1.50 below, which also captures the traffic volumes highlighted within this response. The updated HRA is issued at Deadline 1 (Appendix BIO.2), and the Applicant can confirm that the statement "<i>given the extant traffic volumes ... this increase is proportionally very small</i>" within Transportation Requirements of each of the HRA Screening Matrices of Section 2 remains valid and therefore there is no change to the conclusions of the HRA Report [APP-342].</li> </ol>
BIO.1.40	Applicant	As set out in Appendix 9.13 of the ES (Breeding Bird Survey Report Part A) [APP-239] and Appendix 9.6 (Breeding and Wintering Birds Survey Report Part B) [APP-303] breeding bird surveys were undertaken in 2016. An updated desk study was undertaken for Part B in 2019 [APP-304]. This states that the 2019 desk study data did not identify any change in what was observed in the Part B 2016 breeding bird survey (paragraph 5.1.1). No updated desk study or field work was undertaken for Part A. Given the age of the survey data can the Applicant comment on the validity of the HRA Report?	<ol style="list-style-type: none"> <li>1. A verification breeding bird and wintering bird surveys has been completed for Part A of the Scheme, as detailed within the response to question BIO.1.10 above. The scope of the verification surveys was discussed with Natural England. Natural England confirmed within an email on 30 June 2020 that "<i>given that more or less all the surveys are less than three years old they would be considered to be valid and thus the scope of the verification surveys would appear to be appropriate particularly since there has not been any significant change in land use since the original surveys were undertaken.</i>" This consultation will be documented within the Natural England SoCG.</li> <li>2. The verification surveys did not identify any significant increases in breeding or wintering bird numbers or in the species composition. The verification surveys concluded that the baseline data presented within Appendix 9.13: Breeding Bird Survey Report Part A [APP-239] and Appendix 9.14: Wintering Bird Survey Report Part A [APP-240] remain valid. Therefore, the conclusions presented within the HRA Report [APP-342] also remain valid.</li> </ol>
BIO.1.41	NE	NE is asked to confirm whether or not it is satisfied with the scope and methodology used to gather baseline data in respect of traffic modelling and air quality for the HRA Report?	
BIO.1.42	Applicant	The Addendum Matrix to the Northumberland Marine Special Protection Area (SPA) (footnotes (j),(k) and (l)) [AS-003] states that "there are no other known projects or schemes that would incur impacts to the black-headed gull population of the SPA or with loss of functional habitat (arable or wetland) that, in combination with the Scheme, would constitute a Likely Significant Effect". Could the	<ol style="list-style-type: none"> <li>1. Due to the distance of the Scheme from the Northumberland Marine Special Protection Area (SPA) (3.7km in a straight line (at its closest point) and 9.2km downstream (closest hydrological connection)), the Scheme would not result in direct impacts to the SPA and therefore would not contribute to such impacts should they arise from other projects or schemes. Direct impacts were therefore not explored further (see <i>Land-take</i> sections of Table 2-3 (page 37) and Table 3-1, (page 80) of the HRA Report [AS-005]). However, the Applicant determined that in combination effects may arise from loss of functional habitat, which was assessed.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		Applicant describe the methodology applied for identifying other projects or schemes that might give rise to impacts on the black-headed gull populations of the Northumberland Marine and Coquet Island SPAs or with loss of functional habitat (arable or wetland) that, in combination with the Scheme, would constitute a Likely Significant Effect?	<ol style="list-style-type: none"> <li>2. In consideration of the abundance of alternative functional habitat for black-headed gull within the wider landscape, the Applicant assessed the Scheme against the 54 other developments identified within the assessment of cumulative effects for the Scheme (Section 16.9 of Chapter 16: Assessment of Cumulative Effects [APP-062]) and supplemented this with a search for other current NSIP applications in Northumberland via the Planning Inspectorate website (<a href="https://infrastructure.planninginspectorate.gov.uk/projects/">https://infrastructure.planninginspectorate.gov.uk/projects/</a>). This was considered a proportionate approach given the very small contribution to the loss of functional habitat for black-headed gull incurred by the Scheme (detailed in footnote (a) of Table 2-4 of the HRA Addendum Report [AS-003]).</li> <li>3. The Scheme makes a very small contribution to the loss of functional habitat for black-headed gull (approximately 0.06% of available terrestrial foraging habitat (footnote (a) of Table 2-4 of the HRA Addendum Report [AS-003])). As such, a very large impact would be required from other projects or schemes to result in a likely significant in combination effect. None of the other developments detailed in Chapter 16: Assessment of Cumulative Effects [APP-062], either alone or combined, result in loss of functional habitat for black-headed gull that would result in a likely significant effect in combination with the Scheme.</li> <li>4. The assessment confirmed there are no other current NSIP applications that would result in the loss of functional land for the black-headed gull population of the Northumberland Marine SPA. The Morpeth Northern Bypass, Port Blythe New Biomass Plant and A19/A1058 Coast Road Junction Improvement schemes were not considered further as these relate to historic DCO applications for which associated habitat loss has already occurred.</li> </ol>
BIO.1.43	NE	Is NE content with the Applicant's approach to the in-combination assessment?	
BIO.1.44	Applicant/ NE	NE has stated its support for the HRA conclusions when they were presented as two separate schemes. There is no evidence of similar agreement regarding the conclusions for the scheme as a whole. Can the Applicant and / or NE provide evidence of NE's agreement with the conclusions of the HRA report concerning the project as submitted?	<ol style="list-style-type: none"> <li>1. Natural England confirmed within an email dated 11 January 2021 that "<i>Natural England has previously confirmed that it agreed with the HRA conclusions for both Part A (Morpeth to Felton) and Part B (Alnwick to Ellingham) separately and can also confirm that Natural England agrees with the conclusions of the HRA assessment (i.e. no likely significant effect) for the scheme as a whole for the proposed improvements to the A1 in Northumberland – Morpeth to Ellingham.</i>" It is proposed that this will be documented within the SoCG with Natural England.</li> </ol>
BIO.1.45	Applicant	In the revised HRA Report [AS-005] Screening Table 2-3 states that "diversions would not affect roads or transport links in close proximity to the European site (within 200m)". However, the northbound diversion for Part A includes the A1068 which crosses and runs alongside the River Coquet and the boundary of the Northumberland Marine SPA. Can the Applicant explain what effect this will have on the Northumberland Marine SPA?	<ol style="list-style-type: none"> <li>1. The use of the A1068 carriageway as a diversion route for traffic during construction of Part A will be required only intermittently and temporarily to facilitate construction, with the majority of the use occurring during overnight closures (see paragraph 2.6.24 of the Construction Traffic Management Plan [APP-347]) when traffic is light. The Construction Traffic Management Plan (updated at Deadline 1 (document reference 7.4)) would ensure that the A1068 would be used as a diversionary route infrequently. The updated Construction Traffic Management Plan states in paragraph 2.6.24, "<i>all closures requiring diversion shall be scheduled so that they avoid frequent or protracted use of the northbound diversion route, via the A1068 in close proximity to the Northumberland Marine Special Protection Area. The use of the A1068 as a diversion route shall take account of the need to minimise impacts on the relevant SPA. Proposals for diversions using the A1068 shall be developed further in consultation with Natural England to manage the number of days of diversion in any given week/month/season/year.</i>" The circumstances in which this might occur are detailed in paragraph 2.2.3 of the Construction Traffic Management Plan [APP-347] and include traffic management installation/switches, temporary earthworks, carriageway resurfacing, statutory diversion, drainage works and bridge beam installations. Since the use would be <i>de minimis</i> the opportunity impacts related to traffic emissions on the European Site and its qualifying features can be described as being unlikely to be affected with a very high degree of scientific certainty – i.e. beyond reasonable scientific doubt. The qualifying features of the SPA predominantly comprise seabird species which utilise cliff and coastal edge habitat. The areas of the Northumberland Marine SPA at the mouth of the River Coquet, located within 200m of the A1068, lie within the intertidal zone and the use of these areas by foraging birds designated as qualifying features under the SPA may</li> </ol>

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			<p>occur. However, as an existing carriageway, any birds that utilise the low tide exposed habitats will be accustomed and habituated to road traffic noise and movements and are therefore unlikely to be adversely impacted by diverted traffic movements.</p> <ol style="list-style-type: none"> <li>The assessment and conclusions detailed above were presented to Natural England during a call on 15 December 2020 and subsequently issued via email. Natural England confirmed agreement that the use of the A1068 as a diversion route during the construction of Part A will not change the overall conclusion of the HRA (i.e. no likely significant effects). This agreement shall be documented within the Natural England Statement of Common Ground.</li> <li>An updated HRA Report has been produced in response to BIO.1.50 below, which also captures the amendment discussed within this response regarding the use of the A1068 as a diversion route for traffic during the construction of Part A and the associated effect (or lack of) on the Northumberland Marine SPA. The updated HRA is issued at Deadline 1 (Appendix BIO.2).</li> </ol>
BIO.1.46	Applicant	<p>The screening matrices in the revised HRA Report [AS-005] state that construction traffic would be confined within the Order Limits, between the Part B Main Scheme Area and Lionheart Enterprise Park Compound and between the Order Limits of Part B and the Main Compound located within the Order Limits of Part A. However, the Construction Traffic Assessments state that construction traffic within the Order Limits are not fixed, with deliveries of aggregates and concrete coming from different directions (Part A [APP-199]; Part B [APP-270]). Can the Applicant explain this discrepancy?</p>	<ol style="list-style-type: none"> <li>The statements in paragraph 5.1.1 of Appendix 5.2: Construction Traffic Assessment Part A [APP-199] and paragraph 5.1.1 of Appendix 5.2: Construction Traffic Assessment Part B [APP-270] regarding traffic movements not being fixed solely relate to movements "within" the Order limits. As such, these statements do not conflict with the screening matrices of the revised HRA Report [AS-005], which confirms that construction traffic would be within the Order limits (although does not specify where; i.e. not fixed as detailed within the Construction Traffic Assessments), in addition to travel between Part B and the Lionheart Enterprise Park Compound and between the Order limits of Part B and the Main Compound located within the Order limits of Part A.</li> <li>As detailed in the Construction Traffic Assessments for both Part A [APP-199] (paragraph 5.1.3) and Part B [APP-270] (paragraph 5.1.5), "<i>the exact source of materials would be determined by the main contractor, however it is likely that aggregates would be delivered from the north and concrete from the south, both along the A1.</i>" Moreover, the updated Construction Traffic Management Plan issued at Deadline 1 (document reference 7.4) states in paragraphs 2.3.3 and 2.3.5 that "<i>delivery routes are expected to be via the A1 from the north or south and instructions to drivers/suppliers would be given confirming that they should avoid the use of roads located within 200m of European sites designated for nature conservation.</i>" Construction traffic between Parts A and B has been included within Appendix 5.2: Construction Traffic Assessment Part A (Table 5-1 [APP-270]) and delivery routes via the A1 are of a sufficient distance from the European Sites to comply with the assessment and conclusions detailed within the HRA Report [AS-005].</li> </ol>
BIO.1.47	NE	<p>The revised HRA Report [AS-005] screens all the sites for impacts from emissions to water from both Part A and Part B of the scheme. For all sites, the report concludes that no impacts are anticipated as a result of pollution events or polluted surface water runoff during construction and operation due to the intervening distance and natural dilution and settlement rates. However, the report also states that the design of Part A incorporates a network of detention basins, featuring filter strips and sediment fall bags, that shall further reduce the likelihood of polluted surface water runoff. It appears that the details regarding the mitigation measures were added to the report in response to advice from NE (Appendix C). Is NE satisfied with the conclusion that water pollution impacts can be screened out on the basis of the intervening distance and natural dilution and settlement rates, without consideration of mitigation?</p>	

Ref. No.	Question to:	Question	Applicant's Response
BIO.1.48	Applicant	Footnote (i) to the screening matrices for Part A and matrices E-2 to E-6 for Part B [AS005], regarding emissions effects during the decommissioning phase, all refer to best practice measures implemented within the CEMP. Please confirm where in the CEMP the decommissioning phase is addressed?	<ol style="list-style-type: none"> <li>1. As detailed in paragraph 2.10.2 of Chapter 2: The Scheme [APP-037], demolition (decommissioning) would not be either feasible or desirable and is therefore not considered further within the ES.</li> <li>2. Decommissioning was included within the Planning Inspectorate screening matrices of the HRA Report as per the template of Appendix 1 of Advice Note 10 (<a href="http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/08/AN10Appendix1v4.doc">http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/08/AN10Appendix1v4.doc</a>). For the purposes of the HRA Report [AS005], it was assumed that activities associated with decommissioning would be conducted in a comparable manner to the construction of the Scheme. The statement in footnote (i) makes a commitment from the Applicant that best practice measures would be implemented within a separate CEMP associated with the decommissioning of the Scheme. Decommissioning would likely be as a result of another highways project to replace the Scheme (in a similar manner as Part A replacing the de-trunked section of the A1). As such, another highways project and the associated decommissioning of the Scheme would be subject to a separate planning application, within which an associated CEMP for decommissioning would be secured.</li> <li>3. A CEMP associated with the decommissioning of the Scheme has not been prepared and would be inappropriate given the potential for best practice and mitigation measures to change over the time period expected between Scheme design and decommissioning.</li> </ol>
BIO.1.49	Applicant	The Applicant provided matrices for all sites with the original application [APP-342], but separately for Part A (Appendix B) and Part B (Appendix E). The ExA requested that they provide a single revised matrix for three sites (Northumbria Coast SPA, Northumbria Coast Ramsar, and Northumberland Marine SPA) and these have been provided in an Addendum [AS-003]. The North Northumberland Dunes Special Area of Conservation was also screened for both Parts of the scheme and no combined matrix was requested. Could the Applicant provide a revised screening matrix for the North Northumberland Dunes Special Area of Conservation that combines the assessments of Part A and B? The Applicant is requested to submit the original Planning Inspectorate screening matrices and the amended ones, where applicable, in Microsoft Word format as per Advice Note 10 paragraph 4.30 ( <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/06/Advice-note-10v4.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/06/Advice-note-10v4.pdf</a> ).	<ol style="list-style-type: none"> <li>1. The Applicant has produced a revised screening matrix for the North Northumberland Dunes SAC, which is submitted at Deadline 1 (Appendix BIO.1) in both word and PDF versions.</li> <li>2. All previously submitted Planning Inspectorate screening matrices are submitted in Microsoft Word format, as requested by the ExA and detailed in paragraph 4.30 of Advice Note 10. These are presented in Appendix BIO.3 [APP-342], BIO.4 [AS-003], BIO.5 [AS-004] and BIO.6 [AS-005] and submitted in Deadline 1.</li> </ol>
BIO.1.50	Applicant	Screening Table 2-5 [AS-005] for Coquet Island SPA states that no qualifying species were recorded in the survey area. However black-headed gull has been identified as a qualifying feature (as part of the seabird assemblage) and was identified in the survey area (as noted elsewhere in the report). Can the Applicant clarify this inconsistency and provide an assessment of the impact to this feature of the SPA?	<ol style="list-style-type: none"> <li>1. The assessment for black-headed gull presented in Table 2-3 of the HRA Report [AS-005] for the Northumberland Marine SPA is also applicable to Table 2-5 of the HRA Report [AS-005] for the Coquet Island SPA.</li> <li>2. An assessment of black-headed gull of the Coquet Island SPA has been included within the updated HRA issued at Deadline 1 (Appendix BIO.2). It remains the case that there are no likely significant effects to the qualifying features of the Coquet Island SPA.</li> </ol>
BIO.1.51	Applicant	Matrix 7 (Table E-8) [AS-005] for the River Tweed SAC lists an additional feature which is not mentioned in the original document (Screening Table 3-7) [APP-342]. This feature is listed as "Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-	<ol style="list-style-type: none"> <li>1. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) habitat is listed within Section 3 Ecological Information of the standard data form (JNCC, 2016)<sup>3</sup>. The form provides habitat types present but does not define the qualifying features of the SAC.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>Batrachion vegetation; Rivers with floating vegetation often dominated by water-crowfoot". The standard data form (JNCC, 2016)<sup>1</sup> for the site also lists "Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i>, <i>Salicion albae</i>)" as an Annex I habitat type present on site. The Applicant is requested to provide a definitive list of features for the River Tweed Special Area of Conservation and an assessment of the impacts to these features.</p>	<ol style="list-style-type: none"> <li>As per the Natural England citation for River Tweed Special Area of Conservation (SAC) (<a href="http://publications.naturalengland.org.uk/file/4773168258482176">http://publications.naturalengland.org.uk/file/4773168258482176</a>) and the JNCC's River Tweed SAC information (<a href="https://sac.jncc.gov.uk/site/UK0012691">https://sac.jncc.gov.uk/site/UK0012691</a>) the qualifying features (habitats and species) of the SAC are:           <ul style="list-style-type: none"> <li>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)</li> <li>Atlantic Salmon <i>Salmo salar</i></li> <li>Brook lamprey <i>Lampetra planeri</i></li> <li>Otter <i>Lutra lutra</i></li> <li>River Lamprey <i>Lampetra fluviatilis</i></li> <li>Sea Lamprey <i>Petromyzon marinus</i></li> </ul> </li> <li>The definitive list of qualifying features presented above was confirmed as correct by Natural England within an email dated 11 January 2021.</li> <li>The Applicant acknowledges that Table 3-7 of the HRA Report [APP-342] does not list "water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)" within the qualifying features. However, Table 3-7 includes statements applicable to the assessment of this habitat, which are also stated in Matrix 7 (Table E-8). Table 3-7 states "...no land-take from within the boundaries of the European Site" additionally stating that the SAC is "not connected hydrologically with the European Site via any watercourses." Table 3-7 also confirms that none of the roads within 200m of the European Site meet any of the traffic/alignment criteria with respect of air quality impacts. As such, there are no likely significant effects identified to water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. (Rivers with floating vegetation often dominated by water-crowfoot) of the River Tweed SAC.</li> <li>An assessment of impacts to other qualifying features (fauna species) is detailed in both Table 3-7 and Matrix 7 (Table E-8) of the HRA Report [APP-342].</li> <li>The conclusions of the HRA Report [APP-342] have been agreed with Natural England and are to be captured within the SoCG.</li> <li>An updated HRA Report is proposed in response to BIO.1.50 above, which also lists "water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)" as a qualifying feature within Table 3-7. The updated HRA Report is issued at Deadline 1 (Appendix BIO.2).</li> </ol>

**Table 1-4 - Carbon Emissions**

Ref. No.	Question to:	Question	Applicant's Response
CE.1.1	Applicant	<p>In its Relevant Representation [RR-013] Transport Action Network states that the Scheme will significantly increase carbon emissions and undermine efforts to reach net zero carbon emissions by 2050 (Climate Change Act 2008). The ES states that the scheme will increase emissions by 1,855,000 additional tonnes of carbon due to increased traffic, and 34,750 tonnes due to construction. Transport Action Network states that this is not 'not significant' as the</p>	<ol style="list-style-type: none"> <li>The emissions data presented by the Relevant Representation [RR-013] makes reference to the data presented within Chapter 14: Climate Part A [APP-058]. The Scheme emissions data are presented in Chapter 16: Assessment of Cumulative Effects [APP-062].</li> <li>Chapter 14: Climate Part A [APP-058] and Chapter 14: Climate Part B [APP-059], specifically the assessment of the effect of the Scheme on climate change (Greenhouse gas (GHG) emissions), has been completed in line with up to date and appropriate methodologies. The assessment of significance of effects in these chapters and for the Scheme (Chapter 16: Assessment of Cumulative Effects [APP-062]) aligns with the methodology set out in the National Policy Statement for National Networks (NPS NN) as explained below.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>ES claims indicating that the Scheme is a retrograde step in terms of tackling climate change. Please respond.</p>	<ol style="list-style-type: none"> <li>3. The estimated GHG emissions arising from the Scheme (Chapter 16: Assessment of Cumulative Effects [APP-062]) have been compared with UK carbon budgets and the associated reduction targets (refer to Table 16-8 of Chapter 16: Assessment of Cumulative Effects [APP-062]). NPS NN Paragraph 3.8 sets out that <i>“the impact of road development on aggregate levels of emissions is likely to be very small”</i> and that <i>“the annual CO2 impacts from delivering a programme of investment on the Strategic Road Network of the scale envisaged in Investing in Britain's Future amount to well below 0.1% of average annual carbon emissions allowed in the fourth carbon budget”</i>. It is acknowledged that the Scheme would result in an increase in GHG emissions (59 thousand tonnes (kTCO<sub>2</sub>e) during construction and 2,428 kTCO<sub>2</sub>e during operation) and this would contribute to the carbon budgets, however these emissions are relatively small when compared to the carbon budgets (between 0.00824% and 0.01074%). The emissions associated with the Scheme have been minimised through the mitigation measures such as the retention of existing structures; selection of structural elements via a matrix examination which includes sustainability considerations; inclusion of pre-fabricated elements; implementing design initiatives where appropriate; incorporating material resource efficiency and waste minimisation as best practice; engagement with suppliers to reduce greenhouse gas emissions; and minimising fuel consumption during construction. These mitigation measures are detailed further in the Outline CEMP [APP-346]</li> <li>4. As set out in Section 14.10 of Chapter 14: Climate Part A [APP-058] and Chapter 14: Climate Part B [APP-059], and carried through for the Scheme (Chapter 16: Assessment of Cumulative Effects [APP-062]), in the absence of agreed thresholds for what level of GHG emissions is considered significant for an EIA, professional judgement has been used to assess the significance of effects. This includes the magnitude of GHG emissions anticipated to be generated; comparison of the anticipated GHG emissions in relation to the regional and local context and the UK carbon budgets; guidance from the Institute of Environmental Management and Assessment (IEMA) (IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance); and comparison to GHG emissions of schemes of a similar size and nature, such as the A1 Birtley to Coal House Improvement Scheme. This, in combination with the guidance set out in the NPS NN, has determined the Scheme to be not significant. Furthermore, the latest DMRB Guidance (LA114 Climate), notes that, in line with the NPS NN, <i>“it is considered unlikely that projects will in isolation conclude significant effects on climate”</i> (Note 1 and Note 2). As such, LA114 sets out in paragraph 3.20 that <i>“The assessment of projects on climate shall only report significant effects where increases in GHG emissions will have a material impact on the ability of Government to meet its carbon reduction targets”</i>.</li> <li>5. The UK Government's commitment to new Net Zero carbon targets for 2050 is not a moratorium on the development of new roads or the improvement of existing roads. The Net Zero target includes the provision for emissions to increase, as long as there is a commensurate decrease, at national scale. Although the Scheme is expected to result in an increase in emissions it is not possible to deduce that the Scheme would stop the UK Government from meeting the target.</li> </ol>
CE.1.2	Applicant	<p>How might the Government's recent announcement about the phasing out of sales of new petrol and diesel vehicles by 2030 to accelerate the transition to electric vehicles affect the assessment set out in Chapter 14 of the ES [APP-058] [APP-059]?</p>	<ol style="list-style-type: none"> <li>1. To model the GHG emissions, data tables from DfT are used which take into account the proportions of the vehicle types, fuel type, forecast fuel consumption parameters and emission factors (see references 14.16 and 14.17 in Chapter 14: Climate Part A [APP-058] and references 14.15 and 14.16 in Chapter 14: Climate Part B [APP-059]). These data tables include forward forecasting of different vehicle types (such as electric) for future years. The uses of these data tables is considered best practice for calculating end-user (traffic) greenhouse gas emissions.</li> <li>2. It is also of note that the Government's recent announcement applies to the purchase of new vehicles from 2030, as such, existing petrol and diesel vehicles will continue to be used beyond 2030. No data at have been produced to incorporate the Government's announcement into the DfT data tables, which accordingly represent a reasonable worst case.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
CE.1.3	Applicant	Table 14.3 of the ES [APP-058] refers to the Alnwick District Wide Local Plan. Should this be the Castle Morpeth plan and if so, do the policies need changing?	<ol style="list-style-type: none"> <li>1. The Castle Morpeth Plan sets out under Policy RE1 that the Council will have regard for the Government's commitments to the principles of sustainable development. Through this, developers will be required to demonstrate that emissions of greenhouse gases are minimised. The Alnwick District Wide Local Plan was published in 2003 and policy in relation to climate are limited. As such, it is considered that the inclusion of the Northumberland Local Plan (draft) and Northumberland County Council Transport Plan (summarised in Table 14-3 of Chapter 14: Climate Part A [APP-058]) are more relevant.</li> </ol>
CE.1.4	Applicant	Paragraph 14.4.9 of the ES [APP-058] states that emissions were quantified for each year over a 60-year lifetime of Part A (up to 2083). Explain why the lifecycle period is 60 years.	<ol style="list-style-type: none"> <li>1. The total end-user traffic greenhouse gas emissions has been based on a 60-year operational life of Part A (2024 to 2083). This exceeds the pavement design life of 40 years and covers half of the standard bridge design life (120 year). The 60-year timeframe is considered best practice for road schemes and modelling beyond this is not proportionate due to a lack of certainty in GHG emissions beyond this timeframe.</li> <li>2. Furthermore, the latest DMRB guidance (LA114 Climate) states that operational aspects should extend to 60 years (Table 3.11.1 of LA114 Climate).</li> </ol>
CE.1.5	Applicant	Paragraph 14.4.16 of the ES [APP-058] notes that the NNNPS sets out that "it is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets" The ES indicates that as such it is unlikely that Part A would constitute a significant portion of the UK carbon budgets. Paragraph 14.10.19 states that this is the case not only for Part A but for the Scheme as a whole. Please explain how this conclusion was reached.	<ol style="list-style-type: none"> <li>1. Greenhouse gas emissions for the Scheme as a whole have been assessed in Chapter 16: Assessment of Cumulative Effects [APP-062]. GHG emission data presented in Chapter 16 comprises the total of construction emissions for Part A and Part B; the operational emissions utilising the traffic model for the Scheme and presents the total greenhouse gas emissions against each of the UK carbon budgets (refer to Table 16-8 of Chapter 16: Assessment of Cumulative Effects [APP-062]).</li> <li>2. The conclusion was reached in line with the appropriate methodologies available at the time of writing (NPS NN; IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance; and DMRB guidance LA114 Climate) and using professional judgement. When comparing the emissions of the Scheme to the UK carbon budgets, they are relatively small (between 0.00824% and 0.01074%) and therefore concur with the NPS NN statement that "<i>it is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets</i>".</li> </ol>
<b>Part B</b>			
CE.1.6	Applicant	Paragraph 14.10.9 of the ES [APP-059] states that the total regional traffic Greenhouse Gas emissions for the operational lifespan of Part B (2023-2082) is 629 ktCO <sub>2</sub> e higher (approximately +9%) than the 'do minimum' scenario. The comparable figure for Part A (paragraph 14.10.9 [APP-058] is 1,836 ktCO <sub>2</sub> e (approximately +28%). Please explain the variation in these figures.	<ol style="list-style-type: none"> <li>1. The variance in operational greenhouse gas emissions between the do minimum scenarios and do something scenarios for Part A and Part B is a combination of several factors. <ul style="list-style-type: none"> <li>• Part A and Part B cover different areas and Part A is greater in length than Part B (Part A is approximately 12.6km and Part B is approximately 8km as set out in Section 2.3 of Chapter 2: The Scheme [APP-037]; and</li> <li>• The traffic models used to calculate end user (traffic) emissions for Part A and Part B have different variables such as traffic flows and percentage of heavy duty vehicles. These variables reflect the actual differences between Part A and Part B and are embedded into the traffic model.</li> </ul> </li> </ol>

**Table 1-5 - Compulsory Acquisition and Temporary Possession**

Ref. No.	Question to:	Question	Applicant's Response
CA.1.1	Applicant	The Applicant is requested to complete the annexed Compulsory Acquisitions Objections Schedule (Annex A)	<ol style="list-style-type: none"> <li>1. The Compulsory Acquisition Objections Schedule (at Appendix CA.1) has been prepared in line with that provided by the Examining Authority and is submitted at Deadline 1. This has taken into account, where</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		and to make any entries that it believes would be appropriate, and at each successive deadline to make any new entries, or delete any entries that it considers would be appropriate, taking account of the positions expressed in Relevant Representations and Written Representations, and giving reasons for any additions. (It is noted that Annex B of the Statement of Reasons (SoR) [APP-018] provides a schedule which provides most of this information.)	possible, the positions expressed in Relevant Representations and consultation during the Pre-Examination Stage. The Applicant confirms it will provide an updated version for each successive deadline throughout the examination as appropriate, which will also take into account any Written Representations received.
CA.1.2	Applicant	The Book of Reference (BoR) [APP-020] includes a number of Statutory Undertakers with interests in land. Please provide a progress report on negotiations with each of the Statutory Undertakers listed in the BoR, with an estimate of the timescale for securing agreement from them. Indicate whether there are any envisaged impediments to the securing of such agreements. State whether any additional Statutory Undertakers have been identified since the submission of the BoR as an application document.	<ol style="list-style-type: none"> <li>1. A schedule of progress on negotiations with statutory undertakers is included at Appendix CA.2</li> <li>2. No additional statutory undertakers have been identified since submission of the Book of Reference [APP-020] as an application document.</li> </ol>
CA.1.3	Applicant	The former Department for Communities and Local Government published Guidance related to procedures for CA (September 2013) in "Planning Act 2008: procedures for the compulsory acquisition of land". This states that: "Applicants should be able to demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made, and that the resource implications of a possible acquisition resulting from a blight notice have been taken account of." The Funding Statement [APP-019] does not identify the CA costs separately from the project costs or explain how a figure for CA costs was arrived at. Please explain the anticipated cost of CA, how this figure was arrived at, and how these costs are going to be met.	<ol style="list-style-type: none"> <li>1. Paragraph 2.1.1 of the Funding Statement [APP-019] states that the most likely estimate of the Scheme is £261.6 million. This includes the land acquisition, compensation costs and claims associated with the Scheme; legal fees and land agent fees. The costs associated with land acquisition are integrated in the Scheme estimate and met through the sources of funding detailed with Section 3 of the Funding Statement. The Scheme estimate which has been prepared in accordance with Highways England procedures and the HM Treasury Green Book includes an allowance for compensation payments relating to the Compulsory Acquisition of land interests in and over land and the temporary possession and use of land. It also takes account of potential claims under Part 1 of the Land Compensation Act 1973; Section 10 of the Compulsory Purchase Act 1965 and Section 152(3) of the 2008 Act.</li> <li>2. Estimates for compensation and land acquisition costs have been informed by land referencing activities; engagement of professional surveyors from the Valuation Office Agency (VOA) used regularly by the Applicant for surveying and valuation purposes and information received from consultation and engagement with parties who have interest in the land. The estimate was reached by appraising the compensation anticipated to be payable as a result of the Scheme (both permanent and temporary) including land value, loss and damage, disturbance, injurious affection (including Part 1 of the Land Compensation Act 1973), landowner fees and costs in line with the Compensation Code and the Department for Communities and Local Government published Guidance related to produces for Compulsory Acquisition.</li> </ol>
CA.1.4	Applicant	Paragraphs 10.6 – 10.12 of the EM [APP-015] indicate how Art 29 of the dDCO provides for the extinguishment of private rights. Could the Applicant explain how this addresses the Guidance published by the former Department for Communities and Local Government in 'Planning Act 2008: procedures for the compulsory acquisition of land' which, in Annex D, paragraph 10 states: "Where it is proposed to create and acquire new rights	<ol style="list-style-type: none"> <li>1. The Land Plans [APP-006] and the Book of Reference [APP-020] indicate the land over which it is proposed to acquire new rights compulsorily. These plots are shown coloured blue on the Land Plans which indicates the extent of 'permanent acquisition of rights over land'.</li> <li>2. The Book of Reference at Table 3.1 cross refers to the articles in the draft DCO [APP-014] relevant to the category of acquisition being sought. In this particular case, the compulsory acquisition of rights over land is covered under article 29 of the draft DCO.</li> <li>3. It should be noted that the extinguishment of a private right is not the acquisition of a right. The latter occurs by the creation of a new right. As such, the approach in the dDCO is correct.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		compulsorily, they should be clearly identified. The Book of Reference should also cross-refer to the relevant articles contained in the development consent order.”?	
CA.1.5	Applicant	<p>Statutory undertakers: land or rights The Applicant is requested to review Relevant Representations and Written Representations made as the Examination progresses and to prepare, and at each successive deadline update as required, a table identifying and responding to any representations made by Statutory Undertakers with land or rights to which PA2008 s127 applies. Where such representations are identified, the Applicant is requested to identify:</p> <ul style="list-style-type: none"> <li>a) the name of the Statutory Undertaker;</li> <li>b) the nature of their undertaking;</li> <li>c) the land and or rights affected (identified with reference to the most recent versions of the BoR and Land Plans available at that time);</li> <li>d) in relation to land, whether and if so, how the tests in PA2008 s127(3)(a) or (b) can be met;</li> <li>e) in relation to rights, whether and if so, how the tests in s127(6)(a) or (b) can be met; and</li> <li>f) in relation to these matters, whether any protective provisions and /or commercial agreement are anticipated, and if so:               <ul style="list-style-type: none"> <li>i. whether these are already available to the ExA in draft or final form,</li> <li>ii. whether a new document describing them is attached to the response to this question or</li> <li>iii. whether further work is required before they can be documented; and</li> </ul> </li> <li>g) in relation to a Statutory Undertaker named in an earlier version of the table but in respect of which a settlement has been reached:               <ul style="list-style-type: none"> <li>i. whether the settlement has resulted in their representation(s) being withdrawn in whole or part; and</li> <li>ii. identifying any documents providing evidence of agreement and withdrawal. The table provided in response to this question should be titled CA1.5: PA2008 s127 Statutory Undertakers Land/ Rights and provided with a version number that rolls forward with each deadline.</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>1. Please refer to Appendix CA.2. The table presented in Appendix CA.2 has taken into account, where possible, the positions expressed in Relevant Representations and consultation during the Pre-Examination Stage. The Applicant confirms it will provide an updated version for each successive deadline throughout the examination as appropriate, which will also take into account any Written Representations received.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
CA.1.6		<p>Statutory undertakers: extinguishment of rights and removal of apparatus etc The Applicant is requested to review its proposals relating to CA or TP of land and/ or rights and to prepare and at each successive deadline update a table identifying if these proposals affect the relevant rights or relevant apparatus of any Statutory Undertakers to which PA2008 s138 applies. If such rights or apparatus are identified, the Applicant is requested to identify:</p> <p>a) the name of the Statutory Undertaker;                      b) the nature of their undertaking;                      c) the relevant rights to be extinguished; and/ or d) the relevant apparatus to be removed;                      e) how the test in s138(4) can be met; and                      f) in relation to these matters, whether any protective provisions and/ or commercial agreement are anticipated, and if so: i. whether these are already available to the ExA in draft or final form, ii. whether a new document describing them is attached to the response to this question or iii. whether further work is required before they can be documented; and                      g) in relation to a statutory undertaker named in an earlier version of the table but in respect of which a settlement has been reached: i. whether the settlement has resulted in their representation(s) being withdrawn in whole or part; and ii. identifying any documents providing evidence of agreement and withdrawal.</p> <p>The table should be titled CA.1.6: PA2008 s138 Statutory Undertakers Apparatus etc. and provided with a version number that rolls forward with each deadline.</p>	<p>1. Please refer to Appendix CA.3. This has taken into account, where possible, the positions expressed in Relevant Representations and consultation during the Pre-Examination Stage. The Applicant confirms it will provide an updated version for each successive deadline throughout the examination as appropriate, which will also take into account any Written Representations received.</p>
CA.1.7	Applicant	<p>Paragraphs 3.1 to 3.6 of the Explanatory Memorandum (EM) [APP-015] state that the Applicant has chosen not to distinguish between 'associated development' within the meaning of section 115(2) PA2008 and works which form part of the NSIP. How does that approach reflect the Guidance on associated development 'Planning Act 2008: associated development applications for major infrastructure projects' (former Department for Communities and Local Government, April 2013)? Explain further the example given of potential overlap between some on-highway and some off-highway diversion of statutory</p>	<p>1. There is no requirement under the 2008 Act for associated development to be identified and neither is this required in the Department for Communities and Local Government (DCLG) Guidance. The point of associated development is to allow for development which has a direct relationship with the principal development to be authorised by means of development consent order. The difficulty with a linear highways scheme is that there is no clear distinction between these principal works and other works which are necessary in order for the scheme to be built.</p> <p>2. For example, the diversion of undertaker infrastructure may require to take place within the route of the highway and some may be off the highway route. The full diversion is, however, required in order for the development to take place. The draft DCO [APP_014] therefore identifies the principal activities which require to be undertaken in order to construct the authorised development as works. The "further development" listed at the end of Schedule 1 authorise the carrying out of the various sorts of operations which are required to</p>

Ref. No.	Question to:	Question	Applicant's Response
		undertakers' equipment and why the 'associated development' aspects of the scheme could not be appropriately categorised as such in the dDCO?	construct the Scheme. This is the consistent approach which has been approved by the Secretary of State on highway DCOs, most recently on the A303 (Amesbury to Berwick Down) Development Consent Order 2020.
CA.1.8	Applicant	The SoR [APP-018], paragraph 1.2.3, lists the works necessary to deliver the scheme. Which, if any, of these works can be identified as associated development?	1. The application does not differentiate between the principal development of the NSIP and associated development within the meaning of s115 of PA2008. Please refer to the response above to CA. 1.7 and DCO.1.4 for further detail on this approach.
CA.1.9	Applicant	The SoR [APP-018], section 3.4 refers to temporary possession powers through Articles 35 and 36. Please provide further details to justify the extent of the land sought to be used temporarily. For each area explain why such a size is required and the justification for the extent of the plots proposed to accommodate them.	1. Please refer to Appendix CA.4.
CA.1.10	Applicant	For the avoidance of doubt, what are all the factors that are regarded as constituting evidence of a compelling case in the public interest for the CA powers sought and where, giving specific paragraph references, are these set out in the submitted documentation?	<ol style="list-style-type: none"> <li>1. Section 5.4 of the Statement of Reasons [APP-018] sets out the compelling case in the public interest for use of Compulsory Acquisition powers in order to construct, maintain and operate the Scheme.</li> <li>2. The importance of the A1 as a route of local and national importance and as part of Highways England's Strategic Road Network (SRN) is confirmed at Paragraph 2.2.1 of the Statement of Reasons. There is a "critical need" to improve the national networks identified in national policy, which is confirmed at paragraph 5.4.3 of the Statement of Reasons [APP-018], and Paragraph 6.4.3 of the Case for the Scheme [APP-344] confirms that the Scheme is supported by national, regional and local transport and planning policy.</li> <li>3. Paragraph 7.1.7 of the Case for the Scheme [APP-344] confirms that it would improve journey times; improve safety; increase resilience; improve connectivity between Morpeth and Ellingham, which is part of the SRN in the North-East region; provide better transport links; and improve opportunities for economic activity. These are considered to be evidence of the compelling case in the public interest for the CA powers sought.</li> <li>4. None of the adverse impacts is considered sufficient to outweigh the compelling case in the public interest in favour of the Scheme.</li> </ol>
CA.1.11	Applicant	The SoR [APP-018] at section 5.4 states that there is a compelling case in the public interest for the CA. What assessment, if any, has been made of the effect upon individual Affected Persons and their private loss that would result from the exercise of CA powers in each case? Where is it demonstrated within the application that the public benefits of the scheme outweigh any residual adverse effects including private loss suffered by individual land owners and occupiers? Demonstrate how such a conclusion has been reached and how the balancing exercise between public benefit and private loss has been carried out.	1. Section 6 of the Statement of Reasons [APP-018] identifies Affected Persons and considers the effect that the Scheme will have on the individuals and their Human Rights. Please also see Appendix CA.5.
CA.1.12	Applicant	In the light of the relevant Guidance related to CA, 'Planning Act 2008: procedures for the compulsory	1. Section 5.5 of the Statement of Reasons [APP-018] identifies the reasonable alternatives to Compulsory Acquisition that have been considered.

Ref. No.	Question to:	Question	Applicant's Response
		<p>acquisition of land' and in particular paragraph 8: How can the ExA be assured that all reasonable alternatives to CA (including modifications to the scheme) have been explored? Set out in summary form, with document references where appropriate, what assessment/comparison has been made of the alternatives to the proposed acquisition of land or interests in each case.</p>	<ol style="list-style-type: none"> <li>1. These alternatives and modifications were consulted on and the preferred route has been chosen based on a thorough consideration of all of the relevant issues. This process is described in detail in Chapter 3; Assessment of Alternatives, Volume 1 of the ES (APP-038) and Chapter 3 of the Case for the Scheme (APP-344)</li> <li>2. For Part A, the Applicant identified four route options in 2005. Two of these options were considered not suitable due to the higher impacts on the following factors: landscape and visual amenity, cultural heritage, ecology, water, soil and geology environment.</li> <li>3. Following public consultation for the two remaining route options on Part A, the Applicant selected the proposed route contained in this DCO application on the basis of various factors: views of consultees (including persons with a land interest), environmental impacts, meeting objectives of the scheme, affordability, value-for-money, safety and construction and operational considerations.</li> <li>4. For Part B, three route options were identified in 2015, however two options were also adjudged to be materially more expensive whilst offering much lower value for money. Additionally, none of the alternative options or modifications would obviate the need for compulsory acquisition and in fact would have resulted in a greater amount of third-party land being required.</li> <li>5. The remaining route option for Part B went through public consultation and input from consultees was assessed for viability.</li> <li>6. To obviate land requiring compulsory acquisition powers within the proposed DCO, the Applicant has engaged with landowners seeking to acquire land through agreement. The Applicant sets out in Chapter 4 and Annex B of the Statement of Reasons [APP-018] the discussions taken place to acquire land by agreement. In instances where the Applicant has been unable to reach an agreement, the use of compulsory acquisition powers has been sought.</li> </ol>
CA.1.13	Applicant	<p>Section 6 of the SoR [APP-018] addresses human rights. Where is it demonstrated that interference with human rights in this case would be proportionate and justified? How has the proportionality test been undertaken and explain how this approach has been undertaken in relation to individual plots?</p>	<ol style="list-style-type: none"> <li>1. Section 6 of the Statement of Reasons [APP-018] considers the impacts of the Scheme on human rights and explains how the proportionality test has been undertaken for each plot. It concludes at Paragraph 6.3 that the interference with human rights is both proportionate and justified.</li> <li>2. The exercise carried out by the Applicant to ensure that the interference with human rights as a result of the powers of compulsory acquisition and temporary possession sought in the DCO would be proportionate and justified involved the following assessments, based on the guidance set out in 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' (DCLG, September 2013). Further detail as to each of these assessments is provided below.             <ul style="list-style-type: none"> <li>• the need for and public benefits of the Scheme;</li> <li>• the need for the land;</li> <li>• the extent of the private loss of the affected individuals;</li> <li>• the consideration of reasonable alternatives; and</li> <li>• the assessment of the private loss of individuals impacted by compulsory acquisition or temporary possession against the public benefits of the Scheme.</li> </ul> </li> <li>3. The need for and public benefits of the Scheme are set out in detail in the Case for the Scheme [APP-344]. This document demonstrates that there is a compelling case in the public interest for the Scheme to be delivered. Of particular relevance is the alignment of the Scheme with the objectives of the National Networks National Policy Statement and the Government's Road Investment Strategy, which demonstrates the substantial public benefits which would arise from the delivery of the Scheme.</li> <li>4. Having established the need for and public benefits of the Scheme, it is necessary to assess the private loss of individuals impacted by compulsory acquisition or temporary possession against those public benefits. In order to do so, the need for the land and the extent of the private loss of the affected individuals must be</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>ascertained. In respect of the need for the land, Section 6 of the Statement of Reasons [APP-018] confirms that the land proposed to be acquired is the minimum land-take necessary to deliver the Scheme and is required to realise the public benefits of the Scheme. The Applicant has sought to achieve a balance between minimising land take and securing sufficient land to ensure delivery of the Scheme, noting that the detailed design of the Scheme is yet to be developed. In that context, the limits of the land to be acquired or used have been drawn as tightly as possible so as to avoid unnecessary land take.</p> <ol style="list-style-type: none"> <li>5. This process of identifying land requirements took place as the Application was being prepared, where the proposed Order limits and extent of permanent land acquisition were debated, including with the Applicant's legal team and land referencing team. This process included: identifying whether land was actually required in discussion with engineers; identifying if small areas of acquisition/possession could be avoided; and, conversely, extending the Order limits in circumstances where an owner might be left with an unviable rump which would be expected to be an impediment as opposed to an asset.</li> <li>6. As summarised in Annex B of the Statement of Reasons, detailed land referencing and consultation was carried out with all affected landowners, thereby identifying the extent of land to be taken, which allows an appreciation of all individual affected persons' private loss based upon land valuation. It should also be noted that it will be open to affected persons to make a claim for compensation in each case of compulsory acquisition or temporary occupation. The need for the land and the extent of the private loss of the affected individuals is set out for each individual plot in Appendix CA.5. In addition, as part of the assessment of the need for the land, reasonable alternatives were considered. The process by which the Applicant considered reasonable alternatives is described at section 5.5 of the Statement of Reasons [APP-018]. Meanwhile, an assessment of reasonable alternatives for each individual plot is set out in Appendix CA.5.</li> <li>7. The private loss of individuals impacted by compulsory acquisition or temporary possession must then be assessed against the public benefits of the Scheme. As confirmed in Section 6 of the Statement of Reasons [APP-018], the Scheme will have an impact on individuals but the public benefits that will arise from the Scheme will outweigh the harm to those individuals. A plot-by-plot assessment of the private loss of individuals impacted by compulsory acquisition or temporary possession for the Scheme against the public benefits of the Scheme is set out in Appendix CA.5.</li> <li>8. As a result of the above assessment, balancing the requirement for each individual plot against its anticipated impacts on the existing landowners and occupiers, the Applicant is satisfied that the powers of compulsory acquisition and temporary possession sought in the DCO, and the resulting interference with human rights, is necessary, proportionate and justified.</li> <li>9. The approach taken to the proportionality test is set out on a Scheme-wide basis in Appendix CA.5. The application of the test to individual plots is relevant in respect of the need for the land, the extent of private loss, the assessment of private loss against public benefit and the assessment of reasonable alternatives. The remaining aspect of the proportionality test (the need for and public benefits of the Scheme) is described on a Scheme-wide basis in the Appendix CA.5.</li> </ol>
CA.1.14	Applicant	What assurance and evidence can the Applicant provide of the accuracy of the land interests identified as submitted and indicate whether there are likely to be any changes to the land interests, including the identification of further owners/interests or monitoring and update of changes in interests?	<ol style="list-style-type: none"> <li>1. In preparing the DCO application the Applicant has carried out diligent enquiry to identify all persons in one or more of the categories set out in section 44 of the 2008 Act.</li> <li>2. Section 4 of the Statement of Reasons [APP-018] sets out the Applicant's approach to the identification of land interests. The methods used to identify these interests included; HM Land Registry records, land interest questionnaires, site visits where applicable, and publicly available sources of information e.g. Companies House records, highway authority boundaries, statutory undertaker records etc.</li> <li>3. Land interests who were identified by the Applicant as being in one or more of the categories set out in section 44 of the 2008 Act are listed in the Book of Reference [APP-020] and have been consulted about the</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>Application in accordance with section 42 of the 2008 Act as described in the Consultation Report [APP-021].</p> <ol style="list-style-type: none"> <li>4. The Applicant appreciates that land interest information is constantly evolving and will undertake further periodic searches of HM Land Registry records over the course of the examination to identify any new land interests which may arise from the sale of a property.</li> <li>5. The first refresh of HM Land Registry records was undertaken prior to the issue of section 56 notices to all land interests listed in the Book of Reference [APP-020]. The updates which were identified from this refresh were included in the updated Book of Reference (Tracked Changes) Rev 1 [AS-009]], and updated Book of Reference (Clean) Rev 1 [AS-010] and accompanying Schedule of Changes submitted during pre-examination. In addition, the Applicant will monitor the return of any undelivered correspondence to determine whether this has resulted from a change in land interest information.</li> <li>6. The Applicant will undertake further refreshes of HM Land Registry records over the course of the examination and each time will provide an updated Book of Reference and Schedule of Changes to capture any changes in land interest information.</li> </ol>
CA.1.15	Applicant	<p>Section 5.5 of the SoR [APP-018] states that none of the alternatives or modifications considered would obviate the need for the compulsory acquisition and temporary possession of the Land. The Applicant is asked to provide further detail to substantiate this position.</p>	<ol style="list-style-type: none"> <li>1. In designing the Scheme and determining the land to be subject to compulsory acquisition and temporary possession powers, the Applicant has considered alternatives and modifications to the Scheme to minimise the potential land take. Details can be found within the ES at Chapter 3: Assessment of Alternatives (APP-038).</li> <li>2. For Part A, As set out at paragraph 3.3.4 of Chapter 3 of the ES [APP-038] five route options were considered for the dualling of the A1 between Morpeth and Felton. Of these, the Brown Route Option comprised a predominantly online dualling of the existing A1 that would require the least amount of compulsory acquisition of land.</li> <li>3. Paragraph 3.3.7 of the ES [APP-038] confirms that the Brown route was not taken forward for consideration as it would result in: <ul style="list-style-type: none"> <li>• Substantial disruption to traffic during construction.</li> <li>• Poor economic benefits, mainly due to disruption to traffic during construction.</li> <li>• Difficulty in achieving minimum standards for road alignment.</li> <li>• Requirement for demolition of properties.</li> </ul> </li> <li>4. For these reasons the predominantly online dualling of the A1 was discounted.</li> <li>5. It should be noted that even the online dualling of Part A would only minimise - and not totally obviate - the need for compulsory purchase of land.</li> <li>6. While three options for Part B were identified in 2015 only one of these was progressed to the option selection stage in September 2016, as the two other options (which both incorporated an element of offline widening) were materially more expensive and offered much lower value for money. In addition, the option progressed to the option selection stage would have the least adverse impact on landscape and visual amenity, cultural heritage, ecology, the water environment as well as geology and soils.</li> </ol>
CA.1.16	Applicant	<p>Paragraph 6.1.3 of the SoR [APP-018] indicates that land at East Cottage Charlton Mires and Charlton Mires Farmhouse is required in Part B for the construction of the grade separated junction at Charlton Mires. It states that the Applicant has been in regular discussions with the landowner and a blight application has been received but as at application, compensation discussions remain</p>	<ol style="list-style-type: none"> <li>1. The owners of East Cottage in plot 15-16a are Alison Drummon-Reddish, Felicity Mary Alison Hester and James Philip Murray Hester.</li> <li>2. The proposed route of the upgrade to the in A1 Northumberland results in the demolition of East Cottage and also acquires around 6 acres of land. Discussions have been ongoing with the Mr &amp; Mrs Hester since 2016 through the Highways England project team and the District Valuer. Value and blight negotiations are ongoing between both parties. The main heads of claim have been agreed with just some final discussions around disturbance items to be finalised.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		ongoing. The Applicant is asked to confirm the Plot references and ownerships for these properties and to provide an update on discussions.	<ol style="list-style-type: none"> <li>3. The owners of Charlton Mires Farmhouse in plot 15-6a are George Gordon Beal and Martin Beal.</li> <li>4. The proposed route of the upgrade to the in A1 Northumberland results in the demolition of the Charlton Mires farmhouse and farm buildings and also acquires around 40 acres of farmland. Discussions have been ongoing with the Mr and Mrs Beal since 2016 through the Highways England project team and the District Valuer. In 2019 Mr &amp; Mrs Beal served a blight notice on the whole of their farm, Highways England served a counter notice to only purchase the part required for the scheme (Farmhouse, buildings and around 40 acres). Highways England are now legally required to purchase the property, value negotiations are ongoing between both parties.</li> </ol>
CA.1.17	Applicant	Annex A of the SoR [APP-018] provides details of the purpose for which CA and temporary possession (TP) powers are sought. It includes, under the heading of permanent acquisition of land a number of plots required for de-trunking works to the existing A1 Trunk Road. Why are permanent acquisition rights required for de-trunking works?	<ol style="list-style-type: none"> <li>1. The dDCO [APP-014] Schedule 3 Part 2 includes de-trunking of the old section of the A1 between 'Priest's Bridge' and Burgham Park. The following two Works Numbers have been split into two; those being permanently acquired and requiring works, and those the Applicant is permanently acquiring without proposed works.</li> <li>2. Work No 10a - from River Lyne to Fenrother Lane East (1166m in length) including works on permanent acquisition of land plots 3/5f, 3-121a. 3/3b, 3/5a, 3/5j, 3/6b, 3/6a, 3/3d, 3/9a, 3/5k, 3/8a, 3/12b, 3/5h, 3/5i, 4/11a, 4/13a, 4/14a, 4/10f, 4/6a, 4/8b, 4/14b and 4/12a</li> <li>3. Work No 10a (no construction works) - 4/18a and 4/19a</li> <li>4. Work No 10b - from Portland House to Brockenfield Bridge (4948m in length) including works on permanent acquisition of land plots 4/14b, 6/5a, 6/1a, 7/5a, 8/10a, and 8/5a</li> <li>5. Work No 10b (no construction works) - 4/12c, 5/10a, 5/8a, 5/11a, 6/10a, 6/13a, 6/2t, 6/9a, 7/12a, 7/11a and 8/12a.</li> <li>6. The permanent acquisition of land from its present ownership for these areas is to facilitate the works identified. Works on the de-trunked length of Scheme will include, but not be limited to surveys and localised repairs to pavement and drainage network where required, stopping up, creation of turning heads, local tie-ins, creation of a free-flow junction, strategic signing and utility diversions.</li> <li>7. Powers of permanent acquisition for plots where no works are proposed are being sought so that the estate in the de-trunked A1 is perfected and to ensure that the corpus of the highway can properly be transferred to the local highway authority, which in this case is Northumberland County Council.</li> </ol>
CA.1.18	Applicant	Paragraph 4.1.2 of the Funding Statement [APP-019] states that to date two valid blight notices have been served. The Applicant is asked to provide details and to update the ExA if any further notices are served.	<ol style="list-style-type: none"> <li>1. The Applicant confirms at Deadline 1 that there have been three valid blight notices served. Details are as follows:           <ul style="list-style-type: none"> <li>• Messrs. Wenbsy-Scott, received in 2017 and accepted by the Applicant</li> <li>• Messrs. Hesters, received in 2017 and accepted by the Applicant</li> <li>• Messrs. Beal, received 2017, counter notice served by the Applicant in 2019</li> </ul> </li> <li>2. The Applicant will update the ExA should any further blight notices be served.</li> </ol>

**Table 1-6 – Draft Development Consent Order**

Ref. No.	Question to:	Question	Applicant's Response
DCO 1.2	Applicant	The Applicant is asked to supply subsequent versions of the dDCO in both pdf and Word formats and in two versions, the first forming the latest consolidated draft and the second showing changes from the previous version in tracked changes, with comments outlining the reason for the change. The consolidated draft version in Word is to be supported by a report validating that version of the dDCO as being in the SI template and with updated revision numbers.	1. The Applicant will supply updated versions of the draft DCO [APP-014] as requested. However, it will not be practical to supply a validation report with each consolidated draft. The validation report relates to the formatting of the draft DCO [APP-014] and has no impact on the substantive content. Preparing each draft is an iterative process which responds to the other documents being prepared for each deadline and OPSI formatting requirements are not always straight-forward. A validation report was prepared with the application draft DCO [APP-014] and a further validation and a further validation report will be obtained for the proposed final version of the draft DCO.
DCO 1.3	Applicant	The Applicant is asked to confirm that Schedule 12 (Documents to be Certified) will be updated in each subsequent version of the dDCO provided during the Examination. This should accompany an update to the Applicant's Document Tracker [AS-002] recording the latest version of each plan and documents.	1. The Applicant confirms that Schedule 12 will be updated as required.
DCO 1.4	Applicant	Section 3 of the EM describes the Applicant's approach to drafting in respect of associated development. Paragraphs 3.4 and 3.5 indicate that the Applicant has chosen not to distinguish between the principal development of the NSIP and associated development within the meaning of s115 of PA2008. This is justified by the Applicant on the basis that "there is no requirement for a development consent order to distinguish between these two categories". The EM also makes reference to the DCLG Guidance on associated development. Schedule 1 of the dDCO describes the authorised development set out in Works Nos. 1-37 with the description of 'further development' following.  If no distinction is made between the principal and associated development how can it be demonstrated that the DCLG Guidance has been adhered to? Furthermore, what is the rationale for the identification of further development?	1. There is no requirement under the 2008 Act for associated development to be identified and neither is this required in the Department for Communities and Local Government (DCLG) Guidance. The point of associated development is to allow for development which has a direct relationship with the principal development to be authorised by means of development consent order. The difficulty with a linear highways scheme is that there is no clear distinction between these principal works and other works which are necessary in order for the scheme to be built. For example, the diversion of undertaker infrastructure may require to take place within the route of the highway and some may be off the highway route. The full diversion is, however, required in order for the development to take place.  2. The draft DCO [APP-014] identifies the principal activities which require to be undertaken in order to construct the authorised development as works. The "further development" listed at the end of Schedule 1 authorise the carrying out of the various sorts of operations which are required to construct the Scheme. This is the consistent approach which has been approved by the Secretary of State on highway DCOs, most recently on the A303 (Amesbury to Berwick Down) Development Consent Order 2020.
DCO 1.5	Applicant	<i>Contents Page.</i>  The Applicant is asked to check the format of the headings used, particularly "Development Consent Order	1. These points have been addressed in the revised draft DCO submitted at Deadline 1.



Ref. No.	Question to:	Question	Applicant's Response
		20[**]” and “Laid before Parliament [***]” which do not appear to be a standard approach.	
DCO 1.6	Applicant	<p><i>Preamble. “An application has been made...”</i></p> <p>The Applicant is asked to review this sentence. The application was made under section 37 of PA2008; the Order would not be made under section 37. In addition, “sections” should be singular</p>	1. This wording has been revised so that it is consistent with the A19/A184 Testo’s Junction Alteration Development Consent Order 2018.
DCO 1.7	Applicant	<p><i>“The application was examined by a single appointed person...”</i></p> <p>The Applicant is asked to draft the Preamble to the next version of the dDCO to confirm that the application has been examined by a panel of two members (“the Panel”) appointed by the Secretary of State. The references to the single appointed person in the following two paragraphs should also be removed.</p>	1. The requested changes have been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.8	Applicant	<p><i>Footnotes.</i></p> <p>A number of early footnotes are very extensive. The Applicant is asked to review the use of footnotes with reference to paragraph 7 of PINS Advice Note 15 and to confirm that the use of footnotes is appropriate.</p>	1. The earlier footnotes have been revised so that they are consistent with the approach in the A63 (Castle Street Improvement, Hull) Development Consent Order 2020.
DCO 1.9	Applicant	<p><i>Art 2 – “the book of reference” means the book of reference.... (Our emphasis.)</i></p> <p>Consider changing the underlined phase with “the document of that description”. This approach has been used with reference to the interpretation of “environmental statement”</p>	1. The requested change has been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.10	Applicant	<p><i>Art 2 – “commence”.</i></p> <p>The definition of “commence” only relates to “the carrying out of any material operation” (as defined in s.56(4) PA 2008). The other works listed in the definition, which are described in the EM as “low impact preparatory works” are excluded from the definition.</p>	1. The definition is designed to clarify that the carrying out of certain works that would constitute a ‘material operation’ under the Town and Country Planning Act 1990 do not mean that the authorised development has been ‘commenced’ for the purposes of interpreting the draft DCO [APP-014]. This enables the Applicant to undertake preparatory works prior to the submission of relevant details for approval under the requirements. The items that are excluded are either de minimis or have minimal potential for adverse effects. That is why they are described as “low impact preparatory works” In the Explanatory Memorandum [APP-015]. In some cases, they may need to be carried out in order to comply with pre-commencement requirements which require approval from the Secretary of State. It will also ensure that the construction timetable is minimised, and the benefits of the Scheme delivered sooner. The definition of

Ref. No.	Question to:	Question	Applicant's Response
		<p>However, these other works are not described as "preparatory works" (for which there is no definition, nor are they all listed in Sch. 1.) It is therefore unclear what authority the Applicant will have to carry out these "preparatory works" as they appear to be excluded from the scope of the DCO (but see comments below on Article 25). Equally, whilst noting that there has been precedent in other DCOs for the SoS to remove definitions of "preliminary works" on the grounds that these were unnecessary / had minimal potential for adverse impacts (see Guidance Note 15 at para 21), the Applicant has not explained why it considers this approach is appropriate in the circumstances of this proposed NSIP.</p> <p>Please clarify.</p>	<p>commence used is appropriate for the requirements of this authorised development and also has precedent in recent schemes such as the M20 Junction 10a Development Consent Order 2017 and the Silvertown Tunnel Order 2018.</p> <p>2. The draft DCO [APP-014] provides authority for all of the preparatory works. For example, archaeological and ecological works are mitigation measures set out in the REAC which must be reflected in the CEMP. Requirement 4(6) draft DCO [APP-014] will require that these mitigation measures are implemented in terms of the CEMP and provides authority for them.</p> <p>3. The remaining works which are excluded from of the definition of "commence" are authorised by the list of additional works which are included at the end of Schedule 1. For example, paragraph (j) authorises the diversion of utility apparatus; paragraph (s) authorises site preparation works (which will cover ground investigation and remedial works) and site clearance; paragraph (u) authorises construction fencing and machinery apparatus and paragraph (v) authorises signage.</p>
DCO 1.11	Applicant	<p><i>Art 2 – "engineering drawings and sections" means the drawings and sections listed...</i></p> <p>(Our emphasis.)</p> <p>Consider changing the underlined phrase with "the document of that description".</p>	<p>1. The requested change has been made and reflected in the revised draft DCO submitted at Deadline 1.</p>
DCO 1.12	Applicant	<p><i>Art 2 – "general arrangement plans" means the drawings listed...</i></p> <p>Consider changing to "means the document of that description listed in Schedule 12 (documents to be certified) and certified as the general arrangement plans by the Secretary of State for the purposes of the Order". (Our emphasis.) This would provide consistency with the interpretation of "engineering drawings and sections".</p>	<p>1. The requested changes have been made and reflected in the revised draft DCO submitted at Deadline 1.</p>
DCO 1.13	Applicant	<p><i>Art 2 – "maintain"</i></p> <p>The definition of "maintain" is not as clear as it could be particularly in relation to the interface with the ES and as drafted does not clearly meet the intent identified in Section 6.4b of the EM.</p> <p>The definition should make it clear that any of the activities classed as maintenance can only be carried out</p>	<p>1. The definition has been revised so that the maintenance activities do not give rise to any materially new or materially different environmental effects in comparison with those reported in the environmental statement. This is in line with the equivalent definition in the A303 (Amesbury to Berwick Down) Development Consent Order 2020.</p>

Ref. No.	Question to:	Question	Applicant's Response
		if they do not give rise to any materially new or different environmental effects to those identified in the ES.	
DCO 1.14	Applicant	<i>Art 2 – “order land”.</i>  Change to “Order land” as this is how the term is presented in the Articles.	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.15	Applicant	<i>Art 2 – “order limits”.</i>  Change to “Order limits” as this is how the term is presented in the Articles.	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.16	Applicant	<i>Art 2 – “owner”.</i>  Insert “(interpretation)” after “section 7”.	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.17	Applicant	<i>Art 2 – “Part B offline works”.</i>  The Part B offline works comprise Work Nos. 22a and 22b. The EM describes the Part B offline works as centred on the realignment of the A1 at the new Charlton Mires junction.  The Applicant is asked to clarify why these works are described as offline when they appear to be on the same alignment as the existing A1 carriageway. The situation is quite different from the offline works for Part A.	1. The definition is used to differentiate these works from the Part B online works. Work Nos. 22a and 22b of the draft DCO [APP-014] involve a realignment of the carriageway east of its current location and therefore require slightly greater limits of deviation (0.5 m) than the Part B online works (0.25 m). However, as Works Nos 22a and 22b tie into the Part B online works, these limits do not require to be as extensive as for the Part A offline works (1 m). The proposed limits have therefore been tailored throughout to reflect the specific circumstances of the proposed works.
DCO 1.18	Applicant	<i>Art 2 – “rights of way and access plans”.</i>  Consider changing to “means the document of that description” for consistency with other terms. The term “Secretary of State” should begin on a new line.	1. These changes have been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.19	Applicant	<i>Art 2 – “statutory undertaker”</i>  Insert “(statutory undertakers’ land)” after “section 127(8)” for consistency with other terms.	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.

Ref. No.	Question to:	Question	Applicant's Response
DCO 1.20	Applicant	<p><i>Art 2 – “street”.</i></p> <p>Insert “(streets street works and undertakers)” after “section 48” for consistency with other terms.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.21	Applicant	<p><i>Art 2 – “structures engineering drawings and sections” means the drawings and sections listed... (Our emphasis.)</i></p> <p>Consider changing the underlined phase with “the document of that description”.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.22	Applicant	<p><i>Art 2 – “traffic authority”.</i></p> <p>Insert “section 121A (traffic authorities) of” after “as in” for consistency with other terms.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.23	Applicant	<p><i>Art 2 – “traffic regulation plans”.</i></p> <p>Consider changing to “means the document of that description” for consistency with other terms.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.24	Applicant	<p><i>Art 2 – “trunk road”.</i></p> <p>Insert “(general provision as to trunk roads)” after “section 10” and “(certain special roads and other highways to become trunk roads)” after “19(1)” for consistency with other terms.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.25	Applicant	<p><i>Art 2 – “vegetation clearance plans” means the plans listed... (Our emphasis.)</i></p> <p>Consider changing the underlined phase with “the document of that description”.</p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.26	Applicant	<p><i>Art 2 – “the works plans” means the plans listed... Our emphasis.</i></p>	1. This has been changed and reflected in the revised draft DCO submitted at Deadline 1.

Ref. No.	Question to:	Question	Applicant's Response
		Consider changing the underlined phase with "the document of that description".	
DCO 1.27	Applicant	<i>Art 2(7)</i>  No justification for this provision is provided in the EM. The Applicant is asked to justify its inclusion.	1. Additional justification has been included in the revised Explanatory Memorandum [APP-015] submitted at Deadline 1.
DCO 1.28	Applicant	<i>Art 6 – Planning Permission</i>  Should the penultimate line specify "the carrying out, use or operation of such development"?	1. It is not considered necessary to make this change. The definition of development in the 1990 Act will cover all forms of development whether by material change of use or operation.
DCO 1.29	Applicant	<i>Art 7 – Limits of deviation</i>  (b)(iii) The Applicant is asked to provide justification for the proposed Limits of Deviation in respect of the comment above relating to the definition of Part B offline works.	1. Please see response to DCO 1.17
DCO 1.30	Applicant	<i>Art 7 – Limits of deviation</i>  (b)(v) The Limit of Deviation is described as 0.5metres upwards or 0.5metres downwards.  This appears to be in conflict with the EM which describes the vertical Limits of Deviation for Highlaws and West Moor as being fixed at 0.6metres.  The Applicant is asked to clarify and justify this provision.	1. The 0.6 metres reference in the Explanatory Memorandum [APP-015] is a typographical error and has been corrected in the revised draft submitted at Deadline 1. 250 mm is to accommodate an increase in the depth of the structural beam spanning the mainline and a further 250 mm to increase or decrease the finished pavement levels on the mainline.
DCO 1.31	Applicant	<i>Art 7 – Limits of deviation</i>  (b)(vii) The vertical Limits of Deviation for the Heckley Fence overbridge works are proposed to be 0.65metres.	1. Up to a 650 mm increase or 250 mm decrease in height for Heckley Fence Accommodation Overbridge has been considered by the Applicant in order to accommodate a 400 mm increase in the depth of the structural beam as a consequence of an increase in the bridge span and a 250 mm increase or decrease in the finished road levels on the A1.

Ref. No.	Question to:	Question	Applicant's Response
		<p>The EM describes this as being due to site circumstances.</p> <p>The Applicant is asked to provide further clarification about site circumstances.</p>	
DCO 1.32	Applicant	<p><i>Art 7 – Limits of deviation</i></p> <p>Paragraph 7.12 of the EM indicates that the Limits of Deviation referred to in this article and shown on the application plans have been taken into account in preparation of the ES and the potential impacts of a deviation within the permitted limits have been assessed. Demonstrate how this has been done.</p>	<p>1. Each of the ES chapters includes a section on assessment parameters where the potential implications of the limits of deviation are considered for relevant parts of the Scheme and a conclusion reached on the implications for the assessment. This includes assessment of the limits in Article 7. Appendix DCO.1 provides a description of how the limits of deviation were taken into account in preparation of the ES and how the potential impacts of a deviation within the permitted limits were assessed.</p>
DCO 1.33	Applicant	<p><i>Art 7 – Limits of deviation</i></p> <p>Paragraph 7.12 of the EM indicates that Highways England is only permitted to exceed the limits specified in Art 7 if it can demonstrate to the SoS's satisfaction that no materially different environmental effects would arise.</p> <p>Should it refer to "materially new or materially different"?</p>	<p>1. This has been changed in the revised draft DCO submitted at Deadline 1. The draft DCO has been revised throughout to ensure that the "materially new or materially different wording" is used consistently.</p>
DCO 1.34	Applicant	<p><i>Art 7 – Limits of deviation</i></p> <p>This article does not make provision for the procedure to enable an application to be made to the SoS. The Applicant may wish to consider the provisions within the A19 Downhill Lane Junction Order 2020 in this respect.</p>	<p>1. A new Article 7(2) has been included in the revised draft DCO submitted at Deadline 1 to provide this procedure based on the approved wording in the A19 Downhill Lane Junction Order 2020.</p>
DCO 1.35	Applicant	<p><i>Art 7 – Limits of deviation</i></p> <p>The ExA is concerned by the tailpiece after Art 7(b)(ix)</p> <p>(i) Justify the level of flexibility sought, in particular why and in what circumstances it will be necessary to permit</p>	<p>1. This is a fairly standard provision in highways DCOs. It may not be necessary to seek any amendment to the limits of deviation. However, highways are, by nature, long linear structures and a balance has to be struck between giving flexibility to deal with issues along that route and limiting the potential impact of the Scheme. The Applicant has sought to tailor the limits of deviation of this scheme to the reflect the characteristics of the Scheme throughout the route. Although it is considered that these limits should be adequate to enable the Scheme to be constructed, it is possible that unexpected site conditions could be encountered along the route that could make it challenging to construct the Scheme fully within the limits. The tailpiece provides a mechanism to authorise the Secretary of State to authorise construction beyond the limits of deviation but only where there would be no materially new or materially different impacts compared to the ES. This means that the impacts will be limited to those which have been assessed</p>

Ref. No.	Question to:	Question	Applicant's Response
		amendment to the maximum limits of lateral and vertical deviation by the SoS at a later date.	in the ES. This provision has broad precedent, including the A19 Downhill Lane Junction Order 2020 already referred to by the ExA.
		ii) Explain why it is appropriate to permit amendments to the Limits of Deviation other than by applying to amend the Order in accordance with the provisions of PA2008.	1. The amendments will only be permissible where they do not lead to materially new or different environmental impacts and will therefore only be used for non-material changes. A requirement to promote an alteration to the DCO with the complex procedures that would be disproportionate compared to the relatively small scale change which would be involved.
		iii) Explain what process is in place for the SoS to determine whether exceeding the vertical limits would not give rise to any materially new or materially worse adverse environmental effects.	1. This is a test and process which is well established in highway DCOs. There is a requirement for consultation with the planning authority on any proposed exceedance of the prescribed limits. Planning authorities are familiar with applying these sort of considerations to planning applications and the planning authority will therefore be well-placed to provide consultation advice to the Secretary of State.
DCO 1.36	Applicant	<p><i>Art 9 – Consent to transfer benefit of the Order</i></p> <p>This Article is drafted in such a way that it gives the Applicant the power to transfer or grant to these entities for the purposes of carrying out the Works listed in sub-section 4.</p> <p>The EM suggests that the intention is to allow these entities to move their own apparatus where this needs to be diverted for the NSIP. However, the relevant Works (as set out in Sch. 1) are far wider than this.</p> <p>This Article should be modified to limit the transfer/grant for the (limited) purposes set out in the EM and not for the entirety of the relevant Works.</p>	1. Article 9(4) has been revised in the draft DCO submitted at Deadline 1 so that the power for the identified undertaker to carry out the specified works is limited to the movement, replacement or diversion of apparatus.
DCO 1.37	Applicant	<p><i>Art 10 -Application of the 1991 Act</i></p> <p>Art 10(4) refers to “article 15 (temporary stopping up and restriction of use of streets)”.</p> <p>The title of Art 15 is “Temporary prohibition, restriction and regulation of the use of streets.</p> <p>Please amend.</p>	1. Article 10(4) has been revised in the draft DCO submitted at Deadline 1 as requested and a further consequential change made within the article.
DCO 1.38	Applicant	<i>Art 11 -Power to alter layout etc. of streets</i>	1. Article 11 gives power to alter the layout of streets within the Order limits. If there is a junction with such a street then the alteration to the layout of the street within the Order limits could have a consequential impact on the junction. Hence, power has been included to undertake works to ensure that any such required work can be carried out to the

Ref. No.	Question to:	Question	Applicant's Response
		The EM states that it is unnecessary to list the affected roads as their "location and extent is self-evident from the Works etc. Plans". The affected roads should either be marked clearly as such on the Plans or listed in a Schedule to the DCO (preferably the latter). This Article also covers "any street having a junction with such a street" but the rationale for this drafting is not explained in the EM. Explain the rationale for this drafting.	junction. The plans in Appendix GEN.2 show the existing and proposed carriageways and the associated existing streets.
DCO 1.39	Applicant	<p><i>Art 11 -Power to alter layout etc. of streets</i></p> <p>Art 11(3) refers to 42 days while Art 11(4) refers to 6 weeks.</p> <p>Is there any reason for switching between days and weeks? Please address in terms of other Articles / Requirements to ensure consistency.</p>	1. The drafting was drawn from previous precedent but the reference in Article 11(3) to 42 days has been changed to 6 weeks, in the revised draft DCO submitted at Deadline 1 so that it is consistent with Article 11(4).
DCO 1.40	Applicant NCC	<p><i>Art 12 -Street works</i></p> <p>Art 12(1) states "The undertaker may, for the purposes of the authorised development, enter upon so much of any of the streets as are within the order limits and may...".</p> <p>Art 12(1)(b) states "tunnel up or bore" Is "up" necessary?</p> <p>Should this article be restricted to specific streets set out in a Schedule? Should it confirm that the power is "without the consent of the street authority"? Should the powers be exercised with the consent of the street authority subject to consultation?</p> <p>What is the view of NCC in respect of this Article?</p>	1. The word "up" has been removed from Article 12 of the draft DCO [APP-014] and reflected in the revised draft DCO submitted at Deadline 1. It is not considered necessary to specify the streets which are subject to this power because the affected streets can be clearly seen on the application plans. The power granted by Article 12 is akin to the power of a statutory undertaker to install apparatus. Such statutory powers are not subject to requiring the consent of the street authority and it is not appropriate to require such consent here.
DCO 1.41	Applicant	<i>Art 14 -Classification of roads etc</i>	1. Additional explanatory wording has been included in the revised Explanatory Memorandum submitted at Deadline 1.



Ref. No.	Question to:	Question	Applicant's Response
		The Applicant should explain the rationale for the power in this Article in the EM.	
DCO 1.42	Applicant	<p><i>Art 14 -Classification of roads etc / Art 18 Clearways</i></p> <p>Variation of the provisions in these articles is possible under any enactment and arguably this has the effect of disapplying section 153 of PA2008 which provides a procedure for changing a DCO. Justification should be provided in the relevant sections of the EM as to why the provisions are necessary or expedient to give full effect to any other provision of the DCO.</p>	<p>1. These provisions designate the classifications of the various roads and public rights of way to be constructed under the Scheme. There are established procedures for designating roads as trunk roads, classified roads or unclassified roads. There are also established procedures for redetermining the type of passage which may be exercised along highways.</p> <p>2. Previous highways DCOs have recognised that it is appropriate for these existing procedures to be used if there is to be a change to the classification of a road constructed under a highways DCO. They are far better suited to dealing with the issues concerned rather than the procedure under section 153 of the 2008 Act. To require use of section 153 in relation to this Scheme would be inconsistent with the approach taken on other highway DCOs and could cause confusion.</p>
DCO 1.43	Applicant	<p><i>Art 15 – Temporary prohibition, restriction and regulation of the use of streets</i></p> <p>Should this article also apply to public rights of way?</p> <p>The EM indicates that Art 15 confers a power on Highways England where the use of a street has been temporarily stopped up under this article to use it as a temporary working site.</p> <p>EM paragraph 8.23 should mirror the wording of Article 15 i.e. refer to prohibition, regulation and restriction of streets rather than “temporary stopping up”.</p>	<p>1.The article reflects the approach to temporary traffic regulation in the Road Traffic Regulation Act 1984. The powers under the 1984 Act apply to streets and it is appropriate that the power provided under Article 15 of the draft DCO [APP-014] follows the same approach. It is therefore not considered necessary to extend the power to public rights of way, which are included in the definition of “street”.</p> <p>2. The requested changes have been made and reflected in the revised Explanatory Memorandum submitted at Deadline 1.</p>
DCO 1.44	Applicant NCC	<p><i>Art 16 – Permanent stopping up and restriction of use of streets, public rights of way and private means of access</i></p> <p>In Art 16(2)(b) should there be a reference to “public right of way” after “street” in line 5?</p> <p>In Art 16(3) reference is made to the right of way to be extinguished. Does the term “extinguish” need to be defined, or alternatively should another term be used as extinguish is not otherwise used?</p>	<p>1. The additional suggested wording has been included in Article 16(3) and is reflected in the revised draft DCO submitted at Deadline 1.</p> <p>2. The term “extinguish” is the same terminology used in the Highways Act 1980 and other legislation for termination of a public right of way. There is therefore no need for the term to be defined.</p>

Ref. No.	Question to:	Question	Applicant's Response
		NCC - Comment on the provision contained within Art 16 of the draft DCO.	
DCO 1.45	NCC	<i>Art 17 – Access to works</i>  Comment on the provision contained within Art 17 of the draft DCO.	N/A
DCO 1.46	Applicant	<i>Art 18 – Clearways</i>  Art 18(2)(a)(iii) Should the reference to Schedule 3A (the Electronic Communications Act 2003) be “Schedule 3A (the electronic communications code) to the Communications Act 2003”?  Art 18 (2)(c)(iii) Change “persons” to “person’s”	1. These changes have been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.47	Applicant IPs	<i>Art 22 – Powers in relation to relevant watercourses</i>  Art 22(4) defines “relevant watercourse” as so much of the River Coquet as the context requires.  Is this sufficiently precise? Are IPs content with the powers which are being sought?	1. The powers which are granted by Article 22 of the draft DCO [APP-014] are parasitic on the other powers provided in the Order to carry out and maintain the authorised development. They grant specific powers to carry out works in the River Coquet but these need to be exercised within the land for which rights of entry are provided elsewhere in the Order. There is therefore no need for Article 22 to be further restricted in its scope.
DCO 1.48	IPs	<i>Art 23 – Discharge of water</i>  Comment on the provision contained within Art 23 of the draft DCO.	N/A
DCO 1.49	Applicant	<i>Art 25 – Authority to survey and investigate the land</i>  The EM describes this article as the means by which, prior to the construction of the scheme, ground investigations and surveying can be undertaken.	1. The exercise of powers under Article 25 of the draft DCO [APP-014] would not trigger commencement of development as the definition of “commence” in Article 2 of the draft DCO [APP-014] excludes various operations such as archaeological investigations, ecological surveys and the assessment of ground conditions from the definition of material operations in section 56(4) of the PA 1990.

Ref. No.	Question to:	Question	Applicant's Response
		The Applicant is asked to demonstrate how this provision relates to the scope of commencement defined in Art 2.	
DCO 1.50	Applicant	<p><i>Art 27 – Compulsory acquisition of land – incorporation of the mineral code.</i></p> <p>For consistency and precision, it is suggested that “acquiring authority” and “undertaker” are emphasised.</p>	1. This change has been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.51	Applicant	<p><i>Art 28 – Time limit for exercise of authority to acquire land compulsorily</i></p> <p>The EM states that this article sets a 5 year time limit on the power of Highways England to take temporary possession of land, although it does not prevent Highways England from remaining in possession of land after that time if it took possession within the 5 year limit.</p> <p>What is the rationale for the power to remain in temporary possession of land after the initial 5-year period has expired?</p>	<ol style="list-style-type: none"> <li>1. Article 28 of the draft DCO [APP-014] sets the last date for when compulsory powers can be exercised under the Order. It limits the period during which powers can be commenced to give certainty as to the likelihood of exercise.</li> <li>2. Powers of temporary possession can be exercised under Article 35 of the draft DCO [APP-014] up until that power prescribes under Article 28. When a power of temporary possession is exercised, Article 35(3) sets a time limit of a year from completion of the relevant work to which the powers relates. The Explanatory Memorandum [APP-015] is simply making it clear that, if the temporary power is exercised prior to the power exercising in Article 28, the undertaker can remain in possession until the end of the period set out in Article 35(3). The land owner is protected in this regard by the liability upon the undertaker to pay compensation.</li> </ol>
DCO 1.52	Applicant	<p><i>Art 29 – Compulsory acquisition of rights and restrictive covenants</i></p> <p>Art 29(2) needs to specify that the right should be solely related to the Work No. specified in column 2 of Sch. 6.</p> <p>Art 29(4) references the divided land provision of the 1965 Act. An explanation for such provision is not provided in the EM. The Applicant is requested to do so.</p>	1. Article 29(2) of the draft DCO [APP-014] has been amended to include reference to column (3) which specifies the Work no. for which temporary rights are authorised and is reflected in the revised draft DCO submitted at Deadline 1. Additional text has been added to the revised Explanatory Memorandum submitted at Deadline 1 in relation to Article 29(4).
DCO 1.53	Applicant	<p><i>Art 31 – Modification of Part 1 of the 1965 Act</i></p> <p>The EM does not currently provide the rationale for the inclusion of this provision in this DCO. The Applicant should address this further.</p>	1. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.

Ref. No.	Question to:	Question	Applicant's Response
DCO 1.54	Applicant	<p><i>Art 32 Application of the 1981 Act</i></p> <p>The EM does not currently provide the rationale for the inclusion of this provision in this DCO. The Applicant should address this further.</p>	<p>1. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.</p>
DCO 1.55	Applicant	<p><i>Art 33 – Acquisition of subsoil or airspace only</i></p> <p>It would be helpful if the EM could explain the rationale for the CA of airspace particularly with reference to the River Coquet bridges.</p>	<p>1. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.</p>
DCO 1.56	Applicant	<p><i>Art 35 – Temporary use of land for carrying out the authorised development</i></p> <p>Art 35(1) References to “that land” in (b) and (c) should specify that this is as referred to in sub-paragraph (a).</p> <p>Art 35(1)(d) refers to “mitigation works”. This phrase does not appear in the definitions, nor is any further explanation given in the EM. The phrase should either be defined or an explanation of the need for these works/this power should be given in the EM.</p> <p>Art 35(4): the EM should explain the rationale for these powers.</p>	<p>1. The Applicant does not consider it necessary to include additional cross-referencing between the description of land in sub-paragraph (a) and the subsequent sub-paragraphs. It is clear from the phrase “that land” that reference is being made to what is described in sub-paragraph (a). This form of wording has been used in numerous DCOs.</p> <p>2. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1 in relation to what is meant by mitigation works and also to provide additional rationale.</p>
DCO 1.57	Applicant	<p><i>Art 38 – Apparatus and rights of statutory undertakers in stopped up streets</i></p> <p>The SoS will be unable to authorise removal or repositioning of apparatus unless satisfied that the extinguishment or removal is necessary for the purpose of carrying out the development to which the</p>	<p>1. The Scheme authorises the construction of a major highways infrastructure project. The streets which are to be stopped up in terms of article 16 of the draft DCO [APP-014] cross the path of the new highway to be constructed or the related side roads. In order to construct the new road network, it will be necessary to remove the existing road structure and construct new foundations and courses suitable to support the new roads. This will inevitably require a degree of excavation below the current road level and will potentially require the removal or repositioning of apparatus which is present in the layers which require to be reconstructed. The powers in Article 38 of the draft DCO [APP-014] are necessary in order to authorise interference with such apparatus where required.</p>

Ref. No.	Question to:	Question	Applicant's Response
		<p>order relates in accordance with section 138 of the Planning Act 2008.</p> <p>Justification is needed to show that extinguishment or removal is necessary.</p>	
DCO 1.58	Applicant	<p><i>Art 40 – Felling or lopping of trees and removal of hedgerows</i></p> <p>Art 40(4)(b) The Applicant has identified the hedgerows to be removed in Part 1 of Sch. 9.</p> <p>The EM should explain why the additional general power in Article 40 (4)(b) is required.</p> <p>The EM indicates that the article provides an additional level of specification sought by PINS Advice Note 15. However, this is an alternative, not an addition.</p> <p>The Applicant is asked to provide further justification for this provision.</p>	<p>1. The Applicant has sought to specify all hedgerows which are known to require removal and these are set out in Schedule 9 of the draft DCO [APP-014]. The general power has been included on a precautionary basis in case it is necessary, following detailed design, for any additional areas of hedgerow to be removed. Such removal would be subject to the consent of the relevant local authority. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.</p>
DCO 1.59	Applicant	<p><i>Art 42 – Application of landlord and tenant law</i></p> <p>The EM should explain why this power is required in the context of the Proposed Development.</p>	<p>1. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.</p>
DCO 1.60	Applicant	<p><i>Art 43 – Operational land for purposes of the Town and Country Planning Act 1990</i></p> <p>The title of the article should be amended to “Operational land for purposes of the 1990 Act” for consistency with other articles and because the 1990 Act has already been defined.</p>	<p>1. The requested amendment has been made to the revised draft DCO submitted at Deadline 1.</p>
DCO 1.61	Applicant	<p><i>Art 43 – Operational land for purposes of the Town and Country Planning Act 1990</i></p>	<p>1. Additional explanatory text has been added to the revised Explanatory Memorandum submitted at Deadline 1.</p>

Ref. No.	Question to:	Question	Applicant's Response
		While the EM notes that this article follows Art 36 of the Model Provisions, the EM does not explain why this provision is required in this particular situation. Please clarify.	
DCO 1.62	Applicant	<p>A number of Articles make provision for “any dispute as to a person’s entitlement to compensation ... or as to the amount of compensation, is to be determined under Part 1 of the 1961 Act”. Part 1 of the 1961 Act only relates to compensation for compulsory acquisition.</p> <p>The ExA considers that in order for there to be certainty that it would apply in other situations (e.g. the temporary use of land under Articles 35 and 36 of this Order), modification should also be included as with the other compensation provisions in Schedule 7 of the draft DCO [APP-014]. Please respond.</p>	<ol style="list-style-type: none"> <li>1. It is not considered necessary to make these revisals. It is clear from the drafting that the terms of Part 1 of the 1961 Act are being applied to situations such as temporary acquisition. Such provision has been included in numerous DCOs and also in Acts of Parliament and the Applicant is not aware of this giving rise to any difficulty.</li> <li>2. It is not appropriate to seek to address in drafting for all conceivable eventualities when normal statutory interpretation applies. These amendments would be otiose.</li> </ol>
DCO 1.63	Applicant	<p><i>Sch. 1</i></p> <p>The Applicant is asked to clarify the reference to s115(2)(b) in the preamble.</p>	<ol style="list-style-type: none"> <li>1. There is a missing footnote which should be the “(b)” reference here. This has been corrected within the revised draft DCO submitted at Deadline 1.</li> </ol>
DCO 1.64	Applicant	<p><i>Sch. 1 – Work No. 5a</i></p> <p>Please explain the rationale for the improvements to the existing road known as West View. In responding the Applicant is asked to have regard to Relevant Representations [RR-018 and RR-018].</p>	<ol style="list-style-type: none"> <li>1. The widening is required to accommodate vehicles from Warreners House PMA. Improvements are based on those already proposed by Taylor Wimpey (widening and new footway) but amended based on consultation with West View residents. Amendments include moving proposed footway to same side of road as properties, not opposite (as with the Taylor Wimpey proposals) and includes space for parking bays.</li> </ol>
DCO 1.65	Applicant	<p><i>Sch. 1 – Work No. 11c</i></p> <p>Typo in line 2</p>	<ol style="list-style-type: none"> <li>1. The typo has been corrected and reflected in the revised draft DCO submitted at Deadline 1.</li> </ol>
DCO 1.66	Applicant	<p><i>Sch. 1 – Authorised Development</i></p>	<ol style="list-style-type: none"> <li>1. The requirement that the “tailpiece works” not give rise to any materially new or materially different effects to those assessed in the ES has been moved to the start of this section and reflected in the revised draft DCO submitted at Deadline 1.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		After Work No 37 various works are listed: (a) to (x). Should the introduction to this section confirm that such works would not give rise to any materially new or materially different effects to those assessed in the ES instead of just relating to item (w)?	
		(a) Explain why drainage works are covered subsequent to the list of numbered works and not part of the list.	1. It was not considered appropriate to include the drainage works as individual listed works as they are a constituent part of the main carriageway works as opposed to being works in their own right. However, where the drainage works involve more extensive operations then they have been given individual work numbers (see Work nos. 33 to 37, Schedule 1 of the draft DCO [APP-014].)
		(o) Cocquet should be Coquet in item (o).	1. The typo in paragraph (o) has been corrected and reflected in the revised draft DCO submitted at Deadline 1.
		(u) Explain why site construction compounds are not part of the list of numbered Works?	1. The site construction compounds have not been identified as individual works as they are temporary in nature.
DCO 1.67	Applicant	<i>Sch. 2 R1 – Interpretation</i>  The definition of European protected species refers to the Conservation of Habitats and Species Regulations 2010. The reference should be to the 2017 Regulations and the regulation numbers updated accordingly. The definition of HEMP includes an explanation of its content which is also provided in R4. It would be more appropriate to include the information in R4 and to simply confirm what it is in R1.	1. Reference to the 2017 Regulations has been included. The definition of the HEMP in R1 has been amended as suggested. These changes are reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.68	Applicant	<i>Sch. 2 R3 – Detailed Design</i>  Should the reference to “materially worse adverse environmental effects” be changed to “materially different environmental effects” as occurs elsewhere in the dDCO?	1. These provisions have been amended throughout the revised draft DCO submitted at Deadline 1 so that they are consistent.
DCO 1.69	Applicant	<i>Sch. 2 R4 – Construction and handover environmental management plans</i>  R4(2)(c)(vii) Should the reference to “local authority” instead refer to “relevant planning authority” which is defined in Art 2?	1. These changes have all been made and reflected in the revised draft DCO submitted at Deadline 1.

Ref. No.	Question to:	Question	Applicant's Response
		R4(2)(d)(vii) Should COSHH be described in full? R4(2)(d)(xv) Typo – “Way”.	
DCO 1.70	Applicant	<i>Sch. 2 R5 – Landscaping</i>  R5(2) Would it be appropriate to provide a document reference number for the illustrative environmental masterplan (which has two parts) as has been done for example with the REAC and for this to be noted as a certified document in Sch. 12? R(5)(3a): change “bases” to “based”?	1. The reference in Requirement 5(2), Schedule 2 of the draft DCO [APP-014] has been changed to landscape mitigation masterplan and it is now included as a certified document in Schedule 12 with an additional definition in Article 2. The changes are reflected in the revised draft DCO submitted at Deadline 1  2. The requested change has been made to Requirement 5(3)(a) and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.71	Applicant	<i>Sch. 2 R7 – Protected species</i>  Should “the relevant parts of the relevant works... Secretary of State” be separated from R7(2)(c) as it appears to apply to parts (a) and (b) too?	1. This correction has been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.72	Applicant	<i>Sch. 2 R8 – Surface and foul water drainage</i>  Should the reference to “materially worse adverse environmental effects” in R8(2) be changed to “materially different environmental effects” as occurs elsewhere in the dDCO?	1. These provisions have been amended throughout the revised draft DCO submitted at Deadline 1 so that they are consistent.
DCO 1.73	Applicant	<i>Sch. 2 R9 – Archaeological remains</i>  R9 provides for no part of the authorised development to commence until a written scheme for the investigation (WSI) of areas of archaeological interest has been submitted to and approved in writing by the SoS. Should R9 specify that the WSI should be based on the WSI annexed to the ES (Appendix 8.5 WSI for Archaeological Trial Trench Evaluation Part A, Appendix 8.6 WSI for	1. It is not considered necessary to refer to the draft WSIs in Requirement 9 Schedule 2 2 of the draft DCO [APP-014] as these documents are already referred to in the REAC (see S-CH3 in particular) contained in the Outline CEMP [APP-344] and Requirement 9(1) provides that the written scheme of investigation submitted for the approval of the Secretary of State must reflect the relevant mitigation measures in the REAC.



Ref. No.	Question to:	Question	Applicant's Response
		Archaeological Strip, Map and Sample Excavation (NG Diversion Works) Part A and Appendix 8.5 Draft Written Scheme for Investigation for Post DCO-Consent Trial Trenching Part B)? If so, should these be identified separately as certified documents?	
DCO 1.74	Applicant	<i>Sch. 2 R10 – Safeguarding of listed milestones</i>  The reference to English Heritage should be changed to Historic England. English Heritage is also referred to in the EM.	1. These changes have been made and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.75	Applicant	<i>Sch. 2 R12 – Amendments to approved details</i>  The requirement should clarify that the approval in writing should be by the Secretary of State.	1. Reference to the Secretary of State has been included and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.76	Applicant	<i>Sch. 2 Part 2 – Further Information</i>  Should “business days” be defined in either Art 2 or R1?	1. A new defined term has been added to Article 2 and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.77	Applicant Environment Agency Statutory Undertakers	<i>Sch. 10 – Protective Provisions</i>  Provide an update as to the acceptability of the Protective Provisions contained in Schedule 9 of the draft DCO	1. The protective provisions are under discussion with the various statutory undertakers. The current position is set out in the draft SoCGs to be submitted at Deadline 2.
DCO 1.78	Applicant	<i>Sch. 12 Documents to be Certified</i>  Should the reference to CEMP be to the outline CEMP?	1. This reference has been changed and reflected in the revised draft DCO submitted at Deadline 1.
DCO 1.79	Applicant	The Consents and Agreements Position Statement [APP-016] states at paragraph 2.1.1(d) that the Scheme has and will be developed on the basis of strong collaboration with key stakeholders, and agreements are expected to be secured at key stages of the Scheme	1. The updates will be provided as requested.

Ref. No.	Question to:	Question	Applicant's Response
		<p>development as necessary. The progress on these items will be reported to the ExA, with a summary of the current situation reported in Section 3 and Appendix A of this Statement.</p> <p>The Applicant is asked to submit an update of Appendix A at each Examination Deadline as well as an update on the Statements of Common Ground listed in paragraph 3.2.2.</p>	

**Table 1-7 - Geology and Soils**

Ref. No.	Question to:	Question:	Applicant's Response:
<b>Part A</b>			
GS.1.1	Applicant	<p>In commenting of the policy objectives of the NNNPS, Table 11.2 of the ES [APP-052] states that Part A involves the on-line widening of the existing A1 carriageway and would not be introducing a wholly new development to the area.</p> <p>Please confirm that Part A also includes off-line works. What are the implications of offline working in terms of the policy objectives?</p>	<ol style="list-style-type: none"> <li>1. The Applicant confirms that Part A also includes offline works of approximately 6.1km of offline widening between Priests Bridge and Felmoor Park.</li> <li>2. The implications of the offline works are not considered to be any greater than those associated with online works in consideration of the policy objective relating to Pollution Control and Other Environmental Protection Regimes. The Applicant recognises that the widening, both online and offline, potentially introduce a greater risk of pollution. However, as with the online sections, the mitigation measures outlined in Section 11.9 of Chapter 11: Geology and Soils Part A [APP-052] would ensure that the policy objectives are met in terms of preventing pollution by preventing or limiting the release of potential pollutants to the lowest practical level. Mitigation measures outlined in Section 11.9 of Chapter 11: Geology and Soils Part A [APP-052] include ensuring the construction is undertaken in accordance with industry best practice and guidance in line with measures included within the Outline Construction Environment Plan (Outline CEMP) [APP-346].</li> </ol>
GS.1.2	Applicant	<p>Table 11.3 of the ES [APP-052] refers to the Alnwick District Wide Local Plan.</p> <p>Should this be a reference to the Castle Morpeth Local Plan?</p>	<ol style="list-style-type: none"> <li>1. The most northerly extent of Part A lies within the area covered within the Alnwick District Wide Local Plan, whereas the majority of Part A lies within the area covered by the Castle Morpeth District Local Plan (1991 – 2006, Published July 2003). Available at <a href="https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Consolidated%20Planning%20Policy%20Framework/Section%20A/Part%201%20-%20Adopted%20Statutory%20DPDs/7.%20Castle%20Morpeth/Castle-Morpeth-District-Local-Plan.pdf">https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Consolidated%20Planning%20Policy%20Framework/Section%20A/Part%201%20-%20Adopted%20Statutory%20DPDs/7.%20Castle%20Morpeth/Castle-Morpeth-District-Local-Plan.pdf</a></li> <li>2. It is noted that although the Castle Morpeth Local Plan is not referenced, the relevant policy objectives have been assessed through consideration of the policy objectives associated with the Northumberland Local Plan: Draft Plan for Consultation (January 2019) and Alnwick District Wide Local Plan (1997) as presented in Table 11-3 of Chapter 11: Geology and Soils [APP-052]. Relevant policy objectives within the Castle Morpeth Local Plan include the following, the corresponding policy objectives within the Northumberland Local Plan: Draft Plan for Consultation (January 2019) and Alnwick District Wide Local Plan are shown in brackets:</li> </ol>

Ref. No.	Question to:	Question:	Applicant's Response:
			<p>3. <b>Contaminated Land. Policy RE8</b> 'The Council will require proposals for the development of all land identified as being or potentially being contaminated by previous developments of mineral workings, to be accompanied by a statement of site investigation outlining the tests undertaken and the evaluation of results, in order that the council may assess any direct threat to Health, Safety or the Environment. (Northumberland Local Plan – Policy POL 1 unstable and contaminated land).</p> <p>4. <b>Ground Stability. Policy RE9</b> 'The Council will require proposals for development which is on unstable or potentially unstable land to be accompanied by a statement on ground stability, together with detail of measures proposed to deal with any instability'. (Northumberland Local Plan – Policy POL 1 unstable and contaminated land).</p> <p>5. <b>Sites of nature conservation importance, local nature reserves and regionally important geological or geomorphological sites. Policy C9</b> 'The Council will not permit development which would affect the integrity of location Nature Reserves, Sites of Nature Conservation importance or Regionally important geological or geomorphological sites either directly or indirectly, unless it can be demonstrated that the development is of overriding importance and no alternative is available'. (Alnwick District Wide Local Plan – Policy Sustainability Criteria, '5' relates to effects on natural resources, geodiversity, biodiversity and environment assets).</p> <p>6. <b>Agricultural Land. Policy C23</b> 'High quality (best and Most versatile) Agricultural Land is regarded as a long term national resource and will whenever possible be protected. Development of such land will not be permitted unless it can be demonstrated that the development is of overriding regional importance and no alternative is available. (Northumberland Local Plan – Policy POL 3 Agricultural Land Quality).</p>
GS.1.3	Applicant	<p>In commenting of the policy objectives of Policy POL1 of the Draft Northumberland Local Plan in Table 11.3 of the ES [APP-052] it is stated that "given that Part A comprises the widening of the existing carriageway there are no suitable alternative sites".</p> <p>The Applicant is asked to confirm that Part A includes off-line work and to consider its response to Policy POL3 in this context.</p>	<ol style="list-style-type: none"> <li>The Applicant confirms that Part A also includes offline works of approximately 6.1km of offline widening between Priests Bridge and Felmoor Park.</li> <li>POL 3 relates to Agricultural Land Quality and the requirement that development of Best and Most Versatile (BMV) agricultural land will not be supported unless it can be demonstrated, in summary;             <ul style="list-style-type: none"> <li>That there are no suitable alternatives on previously developed or lower quality land;</li> <li>The need for development clearly outweighs the need to protect BMV agricultural land;</li> <li>In the case of temporary / potentially reversible development (e.g. mineral workings) the land would be reinstated to its pre-working quality.</li> </ul> </li> <li>As reported in Chapter 11: Geology and Soils Part A [APP-052], as a result of the Scheme, including both online and offline works, there would be a permanent loss of BMV agricultural land amounting to approximately 9 ha, considered a loss of minor magnitude. The majority of the offline works result in a permanent loss of agricultural land which has been classified as Grade 3b (moderate quality) and Grade 4 (poor quality), not constituting BMV agricultural land. A small proportion of the offline works, to the south of Causey Park, result in the permanent loss of agricultural land which has been classified as Grade 3a (good quality), BMV.</li> <li>In response to Policy POL 3 Agricultural land quality the Applicant's response remains the same;             <ul style="list-style-type: none"> <li>Following extensive feasibility studies the existing Scheme offers the optimum solution to meet the Scheme objectives. Furthermore, other alternatives to the proposed offline works were not taken forward as the preferred route for a number of reasons as presented in Chapter 3: Assessment of Alternatives [APP-038].</li> <li>As Part A is a Nationally Significant Infrastructure Project (NSIP) the need for the development clearly outweighs the needs to protect such land in the long term. Given the relatively small area of BMV land (approximately 9 ha) that is to be permanently lost as a result of Part A, the loss of BMV land is considered to be of minor magnitude (loss of 5-&lt;20ha of agricultural land) and consequently attracts limited weight.</li> <li>Areas of temporary land take are to be reinstated to their previous use and mitigation measures as outlined in Section 11.9 Chapter 11: Geology and Soils Part A [APP-052] would be implemented to ensure policy objectives</li> </ul> </li> </ol>

Ref. No.	Question to:	Question:	Applicant's Response:
			are not compromised. Due to the nature of the scheme there is no intention to reinstate areas of permanent land take.
GS.1.4	Applicant	<p>Table 11.6 of the ES [APP-052] outlines the Geology and Soils Magnitude Impact Criteria for Part A.</p> <p>How were the criteria determined? Has an assessment been undertaken for the entire Scheme? How would the criteria change if the entire Scheme were assessed, for example would the measure of loss of agricultural land need to change?</p>	<ol style="list-style-type: none"> <li>1. With reference to the Geology and Soils Magnitude Criteria summarised in Table 11-6 of Chapter 11: Geology and Soils Part A [APP-052], in the absence of specific guidance at the time of initial writing the criteria were determined using professional expertise and in terms of the difference between a moderate impact and major impact for the loss of agricultural land were based on the threshold of 20ha adopted in Schedule 4 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 at which point consultation with Natural England is required.</li> <li>2. The separate assessments completed and set out in Chapter 11 Geology and Soils Part A [APP-052] and Chapter 11 Geology and Soils Part B [APP-053] both concluded that there would be a significant adverse effect because of the loss of agricultural land as a result of permanent land take. The Scheme was considered as a whole in Chapter 16: Assessment of Cumulative Effects [APP-062] and given that the effect on agricultural land had been assessed as significant for both Part A and Part B individually the combined effect was therefore considered significant and further assessment was scoped out.</li> <li>3. Since Chapter 11: Geology and Soils Part A [APP-052] was initially written the updated DMRB guidance LA109 Geology and Soils (formerly DMRB Volume 11, Section 3, Part 11 &amp; Part 6) has been published (October 2019). The updated DMRB guidance provides defined sensitivity and magnitude criteria to be used in the assessment of geology and soils. An assessment was completed in consideration of the updated guidance and is presented as Appendix 11.5 Geology and Soils DMRB Sensitivity Test Part A [APP-265]. The sensitivity test concluded that the outcomes of the assessment presented in Chapter 11: Geology and Soils Part A [APP-052] would not change if the updated DMRB guidance LA109 were to be applied.</li> </ol>
GS.1.5	Applicant	<p>Paragraph 11.6.2 of the ES [APP-052] describes how Part A was broadly split in to four sub-sections (as illustrated on Figure 11.1: Study Area of the ES [APP-113].</p> <p>Explain why it was decided to split the study area into sub-sections and how the four were determined. Are the sub-areas distinguished by the broken black line on Figure 11.1 [APP-113]?</p>	<ol style="list-style-type: none"> <li>1. The Applicant confirms, the four sub-sections are shown by the broken black lines on Figure 11.1 Study Area Part A [APP-113]. The study area was initially split into the four separate sub-sections within Appendix 11.2 Ground Investigation Report Part A [APP-262] to distinguish between the stretches of online and off line works and for example distinguish between stretches of minor earthworks along sections at grade (Section A3) and major earthworks (Section A4).</li> </ol>
GS.1.6	Applicant	<p>In Appendix 11.1 of the ES [APP-261] Preliminary Sources Study Report, reference is made to Appendices A to I but these are not appended.</p> <p>Please provide the missing Appendices.</p>	<ol style="list-style-type: none"> <li>1. The Appendices are now provided in Appendix GS.1.</li> </ol>
GS.1.7	Applicant	<p>In Appendix 11.2 Ground Investigation Report of the ES [APP-262] paragraph 3.10 indicates that no additional information has been obtained from the Coal Authority.</p> <p>Does this conflict with Appendix 11.1 [APP-261] where Appendix I is a Coal Authority Report? Why was the Coal Authority not consulted for the Ground Investigation Report?</p>	<ol style="list-style-type: none"> <li>1. The Coal Authority Report provided in Appendix I of the Preliminary Sources Study Report (PSSR) Part A [APP-261] predates Appendix 11.2 Ground Investigation Report (GIR) Part A [APP-262], and there is therefore no conflict. It is stated within the GIR that no additional information was obtained from the Coal Authority and that no further discussion of the data provided in the PSSRs was considered necessary for the Scheme in its form at the time of writing.</li> <li>2. The Coal Authority was consulted on Part A at the scoping stage. Refer to Appendix 4.1 Scoping Opinion Response Tracker [APP -192] for the Coal Authority Response and how it has been addressed within the assessment. In Summary, the Coal Authority notes that there are a four mine entries and areas of recorded and likely unrecorded coal mine workings at shallow depth along the Scheme route. The Coal Authority stated</li> </ol>

Ref. No.	Question to:	Question:	Applicant's Response:
			<p>that a Coal Mining Risk Assessment would be expected within any Environmental Statement prepared to support the application for the Scheme.</p> <p>3. A review of the existing information was completed as part of Appendix 11.2 GIR Part A [APP-262], alongside a walkover of the area known to have been recently affected by coal mining related events. Additional ground investigation was commissioned to specifically investigate mining risk. Appendix 11.4 Coal Mining Risk Assessment (CMRA) Part A [APP-264] prepared for the Scheme reviews the coal mining information available for the Scheme and includes information obtained from the Coal Authority and ground investigation data.</p> <p>4. Coal mining risks and likely mitigation measures are identified in Chapter 11: Geology and Soils of the ES [APP-052] and a CMRA is provided as Appendix 11.4 Coal Mining Risk Assessment (CMRA) Part A [APP-264], the Applicant has therefore addressed the comments provided by the Coal Authority.</p>
GS.1.8	Applicant	<p>Appendix 11.4 of the ES [APP-263] is a Coal Mining Risk Assessment.</p> <p>Was the Coal Authority consulted in the preparation of this report? If not, why not?</p>	<p>1. The Coal Authority was not consulted in preparation of Appendix 11.4 CMRA Part A [APP-264] as they had been consulted as part of previous studies associated with the Scheme and it was considered no further discussion or analysis of the data in the previous studies was necessary, as stated in the Appendix 11.2 GIR Part A [APP-262]. Appendix 11.4 CMRA Part A [APP-264] references the information available and appends additional information such as the Factual Ground Investigation report which details the additional ground investigation which was completed specifically to investigate the mining risk at Causey Park.</p>
GS.1.9	Applicant	<p>Appendix 11.5 of the ES [APP-263] is a Geology and Soils DMRB Sensitivity Test. Table 3.1 states that detriment to human health for current and future site users would have a major adverse magnitude leading to a slight adverse effect.</p> <p>Clarify where the magnitude is identified in Chapter 11 [APP-052].</p>	<p>1. Within Table 3-1 of Appendix 11.5 DMRB Sensitivity Test Part A [APP-265], the magnitude of the effect on current and future site users is stated to be moderate adverse, presenting a slight adverse effect.</p> <p>2. Within Chapter 11: Geology and Soils Part A [APP-052] the magnitude of change is identified in paragraph 11.10.6. For human health receptors (surrounding site users and construction workers) the magnitude of change is stated to be considered negligible, on the basis of the implementation of mitigation measures.</p>
<b>Part B</b>			
GS.1.10	Applicant	<p>Table 11.6 of the ES [APP-053] outlines the Geology and Soils Magnitude Impact Criteria for Part B.</p> <p>How were the criteria determined? Has an assessment been undertaken for the entire Scheme? How would the criteria change if the entire Scheme were assessed, for example would the measure of loss of agricultural land need to change?</p>	<p>1. As with Part A, with reference to the Geology and Soils Magnitude Criteria summarised in Table 11-6 of Chapter 11: Geology and Soils Part B [APP-053], in the absence of specific guidance at the time of initial writing the criteria were determined based on professional expertise and in terms of the difference between a moderate impact and major impact for the loss of agricultural land were based on the threshold of 20ha adopted in Schedule 4 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 at which point consultation with Natural England is required.</p> <p>2. The separate assessments completed and set out in Chapter 11: Geology and Soils Part A [APP-052] and Chapter 11: Geology and Soils Part B [APP-053] both concluded that there would be a significant adverse effect on the loss of agricultural land as a result of permanent land take. The Scheme was considered as a whole in Chapter 16: Assessment of Cumulative Effects [APP-062] and given that the effect on agricultural land had been assessed as significant for both Part A and Part B individually the combined effect was therefore considered significant and further assessment was scoped out.</p> <p>3. Since Chapter 11: Geology and Soils Part B [APP-053] was written the updated DMRB guidance LA109 Geology and Soils (formerly DMRB Volume 11, Section 3, Part 11 &amp; Part 6) has been published (October 2019). The updated DMRB guidance provides defined sensitivity and magnitude criteria to be used in the assessment of geology and soils. An assessment has been completed in consideration of the updated guidance and is presented as Appendix 11.7 Geology and Soils DMRB Sensitivity Test Part B [APP-323]. The</p>

Ref. No.	Question to:	Question:	Applicant's Response:
			sensitivity test concluded that the outcomes of the assessment presented in Chapter 11: Geology and Soils Part B [APP-053] would not change if the updated DMRB guidance LA109 were to be applied.
GS.1.11	Applicant	<p>Paragraph 11.11.1 of the ES [APP-053] indicates that following reinstatement of the temporary land take, there would be a programme of monitoring of soil conditions to identify if there are soil problems which need to be remediated.</p> <p>The Applicant is asked to confirm the extent of the programme of monitoring and how it would be secured. Is the monitoring included within the outline CEMP? If so, indicate where; if not, why not?</p>	<ol style="list-style-type: none"> <li>1. The requirement for reinstatement of land subject to temporary possession and its subsequent monitoring is included within the Outline CEMP [APP-346] as line S-GS15.</li> <li>2. The monitoring programme will be completed by the Main Contractor as part of the soil handling strategy and aftercare plan. The requirement for monitoring is included within the Outline CEMP [APP-346], however the extent of monitoring is not currently included. Further detail relating to the extent of monitoring will be added to the CEMP prior to consultation with relevant parties and discharge under requirement 4 of the draft DCO [APP-014]. Therefore, inclusion within the CEMP will secure the monitoring requirements.</li> </ol>

**Table 1-8 - Historic Environment**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
HE.1.1	NCC	Table 8.4 of the ES [APP-046] states that the scope of post determination trial trenching and archaeological mitigation for advanced works was set out in two draft WSIs. These have now been completed and provided (Appendix 8.5 and 8.6) [APP-225 and APP-226]. Is NCC content with the final versions of the WSI?	<ol style="list-style-type: none"> <li>1. NCC was provided with the draft WSI's ahead of submission and provided comments and requests for amendments. All the comments were addressed in the submitted WSIs.</li> <li>2. The WSI's are still referred to as "Draft" documents, as fully detailed method statements will be required to supplement these (paragraphs 4.1.4 to 4.1.6 [APP-225 and paragraphs 4.1.4 and 4.1.5 [APP-226] of the WSI's). It is the responsibility of the Scheme Archaeologist and/or Archaeologist (Main Contractor) to prepare these in consultation with NCC, as stated in Table 2-1: Responsibility Matrix of the Outlined CEMP [APP-346].</li> </ol>
HE.1.2	Applicant	<p>Paragraph 8.5.5 of the ES [APP-046] states that there is only partial coverage of Part A by the Light Detection and Ranging data.</p> <p>What implications does the absence of comprehensive data have?</p>	<ol style="list-style-type: none"> <li>3. Light Detection and Ranging (LiDAR) data are used in this Scheme to enhance other assessments undertaken. Therefore, the information available serves to reinforce what would otherwise be sufficient assessment as opposed to its partial coverage suggesting an insufficiency of data.</li> <li>4. The assessment of LiDAR is one method of non-intrusive assessment which can be applied to identify features of potential archaeological origin. It is used to identify and map any above ground earthworks present. A site walkover of the Scheme was also conducted in May 2018 and modern aerial imagery reviewed in order to also identify above ground earthworks, however the benefit of LiDAR is its ability to identify very slight earthwork remains that can be difficult to identify. The aim of the LiDAR assessment was, therefore, to enhance the quality of the assessment, where possible.</li> <li>5. The extent of the surveys required to inform Chapter 8: Cultural Heritage Part A [APP-046] were discussed and agreed with NCC in a telephone meeting held on the 29 March 2018 (see Table 8-4 of Chapter 8 Cultural Heritage Part A [APP-046]). It was agreed that the assessment would be informed by a Historic Environment Desk-based Assessment (drawing on data held by Historic England, the Northumberland Historic Environment Record and using modern and historic cartographic evidence), a walkover survey and geophysical survey as a minimum. It was agreed to explore further the opportunities to include other non-intrusive survey techniques, including LiDAR where appropriate.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>6. The extent and quality of the available LiDAR data available for Part A was reviewed by an archaeological specialist and it was determined that while coverage of the Scheme was incomplete, there was sufficient information available to allow for the assessment of part of the Scheme (Appendix 8.3 Light Detection and Ranging (LiDAR) Assessment Part A [APP-223]).</li> <li>7. The implications of the absence of the data is that possible to apply this enhanced element of the assessment does not apply across the entire Scheme. The assessment has taken into account, however, where there is an absence of data or information, as opposed to an absence of evidence. It is judged that other methods used to inform the assessment are sufficient and are in keeping with the Chartered Institute for Archaeologists standard and guidance documents (Section 8.4 of Chapter 8: Cultural Heritage Part A [APP-046]).</li> <li>8. The limitations and assumptions of the assessment for the potential and value of archaeological remains is based on the available evidence on the worst-case scenario, as outlined in Section 8.5 and paragraph 8.7.25 Chapter 8: Cultural Heritage Part A [APP-046].</li> </ol>
HE.1.3	Applicant	<p>Reference is made in paragraph 8.7.30 of the ES [APP-046] to six designated heritage assets within the Order Limits comprising Grade II Listed mileposts. It is confirmed in paragraph 8.7.31 that two of the mileposts have not been located.</p> <p>Apart from a walkover survey what efforts have been made to identify what has happened to these mileposts? Has contact been made with the Milestone Society?</p>	<ol style="list-style-type: none"> <li>1. The two mileposts were initially reported as being missing in the Options Selection Stage Environmental Assessment Report, 2017. The site walkover undertaken in May 2018 also attempted to locate the mileposts, but despite visiting the reported locations and the area around it, they could not be located. Following this, the Milestone Society Repository online resource was reviewed, and this also recorded the two milestones as missing (paragraphs 8.7.31, 8.7.52, 8.8.3 and 8.8.17 of Chapter 8: Cultural Heritage Part A [APP-046]).</li> <li>2. The Milepost Society has not been contacted directly due to opportunity to review their repository via their website to confirm the absence of the milestones. It is not within the scope of the assessment to attempt to locate the missing heritage assets or establish why they are missing.</li> </ol>
HE.1.4	Applicant	<p>Paragraph 8.7.31 of the ES [APP-046] states that as the mileposts are Grade II listed, they are of medium value. As set out in Appendix 4.5 [APP-197] the updated DMRB Guidance indicates that the sensitivity (value) of heritage assets are no longer defined by its level or grade of designation and has to be assessed and justified for each heritage asset. Paragraphs 8.10.29-8.10.30 state that a review of Grade II Listed Buildings likely to be impacted has not identified any grounds for increasing their value from medium to high.</p> <p>How was this review undertaken and what were the findings for heritage assets generally and for the mileposts in particular?</p>	<ol style="list-style-type: none"> <li>1. Following the issuing of the updated guidance (Highways England 2019 Design Manual for Roads and Bridges LA 106 Cultural Heritage Assessment), all of the Grade II Listed Buildings identified as being affected by the Scheme were subject to a review to establish if the value of any required increasing from medium to high. To qualify as being of high value, the Grade II Listed Buildings would need to have demonstrable architectural or historical of national significance (defined in Table 8-6 of Chapter 8: Cultural Heritage Part A [APP-046] as "Other Listed Buildings that can be shown to have exceptional qualities in their fabric or historical associations"). The reported value and the qualities which contribute to the assessment of value were revisited for each of the Grade II Listed Buildings identified as being impacted.</li> <li>2. The review established that none of the Grade II Heritage Assets merited an increase in the reported value as none met the criteria for High Value as defined in Table 8-6 of Chapter 8: Cultural Heritage Part A [APP-046]. The milestones in particular are a relatively common heritage asset in the Northumberland region and beyond, and many have been repositioned or have been subject to alteration since first established. They are of limited architectural interest, although they have a historic interest based on their relationship with historic routeways.</li> </ol>
HE.1.5	Applicant NCC Historic England	<p>In paragraph 8.7.34 of the ES [APP-046] it is stated that the assessment identified 64 built heritage assets or designated areas within the Outer Study Area and that 20 built heritage assets have been identified as being potential sensitive receptors.</p> <p>The Applicant is asked to explain how the number of assets was reduced from 64 to 20.</p>	<ol style="list-style-type: none"> <li>1. The assessment of impacts on settings was undertaken in accordance with Historic England guidance (paragraphs 8.4.31 and 8.4.32 of Chapter 8: Cultural Heritage Part A [APP-046], which comprises a five-step approach to assessment. Step 1 is Asset Identification, which is the scoping exercise to filter out those heritage assets which would be unaffected, typically where there are no views to/from the site.</li> <li>2. A review of the Zone of Theoretical Visibility (ZTV) Model was undertaken to identify the areas and heritage assets which potentially share intervisibility with the Scheme (Figure 7.3 Zone of Theoretical Visibility Part A [APP-090]).</li> <li>3. All of the 64 assets, or a location as close by as possible, were subject to a site visit from Public Rights of Way (PRoW). This was typically from the pavement at the front of the house or at the end of the driveway. In the case of the Felton and West Thirston Conservation Areas, the walkover survey included the main streets</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		NCC / Historic England are asked to comment on the identification of the 20 sensitive receptors.	<p>throughout the designated areas. The aim of this was to confirm, or ground truth, the ZTV model by determining whether the existing A1 is currently visible from the asset. It was also considered whether the Scheme and any temporary works areas would also be visible, and if there could be any impacts due to noise, lighting or pollution. The location of assets was also considered in terms of how it could be indirectly impacted as a consequence of the Scheme (i.e. from the movement of construction related traffic).</p> <p>4. Following this two-step approach, it was possible to reduce the number of assets which required a detailed assessment to 20 heritage assets based on the combined results of the ZTV model and the walkover survey, in accordance to the methodologies set out in paragraphs 8.4.31 to 8.4.37 and Tables 8-7, 8-8 and 8-9 of Chapter 8: Cultural Heritage Part A [APP-046]. These 20 assets had the potential to be impacted through a change in their setting from a change in views to and from the asset, alterations in lighting, noise, accessibility, pollution, etc.</p> <p>5. Assets were scoped out for detailed assessment where they clearly did not share any intervisibility with the Scheme, or any potential for impacts on setting through a change in noise, lighting, accessibility, pollution, etc, including as an indirect impact of the Scheme (i.e. temporary traffic diversions).</p>
HE.1.6	Applicant	<p>Historic hedgerows aligning the route of the existing A1 are recognised in paragraph 8.7.60 of the ES as being contemporary with the development of the former turnpike road in the 18th century.</p> <p>Why are historic hedgerows assessed as being of low value?</p>	<p>1. The hedgerows aligning the existing A1 are assessed as being of historic importance due to their association with the non-designated Morpeth North Turnpike Road (HER 18226). The Morpeth Turnpike Road is assessed as being of low value of as it compromised by poor preservation due to ongoing development, maintenance and widening of the highway and is of limited archaeological value except for its potential to contribute to an understanding of the development of transport routes.</p> <p>2. The value of the historic hedgerow aligned along the Morpeth North Turnpike is also assessed as being low, based on the same criteria as the assessment Turnpike Road itself (paragraph 8.7.11 of Chapter 8: Cultural Heritage Part A [APP-046]), which is appropriate given the direct relationship between the two assets.</p>
HE.1.7	Applicant	<p>Appendix D of Appendix 8.1 [APP-221] refers to the Scheme Boundary.</p> <p>Does the Scheme Boundary correspond with the Order Limits?</p>	<p>1. The Scheme Boundary as reported in Appendix 8.1 Historic Environment Desk Based Assessment Part A [APP-221], including Appendix D (Historic Environment Gazetteer), is not the Order limits. It is an earlier version of the Order limits. The document was completed in August 2018 and circulated to NCC and Historic England for comment as part of consultation. Paragraph 8.4.14 of Chapter 8: Cultural Heritage Part A [APP-046] states <i>"Following the completion of the HEDBA [Appendix 8.1 Historic Environment Desk Based Assessment Part A [APP-221], there have been changes to the Order Limits to accommodate design changes, however the HEDBA considered a wider area than is now set out in the Order Limits."</i></p> <p>2. Appendix 8.4 Gazetteer of Cultural Heritage Assets Part A [APP-224] was prepared based on the final, smaller Order limits and Study Areas and supersedes Appendix D (Historic Environment Gazetteer) within Appendix 8.1 Historic Environment Desk Based Assessment Part A [APP-221].</p>
HE.1.8	Applicant	<p>Appendix 8.4 [APP-224] provides a Gazetteer of Cultural Heritage Assets while Appendix D of Appendix 8.1 [APP-221] is a Historic Environment Gazetteer.</p> <p>The Applicant is asked to explain any differences between the two documents. Why were New Houses Farm and High Highlaws Farm included in the former but not in the latter?</p>	<p>1. New Houses Farm and High Highlaws Farm were unintentionally omitted from Appendix D of Appendix 8.1 Historic Environment Desk Based Assessment Part A [APP-221], however they are both reported and assessed in detail throughout Appendix 8.1 Historic Environment Desk Based Assessment Part A [APP-221]). Appendix 8.4 Gazetteer of Cultural Heritage Assets Part A [APP-224] was produced based on the Order limits at the point the DCO Application was submitted and supersedes Appendix D of Appendix 8.1 [APP-221].</p>
<b>Part B</b>			



Ref. No.	Question to:	Question	Applicant's Response
HE.1.9	IP's	Paragraph 8.1.2 of the ES [APP-047] identifies differences in the assessment between the chapters for Part A and Part B.  Are IPs content with the different approaches? Are there any significant implications arising from the difference in approach?	
HE.1.10	Historic England NCC	Table 8.4 of the ES [APP-047] notes the presence of a Prehistoric burial mound Scheduled Monument within the current Order Limits which was identified by Historic England and NCC as being the main point of concern.  Are Historic England and NCC content that here would be no direct physical impacts on Scheduled Monuments?	
HE.1.11	NCC	Table 8.4 of the ES [APP-047] notes that a Draft WSI for Historic Building Recording for Charlton Mires was submitted to NCC for comment.  Is NCC content with the scope of the WSI?	
HE.1.12	Applicant	Paragraph 8.7.3 of the ES [APP-047] states that within the Order Limits and Study Areas of the Part B Main Scheme Area there are seven Scheduled Monuments. Paragraph 4.3.20 of the SoR [APP-018] indicates that there are eight Scheduled Monuments located within 1 km of Part B with two Scheduled Monuments abutting the Order Limits and two located in close proximity to the Order Limits of Part B.  Please clarify.	<ol style="list-style-type: none"> <li>Paragraph 8.7.3 of Chapter 8: Cultural Heritage Part B [APP-047] is correct, there are seven Scheduled Monuments within 1km of the Order limits, with two Scheduled Monuments abutting the Order limits and two located in close proximity to the Order limits of Part B. They are: <ul style="list-style-type: none"> <li>Prehistoric Burial Mound, 420m north-west of East Linkhall (NHL 1018499) (abutting the Order limits)</li> <li>North Charlton medieval village and open field system (NHL 1018348) (abutting the Order limits)</li> <li>Camp at West Linkhall (NHL 1006500)</li> <li>Iron Age defended settlement in Camp Plantation, 350m north west of North Charlton Mill (NHL 1017955)</li> <li>Ellsnook round barrow, 175m north east of Heiferlaw Bridge (NHL 1006564)</li> <li>Heiferlaw tower house, 230m north east of Holywell (NHL 1014061)</li> <li>Heiferlaw defended settlement and Second World War Zero Station, 100m north of Holywell (NHL 1014080)</li> </ul> </li> <li>Earlier proposed Order limits were larger than the Order limits at application, which resulted in wider Study Areas at the start of the assessment, which contained eight Scheduled Monuments. The Order limits around the southern end of Part B were reduced in size towards the end of the assessment period which resulted in a reduction in the size of the Study Areas and the exclusion of one Scheduled Monument (St Leonard's Hospital, Alnwick, NHL 1006595).</li> </ol>
HE.1.13	Applicant	Paragraph 8.7.11 of the ES [APP-047] states that the Stone Cists and Tumulus (HER 5033) was found in the early 1800s. Table 8.11 states that Stone Cists and Tumulus were identified in the late 1800's (HER 5033).  Please clarify.	<ol style="list-style-type: none"> <li>The Stone Cists were found in the early 1800s, sometime before 1824 when the reports of the finding was originally published. The text in Paragraph 8.7.11 of the ES [APP-047] is correct. The entry in Table 8.11 is not correct.</li> <li>This does not affect the assessment in any way since the date of discovery is not material.</li> </ol>
HE.1.14	Applicant	Paragraph 8.7.11 of the ES [APP-047] states that the assessment identified nine designated and four non-	<ol style="list-style-type: none"> <li>It is understood that this question is in reference to paragraph 8.7.57 of Chapter 8: Cultural Heritage Part B [APP-047] as paragraph 8.7.11 is the subject of Written Question HE.1.13 above (in relation to the date of the Stone Cists).</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>designated (i.e. 13 in total) built heritage assets which could be temporarily or permanently impacted by Part B through change in setting during construction and operation. It then states that 15 built heritage assets have been identified as being potential sensitive receptors due to an anticipated change to the setting, before listing 13 of them.</p> <p>Please clarify.</p>	<p>2. There are 15 built heritage assets, namely:</p> <ul style="list-style-type: none"> <li>• Grade I Registered Park and Garden Alnwick Castle (NHL 1001041) and designated heritage assets contained within it;</li> <li>• Grade II Listed Building Heckley House (NHL 1042044)</li> <li>• Grade II Listed Buildings Barn and Engine House on North side of Main Farm Building Group (NHL 1041755)</li> <li>• Grade II Smithy at South-East Corner of Barn and Engine House and (NHL 1303729)</li> <li>• Grade II Listed Buildings Rennington Moor Farmhouse (NHL 1041756)</li> <li>• Grade II Yard Walls at Rennington Moor (NHL 1154641)</li> <li>• Grade II Listed Building Lime Kiln south of Kiln Plantation which lies 700m south-east of Rock Midstead (NHL 1154647)</li> <li>• Grade II Listed Building Dovecote to the east of Heckley Fence Farmhouse with Attached Wall (NHL 1371059)</li> <li>• Grade II Listed Building Patterson Cottage (NHL 1371080)</li> <li>• Grade II Listed Building West Linkhall Farmhouse (NHL 1298856)</li> <li>• Rock Conservation Area</li> <li>• Non-designated West Lodge (WSP001)</li> <li>• Non-designated Drythrople (WSP003)</li> <li>• Non-designated Rock Lodge (WSP007)</li> <li>• Non-designated Heiferlaw Bank (WSP013)</li> </ul> <p>3. The list in paragraph 8.7.57 of Chapter 8: Cultural Heritage Part B [APP-047] groups the two Grade II Listed buildings "Buildings Barns and Engine House on North side of Main Farm Building Group" and "Smithy at South-East Corner of Barn and Engine House" together as they are in the same location and form part of the same asset group. The two Grade II Listed Buildings at Rennington Moor Farmhouse and Yard Walls at Rennington Moor are also grouped together for assessment for the same reasons.</p>
HE.1.15	Applicant	<p>According to paragraph 8.9.10 of the ES [APP-047] the non-designated milestone North of Shipperton Bridge (HER 16878), which would be removed as a result of Part B, would be subject to a Level 1 Survey in accordance with Historic England's guidance prior to the start of construction to create a permanent record of its existing setting. This would be followed by the careful removal of the asset and its safe storage during construction. On completion of construction, the milestone should be reinstated as close as possible to its original location.</p> <p>In R10 of the draft DCO [APP-014] the Grade II listed milestones include National Heritage Number 168780. Please clarify whether that this refers to the non-designated milestone north of Shipperton Bridge.</p> <p>Should the reference in paragraph 8.9.10 to the Draft WSI be to the Draft WSI for Historic Building Recording (Appendix 8.6) [APP-296]?</p>	<p>1. An error is noted in Requirement 10 of Schedule 2 of the draft Development Consent Order (DCO) [APP-014], which currently reads <i>"No part of the authorised development is to commence until a written scheme for the protection of the grade II listed milestones with National Heritage Numbers 168780, 1371039, 1371021, 1370646, 1303996, 1153544 and 1042132 has been submitted to and approved by the local planning authority in consultation with English Heritage"</i>. It should read <i>"No part of the authorised development is to commence until a written scheme for the protection of the grade II listed milestones with National Heritage Numbers 1371039, 1371021, 1370646, 1303996, 1153544 and 1042132, and the non-designated milestone Historic Environment Record Reference 16878, has been submitted to and approved by the local planning authority in consultation with Historic England."</i></p> <p>2. The reference to the Draft WSI for Post-DCO Consent Trial Trenching in paragraph 8.9.10 Chapter 8: Cultural Heritage Part B [APP-047] is an error, it should cross reference the Outlined CEMP [APP-346]. Paragraph 8.9.10 of Chapter 8: Cultural Heritage Part B [APP-047] should also include the recommendation to consult with the Milestone Society (mistakenly included in paragraph 8.9.11 of Chapter 8: Cultural Heritage Part B [APP-047]).</p> <p>3. Appendix 8.6 Draft WSI for Historic Building Recording Part B [APP-296] is for the recording of Charlton Mires Farmhouse only. It does not include the methodology for the recording and treatment of the milestones on the Scheme and therefore requirement 10 of Schedule 2 of the draft DCO [APP-014] should not reference Appendix 8.6. The requirement to produce detailed method statements for the recording and treatment of the milestones is provided in the Outline CEMP A-CH2 and B-CH3 [APP-346].</p>

Ref. No.	Question to:	Question	Applicant's Response
		<p>R10 of the dDCO refers to a written scheme for the protection of Grade II milestones. Should there be a reference in R10 to the need for the written scheme for the protection of Grade II milestones to be substantially in accordance with the Draft WSI for Historic Building Recording (Appendix 8.6) [APP-296]?</p> <p>In light of the comment at the end of paragraph 8.9.11 that any mitigation would be devised in consultation with NCC and the Milestone Society and set out in a method statement (which presumably relates to the milepost in the previous paragraph, not to Charlton Mires Farm) should the Milestone Society also be a consultee under R10?</p>	<p>4. The outline CEMP has been amended, and submitted at Deadline 1, so that the Milestone Society are consulted in regard to the works proposed for the Shipperton Milepost as a stakeholder. However, the requirement to approve the works and method statements to discharge requirement 10 is the responsibility of the Secretary of State.</p> <p>5. An updated draft DCO [APP-014] is submitted at Deadline 1.</p>
HE.1.16	Applicant	<p>Paragraph 8.9.10 of the ES [APP-047] states that a programme of historic building recording would be undertaken prior to the demolition of Charlton Mires Farm (WSP002) to ensure it is preserved by record in accordance with Historic England's guidance and as presented in the Draft WSI for Historic Building Recording (Appendix 8.6) [APP-296].</p> <p>How would the WSI for Historic Building Recording be secured?</p>	<p>1. A Draft Written Scheme of Investigation (WSI) for the historic building recording is provided as part of the DCO application (Appendix 8.6 Draft Written Scheme for Investigation for Historic Building Recording Part B [APP-296] and is secured in the Outline CEMP in B-CH4 [APP-346]. Schedule 2 Requirement 4 of the draft DCO requires the CEMP to be produced in accordance with the Outline CEMP [APP-346] and to include the Archaeological Control Plan (item xi). Requirement 9 Part 1 of the draft DCO [APP-014] requires submission of WSIs approved by relevant planning authority to be submitted and approved by Secretary of State before development can commence.</p>
HE.1.17	Applicant	<p>A suitable mitigation, and any necessary monitoring, strategy would be devised in consultation with NCC and set out in a WSI and/or a conservation management plan according to paragraph 8.11.1 of the ES [APP-047].</p> <p>How would a conservation management plan be secured through the DCO?</p>	<p>1. Conservation Management Plans may be required in the event that archaeological remains of high value are identified and require preservation in-situ. The approach to mitigation in the event that remains are encountered which require preservation in-situ is provided in S-CH5 of the Outline CEMP [APP-346]. This includes the preparation of detailed method statements, which would include the requirement for the production of conservation management plans to address the approach to securing the long-term protection of archaeological remains during the operation phase.</p> <p>2. Schedule 2 Requirement 4 of the draft DCO [APP-014] requires the CEMP to be produced in accordance with the Outline CEMP [APP-346], and to include the Archaeological Control Plan (item xi). Requirement 9 (6) requires archaeological method statement to be approved by NCC.</p>
HE.1.18	Applicant	<p>Figure 2 of Appendix 8.1 [APP-291] shows the location of non-designated heritage assets.</p> <p>How were WSP Heritage Assets defined and how do these differ from non-designated Historic Environment Records?</p>	<p>1. "WSP Heritage Assets" are also non-designated assets. The difference is that the WSP Heritage Assets have been identified by the Applicant's Cultural Heritage team during the assessment process, and not from the search of Northumberland Historic Environment Database.</p> <p>2. They were defined through review of the historic mapping evidence, modern day mapping and confirmed in the site walkover survey.</p>
HE.1.19	Applicant	<p>Paragraph 8.10.16 of the ES [APP-047] notes that Charlton Mires Farm is a non-designated asset and is of at least mid-19th century date, with the potential for elements dating to the 18th century based on a review of historic mapping. It is judged to be of low value based on</p>	<p>1. Chapter 8: Cultural Heritage Part B [APP-047] is an assessment of the predicted impact and effects of Part B on heritage assets during construction and operation. The methodology and approaches for the cultural heritage assessment are set out in Section 8.4 Chapter 8 Cultural Heritage Part B [APP-047]. The methodologies are based on DMRB (2007, Volume 11 Section 3 Part 2 HA 208/07 and the superseding 2019 LA 106 Cultural Heritage Assessment), Historic England guidance and Chartered Institute for Archaeologists'</p>

Ref. No.	Question to:	Question	Applicant's Response
		<p>the evidence currently available. The construction of the new Charlton Mires Junction would require the demolition of the farm. The magnitude of impact after preservation by record would be permanent moderate adverse with a slight adverse effect (not significant).</p> <p>Please explain further how the demolition of this asset has been assessed as having a slight adverse effect particularly when the temporary and permanent land take and loss of residence and farm buildings from Charlton Mires Farm and the impacts on agricultural land holdings during construction are assessed to be large adverse in Table 17.3 [APP-063].</p>	<p>guidance. Based on this approach, and with the use of mitigation, the predicted effect on the Charlton Mires Farmhouse (a non-designated low value heritage asset) during the construction phase is slight adverse.</p> <p>2. The methodologies for cultural heritage assessments do not require the consideration of the use of the heritage asset as a private residence or the direct impacts on the agricultural land holdings around the heritage asset during construction or operation.</p>

**Table 1-9 - Landscape and Visual**

Ref. No.	Question to:	Question	Applicant's Response
LV.1.1	Applicant	<p>Paragraph 2.3.38 of the ES [APP-037] refers to the former Kyloe Hills and Glendale Area of High Landscape Value (AHLV) and an unnamed former AHLV. These are identified as former designations because they were in the Alnwick District Local Plan which has since been superseded. As former AHLV, what is the status of these areas and how should they be addressed in policy terms?</p>	<ol style="list-style-type: none"> <li>1. Part B is within the former local planning authority area of Alnwick District Council. The development plan for the former District of Alnwick comprised the Alnwick District Wide Local Plan (adopted in April 1997) as well as the policies of the Alnwick District, Core Strategy (2007).</li> <li>2. The former Berwick-upon-Tweed Borough Local Plan Policies F3 which included the Kyloe Hills and Glendale Area of High Landscape Value (AHLV) is 'saved' in the Northumberland Local Plan and that the Alnwick District policy RE17 that defined the unnamed AHLV is also 'saved.'</li> <li>3. The former Berwick-upon-Tweed Borough AHLV should be considered against the saved policy.</li> <li>4. Policy RE17 ('Protection of Areas of High Landscape Value') states that planning permission would not normally be granted for development which would have a significant and adverse effect on the appearance of the AHLV, Registered Parks and Gardens of Special Historic Interest or the fringe of the Northumberland National Park. Where development is to be permitted, the proposal would be required to demonstrate high standards of design and landscaping consistent with functional requirements.</li> <li>5. The Alnwick District Wide Local Plan Proposal Map also identifies the route of the Scheme for the 'upgrading of the A1 Trunk Road' under policy TT2 that safeguards the route from development that would prejudice the proposed dualling of the A1. Part B is adjacent to an identified AHLV.</li> <li>6. The fact that the dualling of the A1 is promoted and safeguarded in the Local Plan means that the two policies RE17 and TT2 must, as a matter of principle, be mutually compatible. Were the landscape and visual impacts of the dualling of the A1 considered to be unacceptable against the requirements of Policy RE17 then clearly both policies would not have been adopted equally and in parallel.</li> <li>7. These areas have not been judged against policy in Chapter 7: Landscape and Visual Part B [APP-045], rather they have been taken into consideration when judging the sensitivity of the Landscape Character Areas (LCAs).</li> </ol>
LV.1.2	Applicant	<p>ES Figures 2.1 [APP-066] and 2.2 [APP-067] show AHLV for Part A and Part B respectively. Is there any reason for the notation in each case being different?</p>	<ol style="list-style-type: none"> <li>1. The notation on Figures 2.1 Environmental Constraints Plan Part A [APP-066] and Figure 2.2 Environmental Constraints Plan Part B [APP-067] is purely a graphic one in terms of colours, tones and hatches, as the figures were prepared at different times, and does not reflect any difference in the relative importance of the designation.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>What is the status of an Intermediate Area of Landscape Value?</p>	<ol style="list-style-type: none"> <li>The Applicant understands that the former Berwick-upon-Tweed Borough Local Plan Policy F4 which defined the Intermediate Area of Landscape Value (IALV) is 'saved' in the Northumberland Local Plan.</li> <li>The IALV was identified in the Berwick upon Tweed Landscape Character Assessment, dated 1993, as a local designation and covers the entire area of the landscape outside of the Northumberland National Park, Areas of High Landscape Value (AHLV) and Berwick itself. The IALV encompasses areas of the landscape that contribute to the setting of the coastal landscape, Tweed valley and landscapes associated with the sandstone ridges that form the locally designated areas of high landscape value. The Berwick upon Tweed Landscape Character Assessment, dated 1993, has been superseded by the Northumberland Landscape Character Assessment, 2010.</li> <li>These areas have not been judged against policy in Chapter 7 Landscape and Visual Part B [APP-045], rather they have been taken into consideration when judging the sensitivity of the relevant LCAs.</li> </ol>
LV.1.3	Applicant	<p>In paragraph 2.5.19 of the ES [APP-037] reference is made to hedgerow mitigation outside of the permanent boundary within third party land while paragraph 2.6.6 states that such hedgerow planting would be expected to be maintained by the relevant landowner.</p> <p>How would this be secured through the DCO? Is any hedgerow planting proposed outside of the Order Limits of Part B?</p>	<ol style="list-style-type: none"> <li>Hedgerow planting proposed outside of the permanent highway boundary, but within the Order limits, forming a feature that is identified as essential mitigation, would be planted to mitigate the effects on visitors of the adjacent Woodland Burial Ground, and has been requested, discussed and agreed with the land owner (refer to Relevant Representation RR-047).As the hedgerow is within the Order limits, there is power to provide it in terms of paragraph (p) of the tailpiece to Schedule 1 to the dDCO.</li> <li>In providing the screening at the request of the landowner it is reasonable that in delivering the hedgerow within the DCO, the maintenance would revert to the landowner. The hedgerow is identified on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] and secured through S-L2(c) in Table 3.1 – Register of Environmental Actions and Commitments: The Scheme of the Outline CEMP [APP-346].</li> <li>As outlined paragraph 7.5.1 Part K of Chapter 7: Landscape and Visual Part B [APP-045], all planting within Part B is located within the Order limits. Therefore, no hedgerow planting is proposed outside of the Order limits of Part B, as outlined on Figure 7.10: Landscape Mitigation Plan Part B [APP-144].</li> </ol>
LV.1.4	Applicant Historic England	<p>Table 4.5 of the ES [APP-039] states that Historic England agreed with the viewpoint locations, methodology and receptors for the landscape and visual assessment for Part B.</p> <p>Why did Historic England not confirm their agreement in respect of Part A?</p> <p>What is the Historic England position with regard to the viewpoint locations, methodology and receptors for Part A?</p>	<ol style="list-style-type: none"> <li>As outlined in Table 4.5 of Chapter 4: Environmental Assessment Methodology [APP-039], agreement was made with NCC with regard to the location of the viewpoints and associated receptors for Parts A and B.</li> <li>Email correspondence with Historic England acknowledged the wide section of the viewpoints, however for both Parts A and B Historic England deferred to NCC and the local knowledge in terms of confirming the location of the viewpoints. No comments were forthcoming from Historic England with reference to the methodology for the LVIA. Specifically, and as identified in Table 7-4 – Summary of Consultation of Chapter 7: Landscape and Visual Part A [APP-044], Historic England requested that the effects on grade II* Bockenfield Farmhouse be included, refer to Appendix 4.2 Environmental Consultation 1 of 2 [APP-193]. Additionally, and with reference to Part B, it was requested that consideration be given to Rock Conservation Area due to its proximity to Part B.</li> <li>The Applicant has contacted Historic England subsequently to confirm that they are satisfied with the viewpoint locations assessed, methodology and receptors for Parts A and B. Email correspondence dated 5 January 2021 has confirmed their position remains unchanged and would have no further comments on the approach to the assessment.</li> <li>The Applicant can confirm that the viewpoint location, methodology and receptors were agreed with NCC through the scoping exercise and subsequently through a site walkover (refer to Appendix 4.2 Environmental Consultation 1 of 2 [APP-193] for Part A. The Applicant can confirm that the visual effects on grade II* Bockenfield Farmhouse were assessed, and the findings of the assessment are set out in Appendix 7.2 Viewpoints Visual Effects Schedule Part A [APP-217], as Receptor 43. With reference to Part B, there was, in an email from NCC dated 27 September 2018, broad acceptance of the viewpoints proposed by the Applicant.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
LV.1.5	Applicant	<p>Paragraph 7.8.3 of the ES [APP-044] states that 'the local LCAs listed above have been scoped out of the assessment because they are not anticipated to experience significant effects due to the lack of intervisibility created by intervening vegetation, topography and interrelationship with Part A'.</p> <p>To which local LCAs does this comment relate and was this approach agreed with relevant stakeholders?</p>	<ol style="list-style-type: none"> <li>1. The Applicant can confirm that this is a drafting error. Paragraph 7.8.3 Chapter 7: Landscape and Visual Part A [APP-044] should state "<i>the national NCAs listed above have been scoped out of the assessment</i>". All LCAs that occur in full or in part within the landscape and visual study area are identified on Figure 7.2 Landscape Character Area Part A [APP-089] and assessed within Appendix 7.1 Landscape Effects Schedule Part A [APP-216].</li> <li>2. Therefore, there was no requirement to agree the scoping out of the LCAs with relevant stakeholders, as those that occur within the landscape and visual assessment study area have been assessed.</li> <li>3. The justification for scoping these National Character Areas (NCAs) out of the assessment of the landscape effects is provided in paragraph 7.8.3 – 7.8.4 of Chapter 7: Landscape and Visual Part A [APP-044]. Agreement has been made with NCC to scope these out of the assessment and this is confirmed in an email between NCC and the Applicant dated January 2021, nevertheless it is appropriate for the assessment to be proportionate and focus on the potential for significant effects.</li> </ol>
LV.1.6	Applicant	<p>A number of receptors have been scoped out of the assessment as listed in paragraph 7.8.2 of the ES [APP-044]. Impacts on two National Character Areas have been scoped out and also impacts on four Landscape Character Areas.</p> <p>Can the Applicant provide evidence of agreement with the AONB Officer to scope out impacts from Part A and Part B of the Proposed Development on the AONB?</p> <p>Can the Applicant confirm if they have discussed and agreed the approach on scoping out the NCAs for Parts A and B and the LCAs for Part B with relevant stakeholders and also provide evidence of this?</p>	<ol style="list-style-type: none"> <li>1. The Applicant believes that this question may relate to paragraph 7.8.2 Chapter 7 Landscape and Visual Part B [APP-045].</li> <li>2. With reference to agreeing to scoping out the effects on the Area of Outstanding Natural Beauty (AONB) for Part A, the Applicant can confirm that the AONB officer was consulted on this subject, as evidenced in Table 7-4 – Summary of Consultation of Chapter 7: Landscape and Visual Part A [APP-044]. It was confirmed in an email between the AONB officer and the Applicant of 8 March 2018 that no further assessment is required due to the distance in separation (approximately 8 km) between the Scheme and Northumberland Coast AONB, refer to Appendix 4.2 Environmental Consultation 1 of 2 [APP-193].</li> <li>3. Similarly, for Part B, the AONB officer stated in an email on the 12 September 2018 that "[I am] content that the <i>Alnwick to Ellingham Improvement Scheme would not have a significant effect on the special qualities of the Northumberland Coast AONB and so have no further comments.</i>"</li> <li>4. On the basis of the above, no further assessment was carried out of the potential effects on the Northumberland Coast AONB for the Scheme.</li> <li>5. The scoping out of those NCAs that are not anticipated to be subject to a significant effect (NCA 1, NCA 2 and NCA 13), from the assessment of landscape effects for Part A has been confirmed with NCC, in an email between NCC and the Applicant dated 6 January 2021. In paragraph 9.3.20 of the Scoping Report Part A [APP-338], it is identified that the landscape character assessment will be focused on the character areas identified at a County Level, and this has been carried through into the assessment in Chapter 7: Landscape and Visual Part A [APP-044].</li> <li>6. Similarly, for Part B, the assessment of effects on landscape character were focused on the character types, identified at a regional level and as identified in paragraph 8.3.20 of the Scoping Report Part B [APP-339] this would form the focus of the assessment and no assessment of the effects on the relevant NCA was carried out.</li> <li>7. Consultation was carried out on the Scoping Report Part A [APP-338] and the Scoping Report Part B [APP-339] with relevant stakeholders, the responses to the Scoping Reports for Parts A and B are set out in Appendix 4.1 Scoping Opinion Response Tracker [APP-192]. NCC and Natural England suggested that reference should be made to the National Character Areas. However, in undertaking further studies, the Applicant concluded that the potential for significant effects was very low, and the assessment of these NCAs was scoped out. This has been explained in paragraph 7.8.4 of Chapter 7: Landscape and Visual Part A [APP-044] and confirmed in an email from NCC.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
LV.1.7	Applicant	<p>As summarised in paragraph 7.8.10 of the ES [APP-044], the Arboricultural Report (Appendix 7.5) [APP-220], details the landscape features that would be lost as a result of the construction of Part A comprising: clearance of 28.2 ha of woodland; clearance of 30.2 ha of trees and groups of trees; clearance of 12.5 ha of hedgerow (based on canopy cover) and removal of 187 of the approximate 300 trees that make up the Coronation Avenue.</p> <p>The Applicant is asked to expand on this summary, providing further detail in terms of the number and value of the landscape features to be lost.</p>	<ol style="list-style-type: none"> <li>1. Paragraph 7.8.10 of Chapter 7: Landscape and Visual Part A [APP-044] outlined the key landscape features to be removed making reference to Table 5-1 included in the Arboricultural Report (Appendix 7.5) [APP-220]. Paragraph 7.8.10 incorrectly interpreted Table 5-1. The list of bulleted points at paragraph 7.8.10 made reference to the 'Total Area of Canopy (ha)' for each of the Woodlands, Trees and Groups of trees, and hedgerows and not the 'Area of Impact (Canopy (ha))'. The total canopy area (ha) would be much lower than those stated in paragraph 7.8.10. The clearance would be as follows:             <ul style="list-style-type: none"> <li>• Clearance of 6.0 ha of woodland.</li> <li>• Clearance of 13.4 ha of Trees and Groups of trees.</li> <li>• Clearance of 6.9 ha of hedgerow (based on canopy cover).</li> <li>• Removal of 187 of the approximate 300 trees that make up the Coronation Avenue</li> </ul> </li> <li>2. As requested, more detail is provided below in terms of the number and value (in terms of the contribution that they make to the landscape) of the landscape features impacted by Part A. A Summary Table has been prepared which demonstrates the area (ha) of canopy lost for each of the woodland blocks impacted by the Scheme along with details of their respective BS 5837:2012 category and is submitted at Deadline 1 as Appendix LV.1 .</li> <li>3. The woodlands comprise predominantly native broadleaf and plantation woodland.</li> <li>4. Key impacts would occur to the following woodlands (refer to Appendix 7.5 Arboricultural Report Part A) [APP-220] and specifically Figure B3 – Tree Constraints Plan for the location of these landscape features):             <ul style="list-style-type: none"> <li>• W120 is an area of ancient woodland on the south side of the River Coquet valley. Woodland on the north side of the River Coquet valley (W122) would also be partially impacted. Both of these woodlands contribute to the wooded characteristics of the valley which is an area of high landscape value.</li> <li>• At the southern end of the Part A and associated with woodland alongside the existing A1, W23 would be removed entirely, and W24 would be partially impacted. The woodland provides important visual screening to the existing A1, and its removal would expose views from the west. W23 is designated with an area Tree Preservation Order (TPO).</li> <li>• Scattered throughout the Part A, 367 no. individual trees, 37 no. of groups of trees and 9 no. linear groups would be removed to construct the Scheme; along with a further 5 no. groups and 4 no. linear group partially removed, and are predominantly native species. A total of no. 12 (referenced as woodland W23 and trees T182, T185, T186, T187, T190, T192, T195, T196, T199, T200, T203) have a TPO placed on them. All trees and groups of trees positively contribute to the landscape, and the landscape strategy set out on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] has sought to replace these throughout Part A.</li> <li>• Hedgerow clearance would require a total of 23.2 km of existing hedgerow (refer to Table 9.22 - Mitigation for Loss of HPI, Chapter 9: Biodiversity Part A [APP-048]) to be removed in order to construct the Scheme. Hedgerows provide a positive landscape feature; they provide a framework of field boundaries and provide screening at a low level. The hedgerows frequently include hedgerow trees which have been accounted for above.</li> <li>• The Coronation Avenue comprises approximately 300 trees that lie adjacent to either side of the existing A1 between Morpeth and Causey Bridge. Although not designated with a TPO, their presence provides a strong linear feature that runs alongside the A1, integrating the existing road into the surrounding landscape. The Scheme would require the removal of 187 no. of these and would reduce the amount of tree cover immediately associated with the A1 corridor.</li> </ul> </li> </ol>

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LV.1.8	Applicant	<p>Paragraph 7.8.10 of the ES [APP-044] referencing the Arboricultural Report (Appendix 7.5) [APP-220], states that the Scheme would require the removal of 187 of the approximate 300 trees that make up the Coronation Avenue. The Landscape Mitigation Masterplan [APP-095] shows the location of the proposed Coronation Avenue trees while the Vegetation Removal Plan [APP-096] shows trees lost to the Scheme.</p> <p>The Applicant is asked to show on a plan the Coronation Avenue trees to be retained, those to be lost and the proposed Coronation Avenue trees. Explain the reasoning behind the replacement tree strategy.</p>	<ol style="list-style-type: none"> <li>1. A draft plan indicating both the trees removed and those to be replaced as part of the Coronation Avenue proposals has been prepared and is presented in Appendix LV.2 submitted at Deadline 1 having been discussed and confirmed with NCC via email January 2021. Due to the scale of the plans the locations for replacement individual trees remains indicative of the number and locations, but is provided to denote the re-formation of the 'avenue'. The strategy for the replacement of the trees that contribute to the Coronation Avenue would be on a like for like basis and would seek to replace the important landscape feature that would be impacted by Part A. This is identified in paragraph 7.9.14 (a) of Chapter 7: Landscape and Visual Part A [APP-044]. The replacement trees would comprise more advanced nursery stock (and would therefore be larger and more discernible than transplants, which would make up the bulk of the mass planting of woodland and scattered trees), this is identified in paragraph 7.9.14 (h) of Chapter 7: Landscape and Visual Part A [APP-044].</li> <li>2. The species present within the current Coronation Avenue comprise lime, beech and horse chestnut, all of which are large trees with expansive canopies if allowed to grow in their natural form. Should the same species be proposed as part of the replacement strategy their ultimate size, form and girth make them unsuitable as roadside trees, the Applicant therefore considers that the final selection of species should reflect their location as roadside trees and a more varied selection of species be proposed to address potential climate change, should a single species ultimately not thrive in the future climatic conditions. This is not to say that some level of formality could not be achieved however, the Applicant considers that less reliance on 2-3 species should inform the species selection. The Applicant also considers that ultimately the distance between the trees will need to reflect the species proposed at the detailed design stage, and will work with NCC in selecting the species, number and indicative location of the replacement trees to agree an appropriate replacement strategy as part of the detailed landscape scheme to be approved by the Secretary of State in terms of Requirement 5(1) of the draft DCO [APP-014], following consultation with the relevant planning authority. This will feed into the landscaping scheme which requires to be submitted to the Secretary of State for approval in terms of Requirement 5(1) Requirement 5(1) has been further revised so that the landscaping scheme requires to include a strategy for replacement of trees which are removed at Coronation Avenue. of the dDCO.</li> </ol>
LV.1.9	Applicant	<p>Section 7.10 of the ES [APP-044] provides an assessment of likely significant effects in respect of landscape and visual matters.</p> <p>The Applicant is asked to further demonstrate with reference to each landscape feature, how the effects summarised in paragraph 7.8.10 have been assessed.</p>	<ol style="list-style-type: none"> <li>1. The means of assessment is as set out below by reference to landscape features:</li> <li>2. The removal of woodland, trees and groups of trees, and the removal of hedgerows, would occur through the draft Order limits, and the impact of their removal has been assessed within the relative landscape character areas, and where views are impacted this has been identified as part of the assessment of impacts and resulting effects. It was considered by the Applicant that paragraph 7.8.10 provided a summary of the total losses of each of these landscape features, as opposed to individual locations, referring to the impacts and providing an assessment of the loss of the vegetation within its context and how its removal would impact landscape character, and views, rather than considering the impacts of specific landscape features in isolation. In summary:</li> <li>3. The clearance of woodland (28.2 hectares) occurs at specific locations, refer to response to LV.1.7 above, and the assessment of effects has considered how this would change the form of the woodland, the extent of any remaining woodland and the degree to which this could be replaced in a similar location or as part of the landscape strategy as outlined on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095].</li> <li>4. The clearance of trees or groups of trees (30.2 hectares) occurs throughout the draft Order limits, and where several scattered trees or trees forming groups would be removed, an assessment has been made of the impact that this would have, and the capacity to replace these in a similar location where a contribution could be made to offsetting the impacts in a location that would be suitable and identified on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095].</li> </ol>



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			<ol style="list-style-type: none"> <li>5. As part of the assessment of landscape effects, substantial vegetation removal as outlined in paragraph 7.8.10, has been identified within the description of impacts in Appendix 7.1 Landscape Effects Schedule Part A [APP-216], and this has informed the resulting magnitude of impact and conclusions as to the significance of effect.</li> <li>6. The clearance of 12.5 hectares of hedgerow has considered the impact that this would have on the landscape framework, frequently defined by the pattern and form that hedgerows take in the landscape, and whether this would be changed as a result of their removal. The replacement of hedgerows as part of the mitigation strategy has sought to restore field boundaries along their original alignments, or where this is not feasible to replicate field boundaries along the nearest suitable alignment the locations of which are provided on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095].</li> <li>7. The removal of 187 trees that currently form the historic Coronation Avenue considers the trees that currently line the southern section of the existing A1 in Part A. Their removal would result in a noticeable change to an existing landscape feature and the assessment of effects has considered how this would change the relationship of the A1 with the surrounding landscape. The replacement of this landscape feature has specifically considered how this would result in a different relationship until such time as replacement planting, the indicative locations of which are provided on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095].</li> <li>8. Likewise, for the assessment of visual effects, the loss of substantial vegetation is noted in the description of impacts within the relevant views, and has informed the magnitude of impact and the conclusions as to the significance of effect for the viewpoints (refer to Appendix 7.2 Viewpoints Visual Effects Schedule Part A [APP-217]), individual residential receptors (refer to Appendix 7.3 Residential Visual Effects Schedule Part A [APP-218]), and Public Rights of Way (PRoW) (refer to Appendix 7.4 Public Rights of Way Visual Effects Part A [APP-219]).</li> </ol>
LV.1.10	Applicant	<p>Paragraph 7.9.13 of the ES [APP-044] refers to a proposed Woodland Creation Area which would replace removed ancient woodland and provide connectivity to the adjacent and retained ancient woodland. This would appear to be secured through the DCO via the Landscape Mitigation Masterplan [APP-095] through R5(2).</p> <p>Does the Landscape Mitigation Masterplan provide adequate detail about the woodland to be created? IPs are invited to comment.</p>	<ol style="list-style-type: none"> <li>1. The Landscape Mitigation Masterplan provides sufficient detail about woodland to be created. It has been prepared in accordance with DMRB LD117 which requires the Environmental Function and landscape and Environmental Elements to be outlined. The Applicant's expert landscape architect, who has provided designs for as many as 15 highway schemes is satisfied based upon his expertise that the amount of detail is ample for the purpose proposed, particularly given the opportunity for later refinement.</li> <li>2. The area identified for the Woodland Creation Area referenced in Paragraph 7.9.13 of Chapter 7: Landscape and Visual Part A [APP-044], and Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] sets out the 8.16 ha of woodland (Woodland Creation Area) that would be created to address the loss of 0.68 ha of ancient woodland that would be removed by the Scheme, at a replacement ratio that equates to 12:1.</li> <li>3. This would result in a single large block of new woodland contiguous with the existing ancient woodland. This is preferable to several smaller blocks of replacement woodland scattered along the corridor, in that the broader area of woodland forms a single continuous habitat, as opposed to several small isolated pockets of woodland, reflecting that which would be removed by the Scheme.</li> <li>4. Details of the strategy to replace ancient woodland is provided in Appendix 9.21 Ancient Woodland Strategy Part A [APP-247], which combined with the Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] provides adequate detail about the woodland to be created.</li> </ol>
LV.1.11	Applicant IPs	<p>Paragraph 7.9.14 of the ES [APP-044] describes the development of the landscape mitigation masterplan, and the mitigation principles adopted. It notes that the landscape mitigation design is set out in Figure 7.8: Landscape Mitigation Masterplan [APP-095].</p> <p>The Applicant is asked to explain the process in developing the landscape mitigation masterplan, how</p>	<ol style="list-style-type: none"> <li>1. The landscape mitigation proposals were established in conjunction with undertaking the LVIA, as set out in Chapter 7: Landscape and Visual Part A [APP-044], and was carried out by the same chartered landscape architect. As such, there was a very good understanding of where the impacts would arise and, where significant effects were identified, suitable measures were considered and determined in order to reduce the magnitude of the impact so that, where appropriate, significant effects were reduced or avoided.</li> <li>2. The principles adopted to identify appropriate mitigation measures, as set out in Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], were established at the scoping stage (refer to paragraph 9.5.1 and</li> </ol>

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		<p>the mitigation principles were established and to confirm what those principles are.</p> <p>Are IPs content with the scope of the Masterplan? Is there a need for a Landscape and Ecological Management Plan to set the Masterplan in context?</p>	<p>9.5.2 of the Scoping Report Part A [APP-338]) to avoid or reduce the potential significant effects, and are summarised as:</p> <ul style="list-style-type: none"> <li>• Where possible avoidance of the removal of existing landscape features that positively contribute to the study area's landscape character, such as the retention of woodland or individual trees;</li> <li>• Replace or where replacement isn't feasible, replicate existing landscape features that reflect the wider landscape setting to the Scheme;</li> <li>• Where significant visual effects were identified, consider measures in the form of planting (hedgerows, woodland or individual trees) to provide a long-term screening or filtering effect, such that a significant effect is avoided or reduced in significance.</li> </ul> <p>3. In addition, the need to replace habitats impacted by the Scheme, as described in Section 9 of Chapter 9: Biodiversity Part A [APP-048], also informed the development of suitable replacement habitat that would also positively contribute towards the replacement or addition of appropriate landscape measures e.g. Woodland Creation Area, adjacent to ancient woodland along the River Coquet valley.</p>
LV.1.12	Applicant	<p>Paragraph 7.9.15 of the ES [APP-044] states that the Landscape Mitigation Masterplan (Figure 7.8) [APP-095] includes the restoration of habitats with reference made to Table 9.22 in Chapter 9: Biodiversity of the ES [APP-048]. Table 9.22 describes the mitigation for the loss of habitats of principal importance by area / length.</p> <p>Does the Landscape Mitigation Masterplan provide adequate detail about the mitigation? IPs are invited to comment</p>	<ol style="list-style-type: none"> <li>1. Table 9.22 in Chapter 9: Biodiversity Part A [APP-048] describes the mitigation for the loss of habitats of principal importance by area / length. As stated in paragraph 7.9.14, item c, of Chapter 7: Landscape and Visual Part A [APP-044] replacement planting would comprise native species to reflect the local landscape character, and also referred to paragraph 9.9.4, item d and f, of Chapter 9: Biodiversity Part A [APP-048].</li> <li>2. The Applicant can confirm that the development of the proposed mitigation measures reflect the guidance provided in DMRB, Vol 10 Section 0, Parts 3 and 4, now superseded by DMRB, LD117 – Landscape Design, providing the required references to the Environmental Function along with Landscape and Environmental Elements. DMRB, Vol 10 Section 0, Parts 3 and 4 being the Applicant's own guidance note on the landscape design approach to highway design. LD117 – Landscape Design has retained reference to Environmental Functions, Landscape and Environmental Elements. Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], provides the Environmental Function and Landscape and Environmental Elements, and as such provides sufficient detail about the mitigation and has been developed to ensure that the restoration of habitats is provided for, indicating the location and extent of the replacement mitigation measures according to the measure of area or length.</li> </ol>
LV.1.13	Applicant	<p>Table 7.22 of the ES [APP-044] describes the significant visual effects on occupants of 10 residential properties by Year 15. Paragraph 7.10.34 of the ES states that while these receptors would experience a significant change to their "view or views, considering the location of Part A it is not considered that any of these properties would suffer unduly from negative visual effects such as visual over-dominance, overbearance, or blocking of light, which collectively may affect the overall visual amenity from the residential property."</p> <p>Can the Applicant confirm if any mitigation measures could be employed in these locations to reduce the level of adverse effect on the 10 receptors?</p>	<ol style="list-style-type: none"> <li>1. Refer to Appendix LV.3 for the response to this written question.</li> <li>2. The Applicant has reviewed the findings of the assessment as outlined in Chapter 7: Landscape and Visual Part A [APP-044], supported with Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093], and the mitigation set out on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095]. The potential additional mitigation measures are outlined below, and consideration is given as to their suitability and the prospect of potentially reducing the significant effects to non-significant:</li> </ol> <p><b><u>R35 The Cottage (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 5 of 6)</u></b></p> <ol style="list-style-type: none"> <li>1. Impacts would arise on this receptor due to the presence of the proposed West Moor Junction in close proximity (less than 10m), comprising changes arising adjacent to the curtilage of the property (refer to Work No 16D on Works Plans [APP-007]), to the receptor and the requirement for the vertical and horizontal realignment West Moor Road. Due to the close proximity to the property itself, the options to identify additional mitigation measures are reduced. Whilst in theory, additional planting could be used as mitigation, and this would need to be immediately adjacent to the building, and large trees could not be planted so close to the building or the highway, therefore in practice there is insufficient space here to deliver this. The planting of large trees would potentially lead to structural issues associated with root damage or loss of light. Whilst additional shrub planting could partially reduce the view of the realigned road, and the edge of the West Moor</li> </ol>

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			<p>Junction, the effect would be to also reduce light reaching the north facing elevation of the single storey property; there would be a similar impact were a screen fence to be proposed. Furthermore, additional features within the verge immediately to the north of the property would reduce visibility from its entrance onto the local road which could pose a safety issue for vehicles pulling out of the entrance onto West Moor Road.</p> <p>2. North of the realigned local road, it would be possible to extend the planting associated with the western facing embankment slope to form a broader belt of shrubs that would reduce views to the north and the western edge of the West Moor Junction, however this would have the negative effect of reducing the open views to the north of the open countryside. The provision of a broader belt of shrubs would potentially reduce the impact of the main components of the West Moor Junction, although it would not screen the realigned local road, and the open aspect to the north would be lost, which would represent a negative effect. Whilst the impacts would be reduced by the creation of the wider belt of planting, the negative impact of the loss of open aspects would, on balance, not change the findings of moderate adverse (significant) effects.</p> <p><b><u>R36 West Moor House (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 5 of 6)</u></b></p> <p>1. For the reasons outlined above, which include the distance of the proposed changes to West Moor Road and distance to R35 The Cottage (less than 10m) (refer to Work No 16D on Works Plans [APP-007]), it is not feasible to identify additional mitigation measures (in the form of additional planting) for receptor R35 that would also reduce the effects for R36, there being insufficient room to provide trees and shrubs between R36 (and specifically R35) and the proposed works. Furthermore, if planting was provided, this would result in the loss of the open aspect to the north. The proposed additional mitigation measures would therefore not change the findings of moderate adverse (significant) effects.</p> <p><b><u>R37 West Moor House (4 properties) (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 5 of 6)</u></b></p> <p>1. Impacts would arise on this receptor due to the presence of the proposed works (refer to Work No 16D on Works Plans [APP-007]) associated with the West Moor Junction in relatively close proximity (less than 10m to the property boundary) to the receptors to the east, and the requirement for the realignment and the elevation of the vertical alignment of the local road. Impacts would arise primarily as a result of the loss of roadside vegetation, and the presence of the West Moor Junction to the east. Proposed mitigation measures comprise the replacement of the roadside hedgerow and individual trees, which in the design year (2038) would reduce awareness of the West Moor Junction and replace the existing highway elements, including earth embankments and traffic movements. The potential remains for the hedgerow and individual trees to be broadened in width to form a narrow belt of shrubs and trees, which in views to the east would further reduce awareness of the West Moor Junction. However, in establishing this denser belt of planting, views northwards from the four receptors, that incorporate open countryside would be screened and the sense of openness would be lost. The provision of a broader belt of shrubs would potentially reduce the impact of the main components of the West Moor Junction, although it would not screen the realigned local road, and the open aspect to the north would be lost, which would represent a negative effect. Whilst the impacts would be reduced by the creation of the wider belt of planting, the negative impact of the loss of open aspects would, on balance, not change the findings of moderate adverse (significant) effects.</p> <p><b><u>R58 Joiners Cottage/R59 The Bungalow (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 3 of 6)</u></b></p> <p>1. These two receptors lie in a shallow hollow in the Causey Park hamlet, and both have west facing elevations towards the Scheme. The Scheme (refer to Work No 1A and 2B, and 11D on Works Plans [APP-007]) would</p>

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			<p>be passing approximately 100m to the west on a slight embankment, with a noise barrier at the top of the embankment, however an attenuation basin, and access road (refer to Work No 11D on Works Plans [APP-007]) would be constructed closer than this, the pond being approximately 50m distant. Currently proposed mitigation measures in the form of hedgerows and individual trees would be planted alongside the Scheme at the foot of the embankment, as such, and in the design year 15, the view of the embankment and noise barrier would be interrupted by the maturing trees, whilst traffic movements on the A1 would be substantially screened by the noise barrier. The moderate adverse (significant) effect would arise as a result of the presence of engineered slopes, the noise barrier and the loss of the broader views of open countryside to the west.</p> <ol style="list-style-type: none"> <li>2. Additional mitigation measures might comprise further planting to reinforce the screening capacity of the proposed hedgerow to form a linear belt of shrubs and trees, connecting to the existing waterside trees that follow the local watercourse that runs through Causey Bridge. This would have the effect of reducing any remaining views of the embankment and noise barrier, but would not alter the fact that the broader views of the open countryside to the west would be screened entirely by the Scheme. Alternatives of earthworks or false cutting would draw the slopes closer to the receptors and would result in the effect of foreshortening the view. Furthermore, to screen the noise barrier and the traffic movements beyond, would require a substantial earthwork, which in the intervening ground would reduce the capacity to deliver the required drainage attenuation measures.</li> <li>3. A screen fence on the property boundary would substantially reduce awareness of the Scheme to the west, however, this would further reduce views of the countryside, albeit impacted by the Scheme to the west.</li> <li>4. As outlined above, several additional measures could be implemented to further reduce the effect on the occupants of these receptors. However, the only measure that may warrant further consideration would be further planting between the drainage attenuation feature and the embankment to the elevated road. Despite this the final effect in the design year 15 (2038) would likely remain moderate adverse (significant) as the loss of the open views of the countryside to the west would still be represent a significant effect.</li> </ol> <p><b><u>R68 Tindale Hill (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 3 of 6)</u></b></p> <ol style="list-style-type: none"> <li>1. The receptor is located on the crest of a low hill, and the occupants would have some existing views approximately 150m distance to the north and northwest, within which the Scheme, comprising Work No 2a, 2B on Works Plans [APP-007]) would be a noticeable new feature. Currently proposed mitigation measures, comprising Bunds 10 and 11 and associated woodland, and a hedge (refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] have been designed to reduce awareness particularly to the northwest, where the carriageway of the Scheme passes the closest within the available views (approximately 150m). Furthermore, measures that comprise screen mounding and woodland planting comprising Bunds 10 and 11 and associated woodland (refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095], which in the design year 15 (2038) would have established and substantially reduce awareness of the Scheme, would also elevate the line of sight beyond the Scheme to the open countryside beyond. Despite this it is expected that awareness of the Scheme would remain to the north due to the slightly elevated position, within which measures to provide screening and integration of the Scheme comprise hedges alongside the top of a shallow cutting.</li> <li>2. Additional mitigation measures that could be considered might include – extending the proposed woodland associated with bund 10 to the north – strengthening and extending the screening into the transition of the Scheme into cutting. Furthermore, a more focused planting of hedgerow trees to tie into the woodland between chainages 16300 – 16550, refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095], would reinforce the boundary to the Scheme, although this is not anticipated to provide substantial additional screening. Finally, the removal of the proposed hedge and arable field margin grassland between the above chainages, would permit a wider belt of trees and shrubs that tie the woodland associated with bund 10 and 11 refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] (sheets 8 and 9). These measures would</li> </ol>

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			<p>marginally reduce the degree to which features of the road would be visible, nevertheless, the presence of a new large infrastructure corridor within what are existing far reaching views of open countryside would not significantly reduce the magnitude of impact and resulting significant effect and the moderate adverse (significant) effect would remain.</p> <p><b><u>R70 Earsdon Moor Farm (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 3 of 6)</u></b></p> <ol style="list-style-type: none"> <li>Views from the receptor are comparable to the above R68 receptor, but the occupants would have slightly more elevated views approximately 400m to the west and south west to the Scheme, comprising Work No 2a, 2B and the northern extents of 9E on Works Plans [APP-007]), with far reaching views of open countryside beyond. Views of the Scheme would arise as it emerges from a slight cutting, along the top of which is proposed a hedgerow with trees along the eastern side of the Scheme, to raise the line of sight beyond.</li> <li>Options to provide additional mitigation could be focused on the planting of additional trees within the hedgerow between chainage 15140 - 15920, refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095], which as the tree planting is indicative could be achieved at the detailed design stage. A further alternative would be the removal of the proposed hedge and arable field margin grassland between the above chainages. This would permit a wider belt of trees and shrubs that tie the woodland north of the Fenrother Junction with the southern tip of woodland associated with bund 10, refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] (sheets 8). This would however result in a strong linear woodland across a significant proportion of the view within what is currently a relatively open and unwooded landscape and this would appear at odds with the existing landscape.</li> <li>Finally, the option remains to provide a screen fence on the boundary of the property which for the single storey property would screen views of the attractive open countryside to the west and south west for its occupants. It is considered that this would substantially and negatively impact the views experienced and would result in an effect greater than that currently predicted to arise.</li> <li>The reinforcement of the proposed hedgerow with frequent hedgerow trees, that would interrupt views of traffic movements, would remain the appropriate solution. Despite this, the presence of the Scheme within slightly elevated views and across a substantial proportion of the view would remain noticeable, which on a receptor that is considered to be highly sensitive to development of this type would still result in a moderate adverse (significant) effect.</li> </ol> <p><b><u>R71 Portland House/R72 Welbeck House (2 properties) (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 3 of 6)</u></b></p> <ol style="list-style-type: none"> <li>These are set immediately adjacent to the A1, with west and south elevations having existing views of the A1 immediately adjacent, and the occupants of both having an existing awareness of traffic in close proximity to the dwelling.</li> <li>The Scheme would require a new link road to be constructed to tie into the existing A1 comprising Work No 9I, 10A and 10B on Works Plans [APP-007]), that are within 10m of the property boundary, and which extend to the west to tie into the proposed Fenrother Junction.</li> <li>Options to provide additional mitigation, over and above the existing hedges proposed either side of the local road diversions (Work No 9I and 10B on Works Plans [APP-007]), are indicated on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] are limited due to the intervening distance and lack of suitable space within which additional planting could be provided. Increased frequency of trees within the proposed hedge on the western side of the A1 diversion would provide some additional screening of the Fenrother Junction in the</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>distance, however the key features of the view in the immediate context would not be changed, and the moderate adverse (significant) effect would be unchanged.</p> <p><b><u>R93 Trafford House (Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] – sheet 2 of 6)</u></b></p> <ol style="list-style-type: none"> <li>1. Trafford House (R93) is located immediately adjacent to the A1, and the access drive, which will be stopped up, currently opens directly to the road. The requirement to provide a new access drive (comprising Work No 8J on Works Plans [APP-007]) would require existing trees and shrubs, that currently provide a visual screen to be partially removed, exposing the external spaces and north facing elevation to newly exposed views of the A1 and the access drive.</li> <li>2. Key to reducing potential effects is the retention of as much of the existing vegetation as is possible, however in addition there is a proposed 2m screen fence that would be erected between the A1 and the access drive, which would provide some visual screening from external spaces at ground level.</li> <li>3. Additional mitigation measures would be challenging to include at this location due to the very limited space available within which additional planting could be provided. It might be feasible to provide a more densely arranged line of trees within the verge, however this may be subject to further design constraints during the detailed design phase as a result of structural constraints such as drainage infrastructure or the need for visibility splays. Nevertheless, the loss of existing mature tree cover would remain a noticeable loss within the view and awareness of the A1 beyond the access drive and screen fence would likely remain, therefore the moderate adverse (significant) effect is predicted to remain in the design year 15 (2038).</li> </ol>
LV.1.14	Applicant	<p>Table 7.25 assesses the design parameters for Part A. Twelve design parameters are discussed and justification is provided for each parameter. Parameter 1 discusses the possibility for additional tree and hedgerow removal.</p> <p>Can the Applicant confirm where in the dDCO, the replacement hedgerow and tree planting for Parameter 1 is secured?</p>	<ol style="list-style-type: none"> <li>1. The replacement of the hedgerow and tree planting (some of which forms the Coronation Avenue) should Parameter 1 be implemented would require the existing design for the proposed hedgerow and replacement between Chainage 10900 – 13200, refer to Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095], and to the east of Part A to be redesigned. The effects of this are identified in Table 7-25 - Consideration of Assessment Parameters, of Chapter 7: Landscape and Visual Part A [APP-044].</li> <li>2. Should Parameter 1 be required, the Order limits provide sufficient space for the re-establishment of the hedgerow and trees as close as possible to the original location (as stated in Table 7-25 - Consideration of Assessment Parameters, of Chapter 7: Landscape and Visual Part A [APP-044]) to be identified as part of the detailed design phase. The OCEMP [APP-346] has been updated and submitted at Deadline 1 to state that should parameters as set out Table 7-25 - Consideration of Assessment Parameters in Chapter 7: Landscape and Visual Part A [APP-044], the Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] will be amended accordingly to show any additional replacement hedgerow and tree planting.</li> <li>3. The draft DCO [APP-014] requires the landscaping scheme to be approved by the Secretary of State in terms of Requirement 5(1), following consultation with the relevant planning authority. Any replacement hedgerow and tree planting required as a result of the adoption of design changes to include Parameter 1, is identified as being required within Table 7-25 - Consideration of Assessment Parameters in Chapter 7: Landscape and Visual [APP-044]. Furthermore, Requirement 3(1) of the dDCO [APP-014] requires that design changes adopted as part of the detailed design must not lead to a worsening of adverse environmental effects, and this would include failing to replace landscape features removed as a result of the adoption of Parameter 1. All changes to the landscape design would need to be contained within the landscaping scheme set out in Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144], and would therefore be subject to approval by the Secretary of State.</li> </ol>
LV.1.15	Applicant	Throughout Chapter 7 of the ES [APP-044] reference is made to the Landscape Mitigation Masterplan [APP-	<ol style="list-style-type: none"> <li>1. Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], Figure 7.10 Landscape Mitigation Plan Part B [APP-144] and the illustrative environmental masterplan referred to in requirement 5(2) of the draft DCO [APP-014] are the same document and provide the same information. The draft DCO [APP014] has been amended</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>095]. R5(2) of the dDCO [APP-014] refers to the illustrative environmental masterplan.</p> <p>Are these intended to be the same document? If, so should the titles be consistent? If not, explain the differences.</p>	<p>to include a new defined term of "landscape mitigation masterplan" which clarifies that the term includes both the Landscape Mitigation Masterplan Part A [APP-095] and the Landscape Mitigation Plan Part B [APP-144] to aid clarity. The updated draft DCO [APP-014] is submitted at Deadline 1.</p>
LV.1.16	IP's	<p>IPs are asked whether the Landscape Mitigation Masterplan [APP-095] would adequately address how landscape and ecological features would be protected and managed during construction and reinstatement.</p>	<p>1. Response not required</p>
LV.1.17	Applicant IP's	<p>The Landscape Mitigation Masterplan [APP-095] includes a key showing different landscape elements and references environmental function, environmental elements and landscape elements. Explain how the Landscape Mitigation Masterplan works alongside the outline CEMP [APP-346].</p> <p>Should explanation of the masterplan proposals be included within the masterplan, a separate LEMP or remain solely within the outline CEMP? IPs are invited to comment.</p>	<ol style="list-style-type: none"> <li>1. The key provided in Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144] utilises the environmental functions, landscape elements and environmental elements as derived from DMRB, Vol 10 Section 0, Parts 3 and 4 (now replaced by LD117). Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144] set out the purpose and nature of the landscape and environmental functions, their location, geographical extent and the proximity to one another in relation to the Scheme. Requirement 5(1) requires that a landscaping scheme is approved by the Secretary of State which must reflect the mitigation measures in the REAC and be based on the landscape mitigation masterplan (incorporating both APP-096 and APP-144).</li> <li>2. The Outline CEMP [APP-346] provides further detail as to how the environmental functions, landscape elements and environmental elements would be secured and delivered, the timeline in terms of the construction, operation, and monitoring in order to provide commitments to their delivery.</li> <li>3. The combination of the environmental commitments and actions, as set out in Table 3.1 Register of Actions and Commitments: The Scheme in the Outline CEMP [APP-346] in combination with Requirement 5 of the draft DCO [APP-014] are sufficient to ensure the delivery of the mitigation measures required, and there is therefore no requirement to produce a separate Landscape Environmental Management Plan. This approach is as standard on other schemes promoted by the Applicant.</li> </ol>
LV.1.18	Applicant	<p>The Landscape Mitigation Masterplan [APP-095] provides for 'Proposed Hedgerow – By Agreement'.</p> <p>Is any proposed hedgerow to be provided outside of the Order Limits? What would be the legal basis of the agreement? What are the implications if agreement cannot be reached? How does this category of mitigation differ from 'Proposed Hedgerow – Essential Mitigation'? If the hedgerows are required to mitigate adverse impacts why is the provision subject to agreement only?</p>	<ol style="list-style-type: none"> <li>1. Proposed Hedgerow – By Agreement, as identified on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], would be delivered within the Order Limits, and would be provided where hedgerows are proposed to restore modified boundaries and/or connect landscape features joining the road, or to re-establish field boundaries, but which are not required as part of the overall essential mitigation required to reduce the effects on landscape character or to provide screening to visual receptors. The term "By Agreement" refers to the inclusion within the Scheme by agreement – i.e. following consultation with landowners.</li> <li>2. Those hedgerows indicated as 'Proposed Hedgerow – By Agreement' would be provided within the Order limits. As the hedgerow is within the Order limits, there is power to provide it in terms of paragraph (p) of the tailpiece to Schedule 1 to the dDCO. They are secured through item S-L2 in Table 3-1 - Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [APP-346]. However, this would be at the request of the landowner to whom the hedgerow and the land on which they would be planted would be handed back to on the completion of the Scheme and revert responsibility to for management, and would therefore not form part of the permanent highway features.</li> <li>3. Should agreement on the proposed hedgerow not be forthcoming, and adjacent landowners instead opt for a boundary fence line only, the findings of the assessment would not be affected. The assessment set out in Chapter 7: Landscape and Visual Part A [APP-044] has not included the category of 'Proposed Hedgerow – By Agreement' as part of the mitigation strategy to minimise the effects as a result of the Scheme.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
LV.1.19	Applicant	Proposed Individual Trees are provided for in the Landscape Mitigation Masterplan [APP-095]. What is the strategy for providing individual trees in terms of location and number?	<ol style="list-style-type: none"> <li>1. Due to the scale of the Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] the location of planting and individual trees is indicative as it is not possible to provide the specific numbers and locations. Therefore, where individual trees are identified on Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] the location is indicative. The strategy for the replacement of the trees that contribute to the landscape would be on a like for like basis and would seek to replace these important landscape feature as close to their original locations as far as is practical and in order that the vegetation framework is replaced or restored. This is identified in paragraph 7.9.14 (b and c) of Chapter 7: Landscape and Visual Part A [APP-044], and is subsequently secured in S-L2 of Table 3-1 - Register of Environmental Actions and Commitments: The Scheme within the Outline CEMP [APP-346] states that 'Where replacement planting is carried out it will be in keeping with the existing landscape.'</li> </ol>
LV.1.20	Applicant	The Landscape Mitigation Masterplan [APP-095] makes provision for Amenity Grassland and Conservation Grassland. What is the strategy for such provision in terms of location and area?	<ol style="list-style-type: none"> <li>1. As indicated on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], provision is made for Amenity Grassland and Conservation Grassland. The strategy for the implementation of these different grassland treatments has focused on its context. Amenity Grassland has been proposed to tie in with adjacent amenity grassland, such as at West View to the south of the Scheme, or where it would replace existing amenity type grassland associated with individual property, such as at Northgate.</li> <li>2. Conservation Grassland has been proposed in the remaining areas of highway boundary, with the exception of the verges, where greater forward visibility is required, and includes areas around drainage attenuation pods, bunds and around areas of woodland. At the detailed design stage, a more nuance approach will be adopted, proposing specific mixes of Conservation Grassland, appropriate to the location and underlying ground conditions.</li> <li>3. The provision of Amenity and Conservation Grassland is secured in item S-L3 (c) of Table 3-1 - Register of Environmental Actions and Commitments: The Scheme, in the Outline CEMP [APP-346] and will feed into the landscaping scheme which requires to be submitted to the Secretary of State for approval in terms of Requirement 5(1) of the dDCO. .</li> </ol>
LV.1.21	Applicant	Explain the purpose of the Proposed Temporary Boundary as shown within the Landscape Mitigation Masterplan [APP-095]. What form would this take? Does it correspond with the Order Limits?	<ol style="list-style-type: none"> <li>1. The purpose of the Proposed Temporary Boundary as shown on Landscape Mitigation Masterplan [APP-095] is to show the full extent of the works required to undertake the construction of the Scheme. The Applicant can confirm that the Proposed Temporary Boundary as shown within Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095] does correspond with the Order limits, showing the full extent of the temporary and permanent land take required to construction the Scheme, including the creation of landscape and ecological mitigation measures.</li> </ol>
LV.1.22	Applicant	The source of the references to environmental function, environmental elements and landscape elements in the Landscape Mitigation Masterplan [APP-095] is the DMRB. What impact if any do the changes to the DMRB have in respect of the masterplan?	<ol style="list-style-type: none"> <li>1. Updates to the DMRB in relation to landscape design are set out in LD 117 Landscape Design. The updated guidance retains the reference to both Environmental Functions and Landscape Elements, but does not expand on the form that the Landscape Elements should take. The previous guidance, DMRB Volume 10, Section 0 Part 3 &amp; 4, provided greater detail as to the nature and form that Landscape and Environmental Elements should take, and it was this guidance that was referred to in developing Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095]. In adopting the same references to Environmental Functions and Landscape Elements, the updated DMRB guidance does not impact on the information provided under the previous guidance.</li> </ol>
LV.1.23	Applicant	Figure 7.9 of the ES [APP-096] Vegetation Clearance Plans shows trees lost to the Scheme.	<ol style="list-style-type: none"> <li>1. Figure 7.9: Vegetation Clearance Plans Part A [APP-096] indicates the trees, groups of trees and hedgerows that would be removed by the Scheme and is based on the information collected and presented in Appendix A of Appendix 7.5: Arboricultural Report Part A [APP-220], which is a record of all the Arboricultural data captured during site walkover surveys and supported through aerial imagery, cross referenced with the</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		<p>How do these unspecified trees relate to Appendix A of the Arboricultural Report (Appendix 7.5) [APP-220] which provides a Survey Schedule?</p>	<p>proposed works to construct the Scheme and presented as the schedule – the Arboricultural Constraints Plan in Appendix B.1 of Appendix 7.5: Arboricultural Report Part A [APP-220], identifying the locations of the trees.</p> <ol style="list-style-type: none"> <li>In accordance with the methodology set out in Appendix 7.5: Arboricultural Report Part A [APP-220] and the methodology as set by BS5837:2012 Trees in relation to design, demolition and construction. Recommendations, any tree or woody vegetation under 75mm in diameter was not recorded as it is not considered a material consideration, due to its size. There are instances whereby the small proportions or girths of the woody shrubs, scrub and vegetation have not been identified within Appendix 7.5: Arboricultural Report Part A [APP-220] but have been shown on Figure 7.9: Vegetation Clearance Plans [APP-096] for completeness. Furthermore, as any individual count of the trees within the groups and woodland is not required to be compliant with BS5837:2012, this information was not recorded and cannot be accurately provided at this stage.</li> <li>Of those recorded in Appendix A of Appendix 7.5: Arboricultural Report [APP-220], details are provided in the Column referenced 'Initial Impact Assessment Remove/Retain' of the Arboricultural features to be retained and removed/lost to the Scheme. These features are identified in Appendix B of Appendix 7.5: Arboricultural Report Part A [APP-220] on the series of figures (Figure B4a Tree Protection Plan).</li> </ol>
LV.1.24	Applicant	<p>Paragraphs 3.1.12 – 3.1.15 of the Arboricultural Report (Appendix 7.5) [APP-220] records the response of The Woodland Trust to the Scheme.</p> <p>To what extent did the Applicant attempt to address these concerns?</p>	<ol style="list-style-type: none"> <li>The Woodland Trust was consulted during pre-application and as part of the statutory consultation on Part A in 2018 and on the Scheme in 2020. We understand Woodland Trust's concerns to focus on the avoidance of the removal of Ancient Woodland. As a result, the Applicant has through the design of the bridge footings and working areas required to construct the bridge designed the Scheme to avoid, as far as practical, the loss of ancient woodland. However, in order to construct the Scheme, there remains an unavoidable loss of ancient woodland. It was noted in conversation during consultation between the Woodland Trust and the Applicant, that the Woodland Trust acknowledged ancient woodland (Dukes Bank Wood) impacts were inevitable to implement the Scheme as presented.</li> <li>The Applicant has worked in consultation with Natural England to develop the proposals for compensating for the loss of ancient woodland at the River Coquet and confirmed a 12:1 ratio of additional woodland to be provided for ancient woodland lost. At a meeting held in March 2019, the Applicant made The Woodland Trust aware that a 12:1 ratio was the proposed compensatory measures, totalling approximately 9 hectares. The Woodland Trust confirmed that their position is that the ancient woodland replacement strategy proposed by the Applicant cannot be considered as compensation for the loss, of what they consider to be irreplaceable habitat.</li> <li>The Applicant considers that compensation to address impacts to ancient woodland is required and is appropriate. It is further acknowledged that compensation is considered a last resort, with efforts made, where feasible, to reduce these impacts through the avoiding the removal of woodland. Within The Woodland Trust's Relevant Representation, a replacement ration of 30:1 has subsequently been suggested, however this is substantially greater than the 12:1 ratio that has been agreed with statutory consultees (Natural England and Forestry Commission), and as identified above previously been proposed to The Woodland Trust. The Applicant considers that the 12:1 ratio is reasonable and has been agreed with the relevant statutory undertaker.</li> <li>A strategy of mitigation and compensation, alongside other objectives, has been produced. This is set out in Appendix 9.21: Ancient Woodland Strategy Part A [APP-247]. Finer details of the strategy, which will include precautionary working methods and biosecurity method statement to avoid the potential spread of invasive weeds (including himalayan balsam), will be developed at the detailed design stage (as identified within the</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			document), with any deviation from the strategy to be further discussed and agreed with Natural England and other appropriate statutory consultees.
LV.1.25	Applicant	<p>Table 5.1 of the Arboricultural Report (Appendix 7.5) [APP-220] provides a Potential Impact Summary with Table 7.1 assessing Likely Significant Effects. The total number of trees to be removed for Part A is given as 367. This does not appear to include the individual trees in the wooded areas, linear groups or groups of trees.</p> <p>What is the figure when these are included?</p>	<ol style="list-style-type: none"> <li>1. In accordance with the methodology set out in Appendix 7.5: Arboricultural Report Part A [APP-220] and paragraph 4.4.2.3 of BS5837:2012, Trees in relation to design, demolition and construction. Recommendations, 'Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate'. The term "group" is intended to identify trees that form cohesive arboricultural features either aerodynamically, visually, or culturally in respect of each of the BS5837:2012 Trees in relation to design, demolition and construction. Recommendations, subcategories.</li> <li>2. In determining whether the use of wooded areas, linear groups or groups of trees is appropriate to the future assessed, there is no requirement to count individual trees forming these features groups to be compliant with BS5837:2012. This information was therefore not recorded and a total number of trees lost which includes the individual trees is not available or necessary.</li> </ol>
LV.1.26	Applicant	<p>The Landscape and Visual Impact Assessment presented in Chapter 7 of the ES for Part A [APP-044] and Part B [APP-045] presents an assessment of likely significant effects at summer of the design year 15, after mitigation planting is established.</p> <p>Can the Applicant explain why a winter design year 15 scenario has not been considered, to account for a worst case?</p>	<ol style="list-style-type: none"> <li>1. The assessment has, as outlined in paragraph 7.4.5 of Chapter 7: Landscape and Visual Part A [APP-044], been undertaken in accordance with Interim Advice Note 135/10 Landscape and Visual Effects Assessment. This guidance states in Annex 2, paragraph 3.1 "The assessment of visual effects should be undertaken for the following scenarios: <ul style="list-style-type: none"> <li>• During the construction period, assuming a maximum visibility or maximum perceived change situation (i.e. when construction activity is at its peak for any given view), and noting how long that period would be likely to last;</li> <li>• A winter's day in the year that the project would open to traffic or be fully operational (i.e. with noise/visual screens and mounds in place but before any planted mitigation has begun to take effect). This is usually a reflection of the operationally non-fully mitigated/maximum visibility scenario;</li> <li>• A summer's day in the fifteenth year after opening (i.e. when the planted mitigation measures can be assumed to be substantially effective). This is usually a reflection of the near fully mitigated scenario under normal conditions."</li> </ul> </li> <li>2. The assessment has therefore not undertaken an assessment for the winter design year 15 scenario in line with the above guidance. The assessment set out in Chapter 7: Landscape and Visual Part A [APP-044] indicates both the greatest impact - in winter year 1 (year of opening) and with the benefit of the mitigation - in summer of the design year 15. The Design year winter assessment would not add to an understanding of worst case impacts.</li> </ol>
<b>Part B</b>			
LV.1.27	Applicant	<p>Paragraph 7.7.11 of the ES [APP-045] identifies the location of three Areas of Landscape Value, which are designated in local policy comprising the Kyloe Hills and Glendale AHLV designated in the former Berwick-upon-Tweed Borough Local Plan, an unnamed AHLV designated in the former Alnwick District Wide Local Plan and an unnamed Intermediate Area of Landscape designated in the former Berwick-upon-Tweed Borough Local Plan.</p>	<ol style="list-style-type: none"> <li>1. The Applicant understands that the former Berwick-upon-Tweed Borough Local Plan Policy F3 which included the Kyloe Hills and Glendale AHLV and Policy F4 which defined the Intermediate Areas of Landscape Value (IALV) are 'saved' policies in the Northumberland Local Plan, furthermore, the Alnwick District Policy RE17 that defined the unnamed AHLV is also 'saved' and therefore remains relevant.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		The Applicant is asked to confirm the planning status of each of these areas.	
LV.1.28	Applicant	<p>Figure 1 of the Arboricultural Report [APP-286] (Arboriculture Constraints Plan) shows 'The Avenue – Historic Tree Lined Road'.</p> <p>Explain the significance of this feature and how it has been assessed.</p>	<ol style="list-style-type: none"> <li>1. 'The Avenue' is a historic tree lined road that originally ran from Rock Lodge past Rock Midstead to the village of Rock. It was cut just west of Rock Lodge by the A1 when this was first realigned and the use of the historic roads has evolved since (for example the track to Rock Midstead follows the adjacent field edges, not the historic Avenue centre).</li> <li>2. From a landscape perspective this feature has been considered for its overall contribution to the local landscape character. As a large linear woodland block, it is a noticeable feature within the wider landscape. It also serves a visual function, screening views for close proximity receptors, specifically R11 (Rock Midstead Cottages and Farmhouse) and R27 (users of PRoW 129/004) (see Figure 7.2: Visual Receptors Plan Part B [APP -136]). These aspects were taken into account when determining the sensitivity of the landscape to change and the magnitude of effect for the visual receptors as set out in Chapter 7: Landscape and Visual Part B [APP-047].</li> <li>3. Figure 1 of the Arboricultural Report Part B [APP-286] (Arboriculture Constraints Plan) shows 'The Avenue – Historic Tree Lined Road'. This comprises woodland areas referenced as W76, W80, W84 and W86 which were assessed predominantly on their arboricultural merit and classified in accordance with guidance provided within the DMRB. Volume 11: Environmental Assessment Section 2, Part 5. To align sensitivity of receptors as determined by DMRB with BS 5837 Trees in relation to design, demolition and construction. Recommendations, tree quality assessment, a professional judgement was made. This professional judgement determined that these four woodland features are classified as 'Low sensitivity features' which aligns with Category B of BS5837. Table 1 - <i>Cascade chart for tree quality assessment</i> of BS5837 sets out the definition for each of the categories within the quality assessment. In consideration of the collective landscape value of these four woodlands, sub-category '3' of BS5837, which is reserved for 'Trees with material conservation or other cultural value' was assigned to these features.</li> <li>4. Figure 1 of the Arboricultural Report Part B [APP-286] (Arboriculture Constraints Plan) made reference to the 'The Avenue – Historic Tree Lined Road' to highlight the significance of this feature owing to its landscape merit as reported in Chapter 7: Landscape and Visual Part B [APP-047].</li> </ol>
LV.1.29	Applicant	<p>Paragraph 7.9.5 of the ES [APP-045] refers to a number of specific mitigation measures relating to landscape and/or visual effects being addressed through the Landscape Mitigation Plan (Figure 7.10 [APP-144]. (Paragraph 7.9.6 makes reference to the landscape mitigation masterplan.)</p> <p>Explain why this is not described as a masterplan unlike its Part A equivalent and with reference to the respective keys, explain any difference in approach to landscape mitigation.</p>	<ol style="list-style-type: none"> <li>1. In developing the Scheme, it was originally proposed that Part A and Part B would be the subject of separate applications for development consent and consequently the assessments were undertaken and compiled separately. There is no difference in the status or intent of the two plans. The dDCO has been revised so that the landscape mitigation masterplan which requires to be approved by the Secretary of State in Requirement 5 is now a defined term which incorporates the different descriptions of the landscape document for Parts A and B.</li> <li>2. Whilst there are graphical differences, in terms of hatches, colours and tones, between Figure 7.8 Landscape Mitigation Masterplan Part A [APP-095] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144] this does not reflect any difference in the importance of, or approach to, the mitigation proposed. The Applicant can confirm that the approach to mitigation for Part A and Part B is the same and that any differences in the presentation is purely graphical.</li> </ol>
LV.1.30	Applicant	Table 7.23 of the ES [APP-045] identifies significant adverse effects at seven residential receptors at Year 15 after mitigation measures have been introduced. There appears to be no explanation as to why mitigation measures will not reduce impacts to these receptors down to a level which is assessed as being not	<ol style="list-style-type: none"> <li>1. Appendix 7.2: Visual Effects Schedule Part B [APP-287] provides further explanation about the findings of the assessment. This is as follows:  <b><u>People living in properties with eastern facing views (Receptors 3,4, 5 and 8)</u></b> <ol style="list-style-type: none"> <li>1. The main element of change in the nature of the view from these receptors that range between 200 – 750m from Works 21A and 21B refer to Works Plans [APP-007], which leads to the findings of significant adverse</li> </ol> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>significant. Can the Applicant explain why it is not possible to mitigate against significant adverse effects at the residential receptors identified in Table 7.23 and shown in Figure 7.3: Viewpoint Location Plan [APP-137] (ie receptors 3,4,5,6,7,8 and 10).</p>	<p>effect, is the introduction of the Scheme combined with the Heckley Fence Accommodation Overbridge (Work no. 27 refer to Works Plans [APP-007]). The landscape mitigation – woodland planting on the embankments of the overbridge and along the western alignment of the A1 is designed to assist with the assimilation of the structures into the view and landscape. Whilst this would reduce the level of significance over time (and the receptors would become habituated to the change) the underlying change - the new element in the view - remains, hence the finding of Moderate Adverse (albeit on the lower end of the moderate scale). Further mitigation could include broadening further the woodland associated with the Heckley Fence Accommodation Overbridge over and above the already wide (20-30m) belts of planting proposed, however this would not reduce the perceived height of the structure within the landscape. Screen fencing would not only be inappropriate within the landscape, due to a lack of similar structures within the landscape, but is likely to draw further attention to the structure, and to the extents of the Scheme to the north and south. Extending the toe of the embankment slopes to achieve a less steep slope profile to the Heckley Fence Accommodation Overbridge would, in the winter Yr1 have the marginal effect of softening the appearance of the slopes, but would not change the findings of the assessment, the structure remaining a noticeable new element within views from these receptors. In addition, and once mitigation planting associated with the slopes has established, the softening effect is anticipated to have been eroded as a result of the presence of the tree canopies. The effect would remain significant.</p> <p><b>People living in properties with close proximity eastern facing views (Receptors 6, 7 and 10)</b></p> <ol style="list-style-type: none"> <li>1. The main element of change in the nature of the view from these receptors, which leads to the findings of significant adverse effect, is the introduction of the Charlton Mires Junction (Work no. 29C – 29L refer to Works Plans [APP-007]) as part of the Scheme), changes to side roads (Works no. 29A, 29B and 29H), and the main alignment (Work no. 22A refer to Works Plans [APP-007]). The landscape mitigation – including woodland planting on the embankments and former highway (specifically south-west of the junction in close proximity to receptors, within 10 – 200m) is designed to assist with the assimilation of the raised junction into the landscape and the replacement planting between the secondary road and the A1 is designed to filter views of the main carriageway. Further mitigation in relation to Receptors 6 and 7 could comprise the construction of earth bunds between the realigned B6347 and the A1, however for these to be effective they would need to be a minimum of 4m in height, and within the relatively flat landscape this would appear incongruous and would, in the Design Yr 15, be covered by woodland in line with the landscape proposals outlined on Figure 7.10 Landscape Mitigation Plan Part A [APP-144]. Similarly, a screen fence would need to be a minimum of 3-4m in height, and would appear incongruous in the landscape due to a lack of similar structures in the wider rural landscape. Whilst the mitigation planting would reduce the level of significance over time, particularly by filtering the views, the underlying change and loss of the open views would remain. The effect would fall from large adverse on completion to moderate adverse with maturing planting, but it would remain significant.</li> <li>2. For Receptor 10, the significant effects arise due to the distance to the Scheme being between 10 and 50m from the residential properties and the construction of the new access road (Work no. 29H refer to Works Plans [APP-007]) between the receptors and the A1. There is insufficient space to achieve substantial additional screening through shaped earth mounding, in addition to the proposed planting of a linear belt of shrubs and trees. A screen fence could provide some additional screening in Yr 1, and prior to the establishment of the linear belt of shrubs and trees that ultimately will screen both the fence and the A1. The existing mitigation planting (as outlined on Figure 7.10 Landscape Mitigation Plan Part B [APP-144]) would provide a filtering or screening effect to the A1 in the Design Yr 15, and substantially replicate the existing views, however the awareness of the dominant feature of the substantially widened main carriageway would remain, and the effect would remain significant.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
LV.1.31	Applicant	<p>Table 7.28 of the ES [APP-045] assesses the design parameters for Part B. Parameter 3 explains that the realignment of the Northern Powergrid Circuit may require slightly different landscaping treatment within the highway boundary. Visual details are provided in the Landscape Mitigation Plan including Assessment Parameter Plan 3 [APP-148].</p> <p>Can the Applicant explain the differences between the landscape mitigation measures which may be required for the Northern Powergrid Circuit realignment?</p> <p>Can the Applicant explain where the design parameters for Part A and Part B are reflected in the dDCO?</p>	<ol style="list-style-type: none"> <li>As set out in Chapter 2: The Scheme [APP-037] paragraph 2.5.280 Parameter 3 requires more permanent land take and slightly different landscape treatment along the eastern side of the alignment. The different landscape treatment is illustrated on Figure 7.14: Landscape Mitigation Plan including Assessment Parameter 3 Part B [APP-149] and is detailed below:             <ul style="list-style-type: none"> <li>Approximate Chainage 53400: A small reduction in the western extents of the woodland planting area (EFA / LE2.2)</li> <li>Approximate Chainage 54000 to 54150: The movement of the hedgerow (EFA / LE4.4) to the east adjacent to the Order Limits and the inclusion of a root barrier along the western alignment of the hedgerow.</li> <li>Approximate Chainage 54150 to 55275: The movement of the hedgerow (EFA / LE4.4) to the east adjacent to the Order Limits.</li> <li>Approximate Chainage 55350 to 56200: The movement of the hedgerow (EFA / LE4.4) to the east adjacent to the Order Limits.</li> <li>Approximate Chainage 56200 to 56250: A small reduction in the extents of the woodland planting area (EFA/EFB/LE2.1), the movement of the hedgerow slightly to the east and the inclusion of a root barrier.</li> <li>Approximate Chainage 56250 to 58175: The movement of the hedgerow (EFA / LE4.4) to the east closer to the Order Limits.</li> <li>Approximate Chainage 58175 to 58275: The movement of the hedgerow (EFA / LE4.4) to the east adjacent to the redline boundary and the inclusion of a root barrier along the western alignment of the hedgerow.</li> <li>Approximate Chainage 58275 to 5825: The movement of the hedgerow (EFA / LE4.4) slightly to the east with a small gap in the hedgerow with root barrier at Approximate Chainage 58210.</li> <li>Approximate Chainage 58830: A small gap in the hedgerow</li> <li>Approximate Chainage 59280: A gap in the hedgerow</li> <li>Approximate Chainage 59280 to 59500: The movement of the hedgerow (EFA / LE4.4) to the east closer to the Order Limits.</li> <li>Approximate Chainage 59600 to 598025: A reduction the area of woodland planting (EFB / LE 2.1) and the inclusion of a root barrier.</li> <li>Approximate Chainage 60100 to 60400: A reduction in the woodland planting area (EFB / LE 2.1) and the inclusion of root barriers.</li> <li>Approximate Chainage 60525: A small gap in the hedgerow and the inclusion of a root barrier.</li> </ul> </li> <li>Details of the design parameters for Part A and Part B are contained within Section 2.12 Assumed Limits, Chapter 2: The Scheme [APP-037] and Part 2 Principal Powers, Article 7 Limits of deviation in the draft DCO [APP-014] which set out the limits of deviation for Parts A and B. Should Parameter 3 be identified as being required, then the revised landscape strategy set out on Figure 7.14: Landscape Mitigation Plan including Assessment Parameter 3 Part B [APP-149] will become the landscape strategy, as identified in Table 7-28 - Consideration of Assessment Parameters in Chapter 7: Landscape and Visual [APP-045], and as required by SL-2 in Table 3-1 - Register of Environmental Actions and Commitments: The Scheme, in the Outline CEMP [APP-346], and referred to in Requirement 5(1) of the draft DCO [APP-014], requiring approval by the Secretary of State following consultation with the relevant planning authority. The OCEMP [APP-346] has been updated and submitted at Deadline 1 to state that should Parameter 3, as set out in Table 7-28 - Consideration of Assessment Parameters in Chapter 7: Landscape and Visual Part B [APP-045], Figure 7.14: Landscape Mitigation Plan including Assessment Parameter 3 Part B [APP-148] will be adopted.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
LV.1.32	Applicant	<p>Monitoring arrangements for Part B are set out in Section 7.11 of the ES [APP-045]. Six viewpoints (2,4,6,7,9 and 11) will be revisited at operational years 5, 10 and 15 to assess that the effects on viewpoints are being adequately mitigated by the installed mitigation measures.</p> <p>Can the Applicant confirm if the viewpoints which will be revisited, include the viewpoints which are representative for those receptors which are identified as experiencing a permanent moderate adverse effect?</p>	<ol style="list-style-type: none"> <li>3. Figure 7.3 Viewpoint Locations Plan Part B [APP-136] illustrates the viewpoint locations, and are referred to for the monitoring periods. Figure 7.2 Visual Receptors Plan Part B [APP-137] shows the location of the visual receptors including those experiencing a permanent moderate effect (Receptors 3, 4, 5, 6, 7, 8 and 10).</li> <li>4. The Applicant can confirm those viewpoints which have been identified as experiencing a permanent moderate adverse effects are as follows:               <ul style="list-style-type: none"> <li>• Viewpoints 5 and 6 are representative of receptors 3, 4, 5 and 8.</li> <li>• Viewpoints 2 and 4 are representative of receptors 6, 7 and 10.</li> </ul> </li> </ol>
LV.1.33	Applicant	<p>In describing monitoring, Section 7.11 of the ES [APP-045] does not describe what arrangements would be put in place if the planting strategy does not achieve the anticipated level of mitigation.</p> <p>Can the Applicant explain what triggers would be used to establish whether the planting strategy has achieved the anticipated level of mitigation and the actions that would be taken should the proposed planting strategy be found to not have achieved the anticipated level of mitigation?</p> <p>How is implementation of any such actions secured through the dDCO or other legal mechanism?</p> <p>Can the Applicant confirm if the monitoring arrangements for Part A and Part B have been agreed with relevant stakeholders?</p>	<ol style="list-style-type: none"> <li>1. The anticipated level of mitigation is described for the summer of year 15. During the first five years after completion, the planting would be inspected regularly in accordance with paragraph 7.11.2 of Chapter 7: Landscape and Visual Part B [APP-045] and any planting failures replaced (except where small areas of failure do not alter the desired design outcome). For the remainder of the 15 years monitoring surveys would be undertaken (at approximately five yearly intervals) to review the success of the landscape mitigation and identify any areas where mitigation commitments have not been met, in accordance with paragraphs 7.11.5 and 7.11.8 of Chapter 7: Landscape and Visual Part B [APP-045]. These surveys would identify any management works required to ensure the longer-term success of the landscape elements and identify measures or develop proposals to rectify any areas where a commitment is not being met. Paragraph 7.11.6 lists six viewpoints which would be revisited to check that the visual effects have been adequately mitigated. These requirements will be included in the Handover Environmental Management Plan (HEMP) for the Scheme.</li> <li>2. The Applicant will employ a Chartered Landscape Architect or similarly experienced professional to carry out these reviews. As a requirement within the HEMP, the assessment at year 10 will require the landscape architect to use their professional judgement based on knowledge and experience of similar schemes to decide whether the proposed mitigation is establishing as anticipated and will perform its function adequately. At Year 15, they will consider if it has achieved its purpose and reduced effects to the levels set out in the LVIA. If the mitigation has not established as anticipated or achieved its purpose, the Applicant will undertake additional planting or other measures as necessary to meet the stated levels of significance.</li> <li>3. The Outline CEMP [APP-346] sets out the monitoring requirements during and post construction, including the roles for those responsible for monitoring, as outlined in Table 2-1 - Responsibility Matrix. In addition, and as set out in Table 5-1 - Monitoring to be Carried out During Construction, monitoring will be undertaken during the construction period including the 5 year establishment period. As stated in paragraph 5.1.9 of the Outline CEMP [APP-346] the landscape and visual mitigation will be reviewed to ensure that delivery of the mitigation as assessed.</li> <li>4. This will be undertaken at the periods set out in paragraph 5.1.12 of the Outline CEMP [APP-346], Requirement 4(5) of the dDCO [APP-014] requires that the construction of the authorised development must be carried out in accordance with the approved CEMP. This provision secures that the monitoring required by paragraphs 5.1.9 and 5.1.12 of the CEMP is implemented and the mitigation delivered as required.</li> <li>5. The Applicant can confirm that monitoring arrangements have not yet been agreed and will be discussed as part of the Statement of Common Ground (SoCG) with NCC.</li> </ol>
LV.1.34	Applicant	<p>Figure 7.11 of the ES [APP-145] Vegetation Clearance Plan does not show the category of tree to be cleared or</p>	<ol style="list-style-type: none"> <li>1. Figure 7.11: Vegetation Clearance Plan Part B [APP-145] indicates the individual trees, groups of trees and hedgerows that would be removed by the Scheme and is based on the information presented on Figure 1, Arboricultural Constraints Plan, in Appendix B.1 of Appendix 7.1: Arboricultural Report Part B [APP-286], which</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		cross reference this to the Arboricultural Report [APP-286]. How do these unspecified trees relate to the Arboricultural Report which provides a Survey Schedule?	is a record of all the Arboricultural data captured during site walkover surveys and supported through aerial imagery, cross referenced with the proposed works to construct the Scheme.
LV.1.35	Applicant	Paragraph 3.2.4 of the Arboricultural Report [APP-286] states that a consultation response was not received from the Forestry Commission.  Has the Applicant sought comments on the Arboricultural Report from the Forestry Commission since the submission of the application? If not, why not?	1. In line with section 42 of the Planning Act 2008 and The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, the Applicant consulted with the Forestry Commission on tree and woodland impacts. As stated in Paragraph 3.2.4 of Appendix 7.1: Arboricultural Report Part B [APP-286], no response was received from the Forestry Commission. The Applicant assumed that the lack of response from the Forestry Commission implied they had no concerns on the Arboricultural matters. However, a Statement of Common Ground (SoCG) is being progressed with the Forestry Commission and a draft is submitted at Deadline 1.
LV.1.36	Woodland Trust	The Woodland Trust does not appear to have been consulted on the Arboricultural Report [APP-286].  Does the Woodland trust have any comments on the Arboricultural Report?	1. The Applicant did not consult directly with the Woodland Trust. The Woodland Trust were provided the opportunity to review Appendix 7.1: Arboricultural Report Part B [APP-286] at the pre-application stage. Following on from this opportunity to review, no comments were received from the Woodland Trust in respect of the Arboricultural Report Part B [APP-286]. The Applicant can confirm that a strategy of mitigation and compensation, alongside other objectives, has been produced. This is set out in [APP-247]. Finer details of the strategy will be developed at the detailed design stage (as identified within the document), with any deviation from the strategy to be further discussed and agreed with the appropriate statutory consultees and will be discussed as part of the Statement of Common Ground (SoCG) with the Woodland Trust.
LV.1.37	Applicant	Table 7.1 of the Arboricultural Report [APP-286] - Likely significant Effects – Trees, Groups, Hedges, Linear Groups, Shrubs and Wooded Areas appears to adopt a different approach to that adopted in Table 7.1 of Part A [APP-220]. For example, the former uses the terms partially impacted, directly impacted and protection require/not impacted whereas the latter uses the terms partial removal, remove and retain.  Explain why different approaches have been adopted and produce a composite which enables the likely significant effects to be considered across the Scheme as a whole. How many trees would be lost under the Part B proposals?	<ol style="list-style-type: none"> <li>1. Table 7.1 of Appendix 7.1: Arboricultural Report Part B [APP-286] was produced in accordance with Table 2.4 of DMRB guidance (Vol 11 Section 2 Part 5) Chapter 2: Determining Significance of Environmental Effects. The interaction between the DMRB sensitivity of the arboricultural resource and the construction or operation magnitude of impact identifies the significance of environmental effects as described in section 2.5 of Appendix 7.1: Arboricultural Report Part B [APP-286]. These outcomes are contained in Table 7.1 of Appendix 7.1: Arboricultural Report Part B [APP-286].</li> <li>2. The different approach is due to a difference in terminology used by different authors only. Table 7.1 Appendix 7.1 Arboricultural Report Part A [APP-220] included a count of features to be removed or retained, referenced as columns 'remove' and 'retain'. Table 7.1 Appendix 7.1 Arboricultural Report Part B [APP-286] does not include these columns. Despite this, the Applicant can confirm that there are no differences in the approach, status or intent of the two Tables. However, despite these differences, the Applicant considers that the terminology used does not reflect any materially alter the data outlined in these Tables.</li> <li>3. A composite table has been provided which enables the likely significant effects to be considered across the Scheme as a whole. This is provided as Appendix LV.4 and is submitted at Deadline 1. The composite table ensures that the same terminology has been used across [APP-220] and [APP-286].</li> <li>4. The Applicant can confirm that a total of 159 arboricultural features are listed as being removed entirely as set out in Appendix A of Appendix 7.1: Arboricultural Report Part B [APP-286] comprising individual trees, groups of trees, linear groups, hedgerows and woodland. A further 37 features will be partially removed and retained. The total number of arboricultural features affected by feature type is shown in Appendix LV.4 and is submitted at Deadline 1.</li> </ol>
LV.1.38	Applicant	Figure 2 of the Arboricultural Report [APP-286] is a Tree Protection Plan for Part B. The equivalent plan for Part A	1. The Tree Protection Plan provided in Appendix 7.5: Arboricultural Report Part A [APP-220] and Appendix 7.1: Arboricultural Report Part B [APP-286] illustrate the same content relating to tree protection measures with the

Ref. No.	Question to:	Question	Applicant's Response
		is provided as Figure B4 [APP-220]. Explain why different approaches have been adopted and produce a composite which enables tree protection measures to be considered across the Scheme as a whole.	<p>only difference being the naming of these figures and the presentation of the data. This difference simply reflects the Tree Protection Plan were compiled separately by separate authors. There is no difference in the status or intent of the two plans and The Applicant considers that the difference in naming and presentation, in terms of symbology and colours, does not reflect any difference in the importance of the information presented. Principally, each of the Tree Protection Plans provide appropriate tree protection information in accordance with BS 5837:2012.</p> <p>2. A composite plan has been provided which enables tree protection measures to be considered across the Scheme as a whole, in Appendix LV.4 and submitted at Deadline 1.</p>

**Table 1-10 - Material and Resources**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
MR.1.1	Applicant	Table 13.2 of the ES [APP-056] sets out National Planning Policy Relevant to Material Resources. It includes the Highways England Sustainable Development Strategy. As the Applicant's own advice, what weight should be given to this document during the Examination?	<ol style="list-style-type: none"> <li>1. The Highways England Sustainable Development Strategy (SDS) document was referenced in Chapter 13: Material Resources Part A [APP-056] and Chapter 13: Material Resources Part B [APP-057] and used to consider the Scheme against the Applicant's overarching ambitions for sustainability, including those for materials and waste.</li> <li>2. The HE SDS document is noted to comply with the National Policy listed in Table(s) 13.2 (for both chapters, above), as follows: National Policy Statement for National Networks (2015), National Planning Policy Framework (2019), Waste Management Plan for England (2013), National Planning Policy for Waste (2014) and National Policy Statement for Hazardous Waste (2013).</li> <li>3. Accordingly, the SDS should be afforded a significant weight during Examination, due to its alignment with national policy and relevance to the Scheme.</li> </ol>
MR.1.2	Applicant	Table 13.16 of the ES [APP-056] states that suitable earthworks cut would be reused and retained where possible and placed in landscape bunds within the Order Limits. In particular, these would be reused on site in landscape bunds (specifically within proposed bunds 1, 2, 7, 8, 9, 10, 11, 12 & 13).  Please direct the ExA to where these proposed bunds are shown on a plan.	<ol style="list-style-type: none"> <li>1. The proposed bunds are shown on Figure 7.8: Landscape Mitigation Masterplan Part A [APP-095], depicted in pink and labelled as 'Essential mitigation – earth bund'.</li> </ol>
<b>Part B</b>			
MR.1.3	Applicant	Section 13.5 of the ES [APP-057] does not refer to the presence of Ash Dieback disease in the location of Part B in spite of Part A [APP-057] noting that the disease may adversely impact the reuse of site-won earthworks.	<ol style="list-style-type: none"> <li>1. As stated in paragraph 2.7.4 of Appendix 7.1: Arboricultural Report Part B [APP-057], Ash Dieback disease was confirmed as being present within a 10km square incorporating the southern section of Part B since 2014. However, the prevalence of the disease was not considered significant enough to warrant inclusion within the Chapter 13: Material Resources Part B [APP-057], and hence it is not specifically mentioned as a material consideration. The management of any vegetation waste affected by the disease will be as per the</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		Please clarify whether Ash Dieback disease would be a consideration in relation to Part B.	requirements set out in Item S-B13 of the Outline CEMP [APP-346], for example Ash trees with ash dieback disease will be disposed of in-situ due to legal restrictions on the movement of plants infected with the disease.
MR.1.4	Applicant	Table 13.15 of the ES [APP-057] shows Material Assets Imported to site during the Construction Phase. In respect of asphalt the amount for Part B is 120,000 tonnes while that for Part A (Table 13.15) [APP-056] is 60,702 tonnes. Similarly, for concrete the respective figure for Part A are 8,450 tonnes and Part B 23,420 tonnes.  Please explain the reasons for such wide variations between the two Parts.	<ol style="list-style-type: none"> <li>1. The figure of 60,702 tonnes used in Table 13.15 of Chapter 13: Material Resources Part A [APP-056] for asphalt was incorrect and should, in fact, be 210,000 tonnes. The incorrect figure was used in the first draft of the ES based on early data and was not updated (in error) when revised data was received from the buildability contractor. However, the Applicant can confirm that the change in figure (from 60,702 to 210,000) would not change the conclusions of the assessment presented in Chapter 13: Material Resources Part A [APP-056].</li> <li>2. The figure of 120,000 tonnes of asphalt for Part B is lower than the volume required for Part A (now known to be 210,000 tonnes) due to the fact that Part A not only requires offline sections (Part B does not) but is of a greater length overall (Part A is 12.6km; Part B is 8km). New sections of road over a longer distance requires greater volumes of asphalt for surfacing.</li> <li>3. The variation in the volumes of concrete between Part A and Part B is due to the fact that the concrete calculations for Part B (23,420 tonnes) <i>included</i> 16,200 tonnes of concrete for surface water channels (SWC), which were incorporated due to an uncertainty on the exact drainage design at the time of the assessment. The uncertainty concerning the exact extent of the drainage design was the result of the fact that the submission date for the environmental assessment was <i>prior</i> to the completion of site surveys and preliminary design; hence, as no design information on the SWCs was available, a reasonable worst case scenario regarding the use of concrete for SWCs was adopted in the environmental assessment.</li> <li>4. If the SWC data for concrete are discounted from the calculation, the overall figures for concrete required for Part A and Part B would be relatively similar: Part A would require 8,450 tonnes and Part B would require 7,220 tonnes.</li> </ol>
MR.1.5	Applicant	Table 13.16 of the ES [APP-057] shows Forecast Site Arisings that can be Recovered and Hence Diverted from Landfill. For topsoil the amount for Part B is 11,840 tonnes while the comparable figure for Part A [APP-056] is 160,000 tonnes.  Please explain the reasons for such wide variations between the two Parts.	<ol style="list-style-type: none"> <li>1. Part A would require approximately 6.1 km of the route to be constructed offline (refer to Chapter 2: The Scheme [APP-037]). This would require removal of a much larger tranche of topsoil to construct the new road, in comparison to Part B which would have minimal offline section or other substantial requirement for topsoil removal.</li> </ol>
MR.1.6	Applicant	Table 13.17 of the ES [APP-057] shows Forecast Site Arisings that have been Identified for Disposal to Landfill. For Part B the earthworks and topsoil cut figure is 2,715 tonnes while for Part A [APP-056] the unsuitable earthworks cut figure is 315,000 tonnes.  What does the difference in terminology indicate and why are the figures so widely different?	<p><b><u>General Discussion on Terminology</u></b></p> <ol style="list-style-type: none"> <li>1. Forecast Site Arisings is a generic term that refers to any material resource that is generated on site through construction, demolition or excavation activities. Such resources may be managed in a number ways, including reuse and recycling, or landfill. 'Topsoil arisings' and 'unsuitable earthworks cut' would form part of Forecast Site Arisings on any site.</li> <li>2. Whilst different terms for site generated resources have been used for Part A and Part B and (therein) tables, it is the sub-section (and specific table) headings that best articulate the arisings and how they are to be managed.</li> <li>3. Specifically, any data for earthworks that is forecast as to be <i>disposed of to landfill</i> (as shown in Table 13.17 in Chapter 13: Material Resources Part B [APP-057]), refer to cut material that is unsuitable for reuse in any application on site (i.e. it is either not needed, or is unsuitable as recovered engineered fill, or is unsuitable for non-structural applications).</li> <li>4. Any data for earthworks is forecast to be <i>recovered</i> as shown in Table 13.16 of Chapter 13: Material Resources Part B [APP-057], refers to forecast site arisings that <i>can</i> be reused on site.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>5. This is now summarised.</p> <p><b>Summary and Explanation of Data</b></p> <ol style="list-style-type: none"> <li>With reference to Chapter 13: Material Resources Part A [APP-056], 735,000t of earthworks cut (as part of a total 800,300t forecast site arisings) was forecast to be generated, particularly as a result of the need to create an offline section of highway. Of this:           <ul style="list-style-type: none"> <li>160,000t would be <b>topsoil</b> (reuse) – <i>due to the extensive removal of topsoil across the offline sections</i></li> <li>260,000t would be <b>suitable earthworks</b> (reuse) – <i>the design can use these arisings for landscaping / bunding at site</i></li> <li>315,000t of earthworks - notwithstanding that this material would be <b>unsuitable</b> for reuse in an engineering capacity, it is simply <b>not needed at site</b> (surplus, landfill) – <i>this volume of forecast generated earthworks greatly exceeds the need for landscaping and bunding, and hence is to be exported from site and is destined for landfill.</i></li> </ul> </li> <li>With reference to Chapter 13: Material Resources Part B [APP-057], 283,075t of earthworks cut was forecast (less than Part A, and particularly as no offline route section would be required). Of this:           <ul style="list-style-type: none"> <li>11,840t would be <b>topsoil</b> (reuse) – <i>a smaller volume of arisings by comparison with Part A, and that can be reused on site</i></li> <li>185,900t would be <b>suitable earthworks</b> (reuse) – <i>the design can use these arisings for landscaping / bunding at site</i></li> <li>85,875t of earthworks, which is currently <b>unsuitable</b> for reuse in an engineering capacity at site - <i>of this volume:</i> <ul style="list-style-type: none"> <li>83,160t would be <b>needed at site</b> in either in non-structural applications (<i>bunding</i>) or would be made suitable for structural applications through lime stabilisation (<i>embankments</i>) (reuse); and</li> <li>2,715t would <b>not be needed at site</b> (surplus, landfill).</li> </ul> </li> </ul> </li> <li>Again, the variance in the volume of earthworks arisings generated on Part A and Part B is the result of the fact that Part A is greater in length than Part B (Part A is approximately 12.6km and Part B is approximately 8km as set out in Section 2.5 of Chapter 2: The Scheme [APP-037]). In addition, Part A incorporates an offline section of 6.1km, which requires the construction of a new road, rather than widening of the existing road, which would produce large volumes of topsoil and earthworks across nearly half of its length .</li> </ol>
MR.1.7		<p>Paragraph 13.10.16 of the ES [APP-057] states that the sensitivity test has identified that Part B would achieve 99% material recovery / recycling. In comparison Part A (paragraph 13.10.16) [APP-065] estimates a 61% recovery would be achieved.</p> <p>Please explain the difference in recovery rates between the two Parts.</p>	<ol style="list-style-type: none"> <li>The recovery rates refer to the amount of non-hazardous construction and demolition waste that can be recovered and/or recycled to substitute use of primary materials on the Scheme.</li> <li>The reason for the lower recovery percentage for Part A is that - by virtue of the design and (hence) the minimal need for fill material - the large volume of cut material on this section was not needed (and would have also been unsuitable for any application on site, <i>should</i> the need have been identified) and was therefore identified for disposal to landfill.</li> <li>High-level estimates for recovery are based on the total volume of recoverable arisings compared with the total volume forecast to be disposed of to landfill. These are then expressed as a percentage of the total volume of arisings and waste. This is summarised below:</li> <li>For Part A, the total volume of forecast arisings is 800,300t, of which 484,500t could be recovered (61%); 315,800t is identified for disposal to landfill (39%). Refer to Chapter 13: Material Resources Part A [APP-056].</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			5. For Part B the total volume of forecast arisings is 310,060t, of which 307,345t could be recovered (99%); 2,715t is identified for disposal to landfill (1%). Refer to Chapter 13: Material Resources Part B [APP-057].

**Table 1-11 - Noise and Vibration**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
NV.1.1	Applicant	<p>Section 6.7 of the ES [APP-042] provides an overview of the baseline conditions for Part A. Noise sensitive receptors are presented in Table 6.20, Noise Important Areas are identified in Table 6.21 and Designated areas and Footpaths are presented in Table 6.22. The measurement locations for the noise surveys and the extent of the survey area are presented in Figure 6.1 [APP-079]. Table 6.18 presents the baseline noise survey results for long term unattended monitoring. Table 6.19 presents baseline noise survey results for short-term attended measurements.</p> <p>Can the Applicant clarify why the long-term monitoring shown in Table 6.18 was only undertaken for a single 24-hour period?</p>	<ol style="list-style-type: none"> <li>1. The noise survey results were not directly used in the assessment of operational noise. This is because it is not appropriate to compare measured baseline noise levels, which were completed a number of years prior to the opening of the Scheme with the opening or design year without Scheme scenarios. Therefore, to obtain a consistent and reproducible set of comparisons it is appropriate to compare predictions with other predictions and not with measurements obtained at a limited number of receptors for a year prior to opening, regardless of how long those measurements are undertaken for.</li> <li>2. However, they were used to inform the application of a noise model acoustic ambient correction (as described in section 1.10 of the Noise Addendum (Document Reference 6.22). They were also used to inform the derivation of the significant observed adverse effect level (SOAEL) and lowest observed adverse effect level (LOAEL) applied within the assessment of construction noise impacts using the ABC method from BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise.</li> <li>3. In terms of the duration of a noise survey, DMRB HD213/11 (in Annex 7, paragraph 7.8 notes that:           <p style="margin-left: 40px;"><i>“To fully understand the noise climate of an area it may be necessary to conduct a full 24 hour measurement at some sites.”</i></p> </li> <li>4. Given the above and in line with DMRB HD 213/11, it was therefore considered that a survey undertaken at a number of sites over a single 24-hour duration was sufficient to provide an appreciation of the existing noise climate at selected locations and specifically to inform the two aspects of the assessment noted above.</li> </ol>
NV.1.2	Applicant	<p>Paragraph 9.9.19 of the ES [APP-042] states that Part A gives rise to significant adverse noise effects at three receptors. Paragraph 9.9.23 indicates that 3m high noise barriers were tested in these locations but did not reach the 3 decibel threshold for meaningful benefit to the residents of those properties. Therefore, it is proposed to install 4m noise barriers at these locations.</p> <p>Can the Applicant explain what the decibel reduction benefit of a 4m high noise barrier would be compared to the 3m high barrier?</p>	<ol style="list-style-type: none"> <li>1. The following noise level reductions are based on the operational noise assessment presented within Noise Addendum (Document Reference 6.22). The noise reduction applicable to 3 m and 4 m high barriers is calculated by comparing the predicted noise levels for the 'with Scheme' Do-Something 2024 scenario with and without the barrier.</li> <li>2. The two noise barriers proposed at a height of 4 m are noise barrier PNB 2 and PNB 3 which are included to reduce noise levels at the receptors which are predicted to experience significant adverse operational noise effects, namely, New Houses Farm (receptor group 11 within Table 1-30 of the Noise Addendum (Document Reference 6.22), and Joiners Cottage and The Cottage, Causey Park (receptor group 10 within Table 1-30 of the Noise Addendum (Document Reference 6.22). The proposed barriers are shown on Figure 1: Operational Road Traffic Noise Study Area, within Appendix D: Noise Addendum Figures, Part 1, Document Reference 6.22.2. These mitigation measures are secured through the Outline Construction Environmental Management Plan (Outline CEMP) [APP-346] in Table 3-2, rows A-N2 and A-N3.</li> <li>3. At New Houses Farm (group 11) PNB3 gives a maximum noise reduction of 2.7 dB at a height of 3 m and a maximum noise reduction of 4.1 dB at a height of 4 m.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>4. At Joiners Cottage (group 10), PNB2 gives a maximum noise reduction of 2.9 dB at a height of 3 m and a maximum noise reduction of 3.8 dB at a height of 4 m.</li> <li>5. At The Cottage (group 10), PNB2 gives a maximum noise reduction of 2.8 dB at a height of 3 m and a maximum noise reduction of 3.7 dB at a height of 4 m.</li> <li>6. Plainly, the benefit of a 4 m high barrier is superior to that of a 3 m high barrier.</li> </ol>
NV.1.3	Applicant	<p>Table 6.35 of ES [APP-042] explains the level of significance experienced at all of the receptors which were included in the noise assessment. Significant adverse residual effects are identified at Group 7 (two receptors) and Group 8 (1 receptor). The ES does not appear to explore any other possible mitigation measures.</p> <p>Can the Applicant clarify what alternative mitigation measures have been explored with regard to reducing noise levels at the three receptors located in Group 7 and Group 8?</p>	<ol style="list-style-type: none"> <li>1. As stated within Table 1.3 of the Noise Addendum (Document Reference 6.22) the Scheme has been designed as far as reasonably possible to avoid passing unnecessarily close to sensitive receptors. The vertical alignment was lowered as far as practicable given other design constraints, therefore increasing the potential for screening of the Scheme. In addition, a low noise surface (LNS) would be installed on the entire length of the Scheme (except across structures).</li> <li>2. For the significant adverse operational noise affects identified in Groups 7 and 8 (Groups 10 and 11 respectively in the Noise Addendum (Document Reference 6.22)), noise barriers (PNB2 and PNB3) at a height of 4m have been included as a mitigation measure (and are secured through the Outline CEMP [APP-346]). Whilst noise bunds were considered for these locations, noise barriers are a more practicable option given the constraints associated with the space required to install an earth bund of the required length and height. The footprint of an earth bund would be an order of magnitude greater than a barrier providing a similar acoustic performance. For example, assuming a 1:3 gradient (although an extended slope away from the road may be more appropriate), with a 1 m wide crest, a 4 m high earth bund would require a 25 m wide footprint. Furthermore, it may be that an earth bund would need to be of greater height than a barrier, to compensate for the crest of the bund being further from the carriageway than a barrier, which otherwise would typically result in a slightly poorer acoustic performance.</li> <li>3. In addition to the proposed noise barriers, the following alternative mitigation measures were considered.</li> </ol> <p><b><u>Road Speed and Vehicle Restrictions</u></b></p> <ol style="list-style-type: none"> <li>1. Whilst a reduction in the road speed limit or a restriction on noisy vehicles using the Scheme would have the potential to reduce noise levels, such measures are not normally suitable for use on motorways and all-purpose trunk roads such as those contained in the Scheme. This is acknowledged within the DMRB LA 111 Noise and Vibration which notes that:   <i>"Speed limits or restrictions on noisy vehicle types are not normally practical for use on motorways and all-purpose trunk roads"</i></li> </ol> <p><b><u>Modifications to Affected Buildings</u></b></p> <ol style="list-style-type: none"> <li>1. Receptor buildings themselves can be treated in order to improve the sound insulation of building façades whilst also considering appropriate ventilation provision. Modification of affected buildings, such as the installation of secondary glazing, has not been considered at this stage as the operational noise assessment is based on external levels incident on the façades of a receptor. Modifications to the building would not influence external noise levels and therefore would not reduce the impacts at receptors predicted to experience significant adverse effects as a result of the Scheme.</li> <li>2. The absolute noise levels at the receptors within Groups 7 and 8 (Groups 10 and 11 respectively in the Noise Addendum (Document Reference 6.22)) are not high and are below the threshold for triggering eligibility for secondary glazing under the Noise Insulation Regulations (NIR). Amongst other criteria, eligibility under the NIR is triggered where the relevant noise level (L<sub>A10, 18h</sub> Do-Something future year (2038)) is equal to or greater than 67.5 dB. Therefore, although the provision of secondary glazing would succeed in increasing the acoustic performance of windows (where they are closed), the benefits achieved through the installation of secondary glazing are unlikely to be fully perceived by the occupants particularly given that these properties may rely on</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>opening windows for ventilation and cooling. For context, the three receptors in Groups 7 and 8 (Groups 10 and 11 respectively in the Noise Addendum (Document Reference 6.22)), Joiners Cottage and The Cottage, Causey Park and New Houses Farm have the following predicted relevant noise levels (which include the benefits from the proposed noise barriers) which are below the 67.5 dB level:</p> <ul style="list-style-type: none"> <li>• Joiners Cottage, Causey Park: 57.0 dB <math>L_{A10,18h}</math></li> <li>• The Cottage, Causey Park: 59.4 dB <math>L_{A10,18h}</math></li> <li>• New Houses Farm: 56.0 dB <math>L_{A10,18h}</math></li> </ul> <p><b>Loss of Value</b></p> <ol style="list-style-type: none"> <li>1. It should be noted that following a year and a day after the opening of the Scheme, residents would potentially be able to claim compensation for loss of value to their property on the grounds of noise through Part 1 of the Land Compensation Act 1973.</li> </ol>
NV.1.4	Applicant	<p>Part A and Part B contain a commitment to monitor impacts from noise and vibration during construction [APP-042 and APP-043]. No monitoring arrangements are intended for the operational phase.</p> <p>Can the Applicant explain why monitoring will not be undertaken, given that there are significant adverse impacts which have been identified at three residential properties in Part A?</p>	<ol style="list-style-type: none"> <li>1. The approach to the operational phase assessment was to follow the appropriate guidance set out within the DMRB HD213/11. This guidance prescribes, as does its successor DMRB LA 111, a predictive approach to assessment which relies upon provided traffic data applicable to annual average conditions both with and without the Scheme. This approach ensures like-for-like comparison. It is not possible to replicate this assessment through monitoring within reasonable timescales.</li> <li>2. To compare measured noise levels with and without the Scheme, it would be necessary that without Scheme monitoring be completed before the start of any construction works and would therefore be a number of years before the with-Scheme monitoring. The assessment presented in the Noise Addendum (Document Reference 6.22) considers with and without Scheme scenarios for the year of opening and design year (as described in Section 1.7 Assessment Methodology of the Noise Addendum (Document Reference 6.22)). It would not be possible to make this like-for-like comparison using measured noise levels. Monitoring of noise levels post construction is not routinely undertaken for road schemes and therefore is not proposed in this situation.</li> <li>3. The assessment completed is based on calculated road traffic noise levels only and is therefore not influenced by other noise sources and possible variables. Variables including, but not limited to, daily fluctuations in vehicle movements, the influence of meteorological conditions, and the influence of sources other than road traffic noise, can all affect measured noise levels making it difficult to undertake a like-for-like comparison with and without the Scheme.</li> <li>4. The Outline CEMP [APP-346] includes details of the proposed maintenance of assets, including the noise mitigation measures (low noise road surface and proposed noise barriers) following the opening of the Scheme. Paragraph 5.2.2 of the Outline CEMP [APP-346]. states:           <p><i>“In the longer term, expected planned maintenance will include activities such as resurfacing the road and replacement of assets when they become life expired.”</i></p> </li> </ol>

**Table 1-12 - Population and Human Health**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
PHH.1.1 [sic]	Public Health England	Paragraph 4.2.31 of the ES [APP-039] states that Public Health England recommended the consideration of Electric and Magnetic Fields (EMF) in the ES. As set out in paragraph 4.2.39, based on the initial assessment the proposals would be compliant with EMF exposure guidelines and the issue has therefore been scoped out of further assessment. Is Public Health England content with this outcome?	
PHH.1.2 [sic]	Applicant	Paragraph 12.1.4(e) of the ES [APP-054] states that Part A considers employment by industry baseline data for 2011, whereas Part B also considers data for 2017 / 2018, because the assessments were completed at different times. However, it is considered that there would be no material difference if 2017 / 2018 data was used for Part A. Explain how this conclusion has been drawn.	<ol style="list-style-type: none"> <li>1. The reference in paragraph 12.1.4 (e) of Chapter 12: Population and Human Health Part A [APP-054] to 2011 data being used for Part A is an error as Table 12-30 of Chapter 12: Population and Human Health Part A [APP-054] was updated before submission of the ES to include 2017/2018 data. The approach and data used in Part A and Part B was therefore the same. This does not affect the outcome of the assessment.</li> </ol>
PHH.1.3 [sic]	Applicant	ES paragraphs 12.4.49 [APP-054] and 12.4.44 [APP-055] state that the number of jobs generated is based on an evaluation of total construction cost against average gross output per construction worker. It is not stated what the average gross output per construction worker is, nor the source of this metric. The Applicant is requested to provide this information.	<ol style="list-style-type: none"> <li>1. The methodology set out within paragraph 12.4.49 of Chapter 12: Population and Human Health Part A [APP-054] and paragraph 12.4.44 of Chapter 12: Population and Human Health Part B [APP-055] refers to the English Partnerships Additionality Guide.</li> <li>2. In accordance with the approaches within this guidance, the gross output per construction employee used within the calculations is £146,492 (which is applicable for both Part A and Part B). This figure is derived from the Business Register and Employment Survey (2018) (BRES) and the Construction Statistics Annual, No.17 (from the ONS).</li> </ol>
PHH.1.[sic]	Applicant	Paragraphs 12.4.64 [APP-054] and 12.4.60 [APP-055] of the ES refer to "human health receptors" (including residential premises / homes, care homes, hospitals, schools, places of worship, sensitive commercial premises, neighbourhoods and communities within the area) but these are unspecified. The Applicant is requested to confirm precisely what assets are considered human health receptors.	<ol style="list-style-type: none"> <li>1. Under the Health Summary within Section 12.7, paragraphs 12.7.84 to 12.7.86 of Chapter 12: Population and Health Part A [APP-054] and Chapter 12 Population and Human Health Part B [APP-055], the following text is stated:  <i>'The sensitivity of the human health receptors has been determined using baseline data gathered at the county level, therefore the sensitivity rating is applicable for this scale, and cannot be determined for a smaller scale. It has been assumed that vulnerable populations (such as children and older people) are present across the Study Area, and these populations may be more susceptible to impacts than the general population.'</i></li> <li>2. As the data used in the assessment is at a county level, it is therefore only possible to assess the impacts at a county level. It follows that particular assets cannot be identified as human health receptors because individual receptors have not been assessed in this way.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
PHH.1.2 [sic]	Applicant	<p>Table 12.4 of the ES [APP-054] confirms that the NCC PRoW Officer was consulted and agreed with the proposed methodology to assess the potential effects on PRoW as a result of Part A.</p> <p>What is the response of NCC to the effect of the Proposed Development on PRoW? Are appropriate alternatives proposed where closures / diversions are required?</p>	<ol style="list-style-type: none"> <li>1. Although the ExA's First Written Questions document directs this question to the Applicant, the Applicant assumes this was intended to be directed at Northumberland County Council (NCC) and therefore a response is not provided.</li> <li>2. The methodology for assessing the effects on PRoW is as outlined in the Scoping Report [APP-338], in the assessment for Chapter 12: Population and Human Health Part A [APP-054], and as outlined to NCC, follows the prescribed guidance from DMRB, as outlined in Volume 11, Section 3, Part 8. WCH facilities have been developed as part of the Scheme design and the embedded mitigation is described section 12.9 of Chapter 12: Population and Human Health Part A [APP-054].</li> <li>3. Temporary and permanent diversions of Public Rights of Way (PRoW) (as shown on the Rights of Way and Access Plans [APP-009]) have been proposed where practicable and possible, following consultation with NCC and local landowners. Due to the nature of the Scheme (whereby single carriageway is to be widened to dual carriageway) PRoW which previously stretched either side of the carriageway (with no formal crossing of the A1) have been stopped up for safety and accessibility reasons, therefore increasing journey lengths for WCH to incorporate two grade separated safe crossing facilities.</li> <li>4. The mitigation measures and diversions for WCH and PRoW described in Section 12.9 of Chapter 12 are deemed to be appropriate and proportionate to the low level of usage of the PRoW network, as demonstrated by the survey data outlined in Appendix TT.1.</li> </ol>
PHH.1. [sic]	Applicant	<p>Tables 12.5 and 12.6 of the ES (Part A [APP-054] and Part B [APP-055]) present thresholds used to assign levels of stress for single and dual carriageway roads respectively. These are meant to replicate those in the DMRB guidance. However, the average journey speed in Table 12.6 differs from that in the DMRB: Table 2 in the DMRB has three categories (Under 60, 60-80, and Over 80 km/hr) while in Table 12.6 these are lower (Under 50, 50-70, and Over 70 km/hr). Can the Applicant explain this discrepancy?</p>	<ol style="list-style-type: none"> <li>1. This is a transcription error between the DMRB guidance and Table 12.6 of Chapter 12: Population and Health Part A of the ES [APP-054] and Table 12-6 Chapter 12: Population and Human Health Part B [APP-055] and should state "Under 60, 60-80, and Over 80 km/hr". All driver stress assessment for Part B has been assessed according to DMRB thresholds as stated within DMRB, Volume 11, Section 3, Part 9 and the findings reported within Chapter 12: Population and Human Health Part A [APP-054] and Part B [APP-055] are correct and a revised analysis confirming the results has been submitted at Deadline 1 in Appendix PHH.1.</li> <li>2. A number of errors have been identified in Appendix 12.2: Driver Stress Part A [APP-267] for the driver stress ratings for specific links on the affected road network, and a revised Appendix 12.2 has been submitted at Deadline 1 in Appendix PHH.1 alongside a revised summary of the assessment. Rectified driver stress ratings are shown in Tables 1-7 and 1-8 of Appendix PHH.1.</li> <li>3. It is not considered that there is a material change to the findings of the assessment for operational driver stress despite the transcription errors. Once operational, it is expected that Part A will result in reduced driver stress, when compared with the "do minimum" scenario (which shows that the majority of sections along the existing A1 would be of Moderate or High levels of driver stress), and also accommodate much higher volumes of traffic due to the additional lanes along the main trunk of the A1. In a 'do something' scenario, driver stress ranges from Low to High driver stress along the A1 in the Study Area.</li> <li>4. There is no material change to the findings of the assessment despite the transcription error, as is outlined in the summary provided within Appendix PHH.1.</li> </ol>
PHH.1.2	Applicant	<p>Paragraph 12.6.12 of the ES [APP-054] states that the study area for the assessment of agricultural land holdings is restricted to the Order Limits, whereas other physical assets have been assessed with a study area of the Order Limits plus 500m. The Applicant is requested to explain why this is a suitable area to</p>	<ol style="list-style-type: none"> <li>1. All Agricultural land holdings whose land holding or direct access falls within the Order limits are included in the assessment. No amendments to the road network would be made outside of the Order limits and therefore no impacts on direct access are expected beyond this.</li> <li>2. Where a farm holding has a land parcel or access within the Study Area, the impact on the entire farm holding has been assessed. Therefore, land beyond the Order limits is included within the Study Area. Where a land holding lies entirely outside of the Order limits, and whose access is not affected, it is not likely that there would be any significant impacts that would impact on the viability of a land holding.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		capture all agricultural land holdings that might be affected in terms of access, water supply and drainage?	<ol style="list-style-type: none"> <li>3. The assessment of impacts to the farm holding considers a number of criteria: the importance of the land (i.e. whether it is imperative to a business operation); the availability of alternative land within the vicinity; and the proportion of the land-take as an overall quantum of each land holding. The assessment has also drawn upon interviews with the affected landowners to ensure that any key issues have been identified, reported and assessed.</li> <li>4. Potential impacts from flooding and on water supply and drainage are also considered within Chapter 10: Road Drainage and the Water Environment Part A [APP-050], Appendix 10.1: Flood Risk Assessment Part A [APP-254] and Appendix 10.5 Drainage Strategy Part A [APP-258]. A study area of 500m from the Order Limits is considered within this assessment for surface water features and the surface water environment. This includes potential effects to the hydrology and water quality of watercourses and drainage ditches within 500m from the Order limits, as well as affects to the hydrology and water quality of watercourses downstream of the Order limits that are hydraulic connectivity to those features within 500m. Groundwater features (including abstraction and discharge points) which lie up to 1km from the Order Limits are also considered. Therefore, all agricultural land which falls within these study areas is encompassed in the assessment for the water environment.</li> <li>5. The Applicant's approach for advanced surveys is that they will be undertaken prior to the start of works to allow any alterations required to the existing land drains to be identified and accommodated within the temporary works and final Scheme proposal. The Applicant will engage with landowners with regards to these matters when the design and specification has commenced and consultation is required. The Outline CEMP [APP-346] will further develop Action B-PH4(e), as set out in the Register of Environmental Actions and Commitments. This confirms that drainage affected by the construction works will be reinstated and any damage to drains will be made good. Action S-GS15 confirms there will be a programme of monitoring soil conditions following reinstatement of temporary land take. Suitable remediation would include subsoiling or drainage followed by crop establishment</li> <li>6. Additionally, the following measures to reduce the impacts of the construction of Part A on agricultural land and land holdings are included in the Outline CEMP [APP-346] under reference A-PH3 and include: <ul style="list-style-type: none"> <li>• Returning agricultural land, which is used temporarily for construction to the owner, restored close to its former productive capacity.</li> <li>• Maintain water supplies and utility services where required. Water troughs will be moved and re- located to an agreed alternative location before work begins if stock are to remain grazing the land. Land and surface drainage affected by the construction works will be reinstated and land restored to a functional state. Any damage to the land or surface drains will be made good.</li> </ul> </li> </ol>
PHH.1.3	Applicant	Paragraph 12.6.13 of the ES [APP-054] states that the assessment of impacts on the economy and employment during construction focuses on the county of Northumberland. This is because it is assumed that much of the construction workforce would be drawn from the regional labour market. Clarify the extent of the regional labour market. Is this Northumberland or further afield?	<ol style="list-style-type: none"> <li>1. As outlined within Table 12-17 of Chapter 12: Population and Human Health Part A [APP-054], the Study Area for economy and employment is the county of Northumberland The regional economy is considered to be that of the North East.</li> </ol>
PHH.1.4	Applicant	It is stated in paragraph 12.7.35 of the ES [APP-054] the PRow in the Study Area do not form a coherent network. In addressing changes which needed to be	<ol style="list-style-type: none"> <li>1. The measures and provision of PRow and WCH routes included within the Scheme are sufficient to reasonably mitigate the impacts on the PRow network and its users, and provide connectivity either side of the A1.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		made to the PRow network as a result of the Proposed Development were any opportunities identified to make the network more coherent? Would NCC wish to comment on the opportunities for a more coherent PRow network?	<ol style="list-style-type: none"> <li>2. Existing at-grade, informal crossings have been replaced with grade separated provision in two locations for pedestrians, in addition to a series of diversions and new sections of PRow, as detailed on the Rights of Way Plans [APP-009]. Amendments and improvements to the PRow network beyond the requirements of the Scheme, to make the PRow network more coherent are not the Applicant's responsibility, and are for NCC to address. The Scheme objectives as presented in paragraph 2.2.1 of Chapter 2: The Scheme [APP-037] do not contain any that specifically relate to improvements to the PRow network.</li> <li>3. However, the Applicant will continue to work with NCC and support their initiatives around rights of way. Subject to funding availability and meeting set criteria, such as being able to demonstrate that an enhancement or measure is an activity deemed beyond business as usual that is not required to mitigate the impacts of the Scheme, there may be opportunities to make use of Designated Funds. Designated Funds is a series of the ring-fenced funds provided by Government to address a range of issues over and above the traditional focus of road investment and may be available to deliver additional enhancements, for example, PRow to enhance safety, connectivity and integration. The Applicant will liaise with NCC to identify possible enhancements for which Designated Funds can be applied for and if successful may be delivered alongside the Scheme. There may also be other funding opportunities that NCC can explore such as through the Department for Transport Transforming Cities Fund.</li> <li>4. Although the ExA's First Written Questions document directs this question to the Applicant, the Applicant assumes the last sentence was intended to be directed at NCC and therefore a response is not provided to this.</li> </ol>
PHH.1.5	Applicant	The Applicant is asked to provide a plan showing all PRow and any other walker, cyclist and horse rider (WCH) routes in a wider context and the effect of the Proposed Development on these networks.	<ol style="list-style-type: none"> <li>1. The Applicant notes that this question has been asked in relation to Part A. For Part B, there is already a plan (Figure 12.2 Local Communities and Community Facilities [APP-182]) which shows PRow within the 500m study area. As no similar question has been asked for Part B, the Applicant understands that the ExA is looking for a similar plan to be produced for Part A as this was not included in the application.</li> <li>2. This is produced at Appendix PHH.2 to show all Public Rights of Way and other WCH routes within 500m, in accordance with the Study Area defined in Chapter 12: Population and Human Health Part A [APP-054] (and as outlined within the Scoping Report Part A [APP-338]), and is submitted at Deadline 1. The effects on these PRow and other routes, and users of these are described in Chapter 12: Population and Human Health [APP-054], Section 12.10, under community severance and journey amenity.</li> </ol>
PHH.1.6	NCC	Is NCC content that the 2016 survey data provides a realistic representation of how the local footways and PRow are being used by WCH?	
PHH.1.7	Applicant	<p>Table 12.24 of the ES [APP-054] presents a Summary of WCH Movements within the Study Area in 2016. Paragraph 12.7.43 states that existing WCH movements were carried out between July and September 2016, over seven days (three Thursdays, and two weekends).</p> <p>Do the results in Table 12.24 provide totals for the seven days? Over what time period each day was data recorded?</p>	<ol style="list-style-type: none"> <li>1. The results in Table 12.25 [APP-054] do provide totals for the seven days. Walking, cycling and equestrian movements were recorded with a mounted camera at 22 locations along Part A. The survey was undertaken between 05:30 and 21:00 hours on the following dates in 2016, and reported within the WCHAR produced in 2018:           <ul style="list-style-type: none"> <li>Thursday 28th July</li> <li>Saturday 30th July</li> <li>Saturday 27th August</li> <li>Thursday 1st September</li> <li>Saturday 3rd September</li> <li>Saturday 10<sup>th</sup> September</li> </ul> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<ul style="list-style-type: none"> <li>• Thursday 15th September</li> </ul> <ol style="list-style-type: none"> <li>2. Results in Table 12.24 of Chapter 12: Population and Human Health Part A [APP-054] provide the totals for all seven days combined.</li> </ol>
PHH.1.8	Applicant	Paragraph 12.9.16 of the ES [APP-054] states that any temporary diversionary works or closure of WCH routes (as identified in Table 12- 37) would be undertaken following consultation with affected individuals, groups, and NCC. To what effect would the consultation be meaningful if a decision on the closure / diversion of a route had already been taken through the DCO?	<ol style="list-style-type: none"> <li>1. During construction, the Main Contractor will be required to develop a PRow Management Plan (requirement is set out in Table 3-1: Register of Environmental Actions and Commitments (references S-PH2, S-PH6, S-PH7, S-PH9, B-PH1 and B-PH5), and Table 5-1 Monitoring to be Carried out During Construction in the Outline CEMP [App-346] which will highlight where potential PRow closures and diversions are required, and the extent of any reinstatement works required.</li> <li>2. Tables 7 and 8 of the Construction Traffic Management Plan [APP-347] shows a schedule of PRow affected and includes summary details of their management during the construction phase. Consultation in this instance will not be on the principle of whether or not a diversion would be required (as this is secured through the DCO), but rather the nature of the implementation of the diversion and to determine details such as timing, duration and the location and requirement for signage,</li> </ol>
PHH.1.9	Applicant	ES paragraphs 12.10.57 [APP-054] and 12.10.37 [APP-055] state that the sensitivity of local economic receptors is medium. It is not clear what exactly is meant by 'economic receptors' and there is no justification for attributing them a 'medium' sensitivity. The Applicant is asked to clarify this matter.	<ol style="list-style-type: none"> <li>1. The economic receptors covered and referred to by the assessment in Chapter 12: Population and Human Health, both Parts A and B [APP-054 and APP-055] are the economy and employment market of Northumberland. It is considered for the assessment that the local economy and receptors are those of the county of Northumberland but that employment effects may extend beyond Northumberland due to the scale of the Scheme, economic linkages and travel to work patterns, (as was detailed in the Scoping Report for Part B [APP-339]). The regional economy is considered to be that of the North East.</li> <li>2. As stated in paragraph 12.4.63 of Chapter 12: Population and Human Health Part A [APP-054] and paragraph 12.4.59 of Chapter 12: Population and Human Health Part B [APP-055], sensitivity criteria within Table 2.1 and 2.2 of DMRB Volume 11, Section 2, Part 5 (HA 205/08), in combination with professional judgement is applied for the assessment of economy and employment. Table 2.1 refers to receptors of a local scale being of low value and a regional scale being of a medium value / sensitivity. Due to the rural nature of the area, (Northumberland), and the size of Northumberland as a county, it is considered that a medium sensitivity is appropriate for the purposes of assessment. Individual economic receptors affected by the Scheme are assessed under the assessment of commercial property.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
PHH.1.10	Applicant	Chapter 12 of the ES [APP-054] and the supporting Figures contain some inconsistencies between properties comprising the baseline for 'residential and commercial properties. For Part A, the Applicant is requested to ensure that residential properties in Tables 12.25 and 12.26 [APP-054] are consistent with Figure 7.6 [APP-109], and that commercial properties in Tables 12-27 and 12-28 [APP-054] are consistent with Figure 12.2 [APP178]. PHH.1.10	<ol style="list-style-type: none"> <li>1. It is assumed that the comment refers to Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093].</li> <li>2. Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] presents a Study Area of 1km, whereas the residential properties assessed within Chapter 12 Population and Human Health Part A [APP-054] are identified within a 500m study area. This means that not all properties shown on Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] are included within Chapter 12 Population and Human Health Part A [APP-093].</li> <li>3. All properties mentioned in Tables 12-25 and 12-26 of Chapter 12 Population and Human Health Part A [APP-054] are shown on Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093].</li> <li>4. A list of residential properties has been provided in Appendix PHH.3 and submitted at Deadline 1, which captures residential properties listed in Figure 7.6 Visual Effects Drawings Residential Properties Part A [APP-093] and located within the 500m Study Area. Some properties had been grouped within Tables 12-25 and 12-26 of Chapter 12 Population and Human Health Part A [APP-054].</li> <li>5. One commercial property listed in Table 12-28 Chapter 12 Population and Human Health Part A [APP-054] is missing from Figure 12.2 Commercial Properties and Community Receptors Part A [APP-121]. Labelling and the location of commercial property C20 has been added to Figure 12.2 Commercial Properties and Community Receptors Part A [APP-121] and is submitted at Deadline 1 in Appendix PHH.3. This is not considered to affect the outcomes of the assessment as reported in Chapter 12: Population and Human Health Part A [APP-054].</li> </ol>
PHH.1.11	Applicant	<p>Wansbeck Food Bank is located within the Part A study area, north of Northgate Hospital, however it is not listed amongst the community facilities (ES paragraph 12.7.59) [APP054].</p> <p>Has the Applicant considered the impacts of the scheme on Wansbeck Food Bank?</p>	<ol style="list-style-type: none"> <li>1. Community facilities, as defined in paragraphs 2.2 and 2.3 of Vol 11, Section 3, Part 8 of DMRB, have been assessed within Chapter 12: Population and Health Part A [APP-054]. However, it is noted that the food bank is a key community facility locally and as such an updated assessment of the impact to this facility is set out below.</li> <li>2. This facility would be assessed under community facilities, and is located outside of the Order limits, but within the Study Area to the south east of Part A. It is not accessed via the A1, but from the A192 to the south. There would be no direct impact upon this facility during construction or operation. However, similarly to Northgate Hospital, which is assessed within Chapter 12 Population and Human Health Part A [APP-054], this facility would be of high sensitivity and is within 500m of the Scheme and therefore users could experience some temporary reduction in amenity caused by construction works. The magnitude of change is predicted to be minor during construction as the temporary works are unlikely to substantially change the users experience of the facility, particularly when considering the existing presence of the A1. For users, with mitigation outlined within the Outline CEMP [APP-346], it is predicted that a slight adverse temporary effect (not significant) would occur, reducing the amenity value for some users. No further mitigation measures are likely to be required, and no significant effects a predicted to occur to the Wansbeck Food Bank.</li> </ol>
PHH.1.12	Applicant	ES paragraphs 12.9.24/ 12.9.28 [APP-054]/[APP-055] regarding economy and employment outline some measures to increase the potential for the workforce and supply chain to be sourced locally. The effectiveness of this mitigation does not appear to have been considered in the assessment and it is not stated how these measures are to be implemented and secured. The Applicant is requested to clarify this.	<ol style="list-style-type: none"> <li>1. The Main Contractor will be responsible for sourcing the workforce from the local labour market.</li> <li>2. Measures are outlined in the Outline CEMP [APP-346], under Reference S-PH11, and will be implemented through the CEMP by the Main Contractor. These measures are:             <ul style="list-style-type: none"> <li>• Working with local people and local businesses to ensure that, wherever possible, investment in the North East, stays in the North East; and</li> <li>• Engaging with Jobcentre Plus to advertise job opportunities to local people seeking employment and identifying opportunities for work placements, further education, skills training. Opportunities for everybody working on the Scheme to upskill, through experience, training and development programmes.</li> </ul> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>3. However, this will be subject to availability of suitability and procurement procedures. Therefore, a worst-case assessment is assumed in the assessment and as such the mitigation recommended has not changed the findings of the pre-mitigation assessment.</p>
PHH.1.13	Applicant	<p>In the analysis of Driver Stress in Appendix 12.2 of the ES (Part A [APP-320] and Part B [APP-321]), it is not clear which thresholds (those in Table 12.5 or 12.6) are used to assign the levels of stress. Some of the classifications of driver stress do not accord with the methodology set out in these tables. For example, 'Link ID 1985-40011' in the '2038 Do Something' scenario is classified as 'Low' for both AM and PM but applying the criteria this should be 'Moderate'.</p> <p>The Applicant is requested to confirm which thresholds are being applied to which road link.</p>	<ol style="list-style-type: none"> <li>1. The number of lanes in each location has determined which criteria has been used for each link (whether according to Table 12-5 Chapter 12: Population and Human Health Part A [APP-054] or Table 12-6 Population and Human Health Part B [APP-55]). This was omitted from the appendices and has now been added and submitted at Deadline 1 in Appendix PHH.1.</li> <li>2. Where the wrong driver stress outcomes per link have been identified in relation to the transcription error (identified in written question PHH.1.) this has been rectified, and a revised Appendix 12.2 is submitted for Deadline 1 within Appendix PHH.1. There is no material change to the findings of the assessment despite the transcription error, as is outlined in the summary provided within Appendix PHH.1</li> <li>3. Once operational, it is expected that Part A would reduce driver stress, when compared with the "do minimum" scenario (which shows that the majority of sections along the existing A1 would be of Moderate or High levels of driver stress), and also accommodate much higher volumes of traffic due to the additional lanes along the main trunk of the A1. Overall, the effect of Part A on driver stress is expected to be slight beneficial (not significant).</li> </ol>
PHH.1.14	Applicant	<p>Section 12.10 of the ES [APP-054] [APP-055] provides an assessment of likely significant effects, a number of which are significant adverse effects. No further mitigation has been proposed.</p> <p>For those matters for which a significant residual effect has been established, can the Applicant explain whether any further mitigation measures have been explored or are available to reduce the significance of effect?</p>	<ol style="list-style-type: none"> <li>1. The significant adverse residual effects reported under each part (Chapter 12: Population and Health Part A [APP-054] and Chapter 12 Population and Human Health Part B [APP-055]) are in relation to community severance for WCH (temporary and permanent), private property (permanent), and agricultural land holdings (temporary and permanent). In the case of Part A, there is also a temporary significant adverse effect for the reduction of amenity of recreational users of the River Coquet and its surroundings. Details of these effects are outlined below.</li> <li>2. The effects as set out below are reported as a worst case and the Scheme has been designed to limit land take where possible.</li> </ol> <p><b><u>Private Property</u></b></p> <ol style="list-style-type: none"> <li>3. The demolition of private property required for Part A and the two demolitions of private property required for Part B are not possible to avoid under the Scheme design, and there is no possible mitigation that would reduce the significance of these effects. Landowners would however be compensated for loss of their property.</li> </ol> <p><b><u>Community Severance</u></b></p> <ol style="list-style-type: none"> <li>4. With regard to community severance and WCH, temporary and permanent diversions of PRoW have been proposed where practicable and possible, following consultation with NCC and local landowners, but due to the nature of the Scheme (whereby single carriageway to be widened to dual carriageway) PRoW which previously stretched either side of the carriageway (with no formal crossing of the A1) have been stopped up for safety and accessibility reasons, therefore increasing journey lengths for WCH to incorporate safe crossing facilities. Additional footbridges to increase connectivity for WCH would increase the land take and the cost of the Scheme, and were not deemed to be proportionate to the level of users of the PRoW network.</li> </ol> <p><b><u>Agricultural Land Holdings</u></b></p> <ol style="list-style-type: none"> <li>5. Land take from agricultural land holdings has been minimised where possible, but the current design has resulted in land take on a number of agricultural land holdings (Clarehugh, Hemelspeth Farm, Causey Park Farm, and land holding C for Part A and Charlton Mires, East Cottage and West Farm for Part B) where the</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>proportion of land take is the main factor of the level of significance. Landowners would be able to seek compensated for loss of their land, but this does not mitigate the loss of land and reduce the significance of effect, according to the assessment criteria used and as detailed in Table 12-14 for Part A and 12-15 for Part B, as the land has not been replaced. . In the case of Causey Park, severance of the land holding is also a main contributing factor to the level of significance. Direct access for this private property from the A1 has not been factored into the design, as all direct accesses for private property from the A1 have been stopped up in order to achieve the objectives of the Scheme (as listed in section 2.2 of Chapter 2: The Scheme [APP-037]), and no new direct field accesses have been incorporated on offline sections of the Scheme. The access to land within the Causey Park holding will be from Causey Park road and the access tracks on the west of the new A1, and from the existing A1 and side roads to the east of the Scheme as follows:</p> <ul style="list-style-type: none"> <li>• (private accesses PA 6/1 (east of Scheme, new access),</li> <li>• PA 6/2 (east of Scheme, new access),</li> <li>• PA 6/3 (west of Scheme, new access track),</li> <li>• PA 6/4 (west of Scheme, new access track),</li> <li>• PA 6/5 (west of Scheme, ties into existing access),</li> <li>• PA 6/6 (west of Scheme, new access),</li> <li>• PA 6/7 (west of the Scheme, new access for detention basin),</li> <li>• PA 6/8 (east of Scheme, new field access),</li> <li>• PA, 6/9 (east of Scheme, new field access),</li> <li>• PA 5/2 (west of Scheme, new access track) and</li> <li>• PA 5/3 (west of Scheme, new access for detention basin)</li> </ul> <p>6. These accesses as denoted on the Rights of Way and Access plan [APP-009]) will be retained and / or included in the scheme design to provide access to Causey Park land. These access tracks will provide access where access was previously gained directly from the A1, and can be joined west of Causey Park Overbridge. Additionally, the Causey Park Overbridge will provide east to west connectivity for vehicles accessing land parcels severed by the Scheme. However, even with consideration of included accesses and the overbridge there still remains severance between operational land and temporary and permanent land take from the agricultural land holding resulting in a significant effect which cannot be reduced through mitigation.</p> <p>7. Mitigation measures to be implemented during construction are set out within the Outline CEMP [APP-346], which is to be developed further into a full CEMP which will require to be approved by the Secretary of State under requirement 4 of the draft DCO [APP-014]. Detailed design discussions (also considering accommodation works), will provide an opportunity for smaller measures to improve drainage, upgrade boundary fences, gates, tracks to be considered, and mitigation will be agreed on a case by case basis, and secured through the CEMP (refer to Table 3-1, references A-PH3 and B-PH4) and implemented as part of the Scheme. However, these measures are unlikely to mitigate fully and reduce the significant effects identified within the assessment.</p> <p><b>Recreational Facilities</b></p> <p>8. The significant moderate adverse effect from the temporary reduction of amenity for users of the River Coquet and its surrounds is will be unavoidable due to the temporary introduction of construction works, even following the implementation of measures in the Outline CEMP [APP-346], However, this effect is a localised effect, and users are likely to be transient, so further measures have not been proposed.</p>
<b>Part B</b>			

Ref. No.	Question to:	Question	Applicant's Response
PHH.1.15	Applicant	Paragraph 2.3.37 of the ES [APP-037] states that the Lionheart Enterprise Park Compound would not impact on commercial development locally because it is likely that the temporary use would be complete before the land is used for commercial development. What is the basis of this assertion?	<ol style="list-style-type: none"> <li>1. This assumption has been made following review of existing land use and planning applications (at the time of submission no planning applications existed for the land identified for the compound). The current land is owned by the Northumberland Estate (and regarded as part of an agricultural land holding), and tenanted, and although the land within which the Lionheart Enterprise Park Compound site is allocated under Policies (T1, ED3 (1), ED3(2) and ED3(3), assessment of this impact under its current use is included under the assessment of agricultural land holdings of Chapter 12: Population and Health Part B [APP-055].</li> <li>2. On-going liaison between the Applicant and the land owner (Northumberland Estates) has confirmed that the land owner intends to develop the land occupied by the Lionheart Enterprise Compound following the completion of construction of the Scheme. It is understood that Northumberland Estates propose to secure planning permission immediately after the Applicant's Scheme has demobilised from Lionheart Enterprise Park. As construction on this section of the allocated development land would not commence until the completion of construction of the Scheme, no adverse impact on future employment land is anticipated. Since the completion of the Environmental Statement and submission of the Application, a planning application has been permitted for a portion of the land within the Order limits for the Lionheart Enterprise compound (Planning reference 20/01883/FUL). This is not considered to affect the ability of the Applicant to undertake the Scheme using the Lionheart Enterprise Compound.</li> </ol>
PHH.1.16	Applicant	Table 12.42 of the ES [APP-055] provides a Summary of Potential Effects on Access to Private Properties during Construction without Mitigation. Why does the table not make reference to East Cottage and Charlton Mires Farm when both are proposed to be demolished?	<ol style="list-style-type: none"> <li>1. Table 12.42 of Chapter 12: Population and Health Part B [APP-055] is preceded by the following text:  <i>"Part B requires the demolition of two properties to accommodate the proposed Charlton Mires Junction. These properties are East Cottage and Charlton Mires Farm, which are located to the east of the existing junction between the A1 and B6347 at Charlton Mires. This loss of private property is considered as a permanent impact occurring during the construction stage of Part B as the current owners of the house would no longer be able to live in their property once its demolished and this would be a permanent change. A description is provided below of those residential properties that are likely to be impacted during the construction of Part B due to impacts on their existing access from the A1. A brief description of the potential impact is also provided for each of the properties identified."</i> </li> <li>2. This text states that Table 12-42 Chapter 12: Population and Human Health Part B [APP-055] only relates to those properties with impacted access. The two properties to be demolished would no longer require access following their demolition and so these are discussed in Paragraph 12.8.18 of Chapter 12: Population and Human Health Part B [APP-055].</li> </ol>
PHH.1.17	Applicant	Paragraph 12.10.18 of the ES [APP-054] states that "during construction of Part B East Cottage and Charlton Mires Farm are required to be demolished to enable Charlton Mires Junction to be constructed. The sensitivity of these assets is high as they are receptors with limited capacity to absorb change. The magnitude of impact is considered to be major. Overall, there would be a direct, permanent effect of large significance (considered to be significant), but compensation would be provided to landowners." Notwithstanding that the effect would not change, why was the sensitivity recorded as 'high' rather than 'very high'?	<ol style="list-style-type: none"> <li>1. The sensitivity criteria used for the assessment of Physical Assets and Land use, as provided within Table 12-10 Chapter 12: Population and Health Part B [APP-055], lists sensitivity criteria for receptors from Low to High only. There is no "very-high" sensitivity value listed. There was no prescribed criteria under DMRB Part 6 Land Use for the sensitivity of private property and therefore the criteria used was based on professional judgement and other industry examples. In this instance, the criteria of high sensitivity was deemed under professional judgement as sufficient and in combination with a major impact recognises a significant effect.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
PHH.1.18	Applicant	Chapter 12 of the ES [APP-054] and the supporting Figures contain some inconsistencies between properties comprising the baseline for 'residential and commercial properties. For Part B, the Applicant is requested to ensure that residential properties identified in Tables 12.25 and 12.26 [APP-055] are consistent with Figure 7.6 [APP-093], and that commercial properties identified in Tables 12.26 and 12.27 [APP-055] are consistent with Figure 12.3 [APP-181], to accurately present the residential and commercial properties identified in the study area. Additionally, for Part B, residential and commercial properties which fall within the study area of the Lionheart Enterprise Compound and the Main Compound should be systematically listed in tables and consistently presented on accompanying figures.	<ol style="list-style-type: none"> <li>1. The Applicant assumes that for Part B, the question intends to request that it is ensured that residential properties within Tables 12-24 and 12-25 of Chapter 12: Population and Health Part B [APP-055], and commercial properties within Tables 12-26 and 12-27 of Chapter 12: Population and Human Health Part B [APP-055] are to be consistent with those displayed on Figure 12.3 Properties and Commercial Facilities Part B [APP-183].</li> <li>2. All residential properties listed in Tables 12-24 and 12-25 of Chapter 12: Population and Human Health Part B [APP-055] are shown on Figure 12.3 Properties and Commercial Facilities Part B [APP-183].</li> <li>3. Labelling and location for Patterson's Cottage boarding kennels and Drythrople has been added to Figure 12.3 Properties and Commercial Facilities Part B [APP-183] and is submitted at Deadline 1 in Appendix PHH.3.</li> <li>4. Information for residential properties and commercial facilities located within 500m of the Lionheart Enterprise Compound and Main Compound are provided in Appendix PHH.3 and shown on the updated Figure 12.3 in Appendix PHH.3 and is submitted at Deadline 1.</li> <li>5. Labelling and the location for Eshott Airfield, Northumberland Canine Centre and a construction yard has been added to Figure 12.3 Properties and Commercial Facilities Part B [APP-183] and is submitted at Deadline 1 in Appendix PHH.3.</li> </ol>
PHH.1.19	Applicant	Paragraph 12.7.101 of the ES [APP-055] states that there are several allocations designated under the Alnwick Local Development Framework 2007 for industrial and employment land within the Lionheart Enterprise Park which fall within the Study Area. It states that "the majority of this land has now been developed and is under use as part of the Enterprise Park" [APP-055]. It is not stated precisely how much land is undeveloped. The Applicant is requested to provide on the quantity and nature of the undeveloped land.	<ol style="list-style-type: none"> <li>1. The quantity of land covered by the designated allocations for the Lionheart Enterprise Park (south of the A1) as outlined in Chapter 12: Population and Health Part B [APP-055] is approximately 36ha. Of this, approximately 19.5ha has been developed. The remaining land is owned by agricultural land holdings and desk top study indicates it is currently a mixture of pasture or arable purposes. Assessment of those parcels within the study area under their current use is included under the assessment of agricultural land holdings of Chapter 12: Population and Human Health Part B [APP-055].</li> <li>2. Since the submission of the Environmental Statement, a planning application has been permitted for a portion of the land within the Order Limits for the Lionheart Enterprise compound, and is currently under development (Planning reference 20/0883/FUL). This is in addition to the 19.5ha detailed above and amounts to approximately 0.17ha.</li> </ol>
PHH.1.20	Applicant	Paragraph 12.10.2 of the ES [APP-055] states that there will be an overall increase in the level of driver stress experienced during construction and that mitigation would limit these effects where possible, but it does not assign this effect a level of significance. The Applicant is requested to confirm the significance of this effect.	<ol style="list-style-type: none"> <li>1. As stated in paragraph 12.4.21 of Chapter 12: Population and Human Health Part B [APP-055] "<i>There is no specific methodology for assessing the degree of driver stress during construction. Therefore, a descriptive assessment as to how likely construction activities would affect driver stress during the construction period has been set out.</i>"</li> <li>2. The determination of significance of driver stress is based on the criteria detailed within the methodology for Chapter 12: Population and Human Health Part B [APP-055] using traffic forecasts to undertake a qualitative assessment (which is in accordance with the criteria listed in DMRB Volume 11, Section 3, Part 9). Traffic forecasts are only available for baseline and operational years, not construction. Therefore, it was not possible to assign significance for driver stress during construction using a qualitative assessment.</li> </ol>
PHH.1.21	Applicant	There is land allocated under the Alnwick Local Development Framework 2007 for industrial and employment land within the Lionheart Enterprise Compound that will be affected by the development. The Applicant is requested to explain how effects on this land from the construction compound have been assessed or	<ol style="list-style-type: none"> <li>1. The current land is owned by agricultural land holdings although the land within which the Lionheart Enterprise Park Compound sits is allocated under Policies T1, ED3 (1), ED3(2) and ED3(3). On-going liaison between the Applicant and the land owner (Northumberland Estates) has confirmed that the land owner intends to develop the land occupied by the Lionheart Enterprise Compound following the completion of construction, as confirmed by the landowner at a presentation call with the Applicant and their agent on 08/12/2020. As construction on this section of the allocated development land would not commence until the completion of construction, no adverse impact on future employment land is anticipated. Since the submission of the</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		provide an assessment of these effects based on the relevant criteria.	<p>Environmental Statement, a planning application has been permitted for a portion of the land within the Order limits for the compound (Planning reference 20/01883/FUL).</p> <p>2. However, as acknowledged in the Applicant's Response to Relevant Representations- (RR011) (document reference 7.9), liaison with Northumberland Estates is ongoing and the Applicant has confirmed to the landowner that they have considered the potential impact of reducing the Scheme compound area, impacted by their recent planning permission at Lionheart. The Applicant considers that the scale of the proposed compound can be reduced in size in order to accommodate the development which has been granted planning permission. Given that both developments may be proceeding in tandem, this issue is best addressed in an agreement between the Applicant and Northumberland Estates and this is being pursued by the Applicant. Should it be appropriate to reduce the size of parcels in this location, revised application plans will be supplied.</p> <p>3. Assessment of the current land use has been undertaken and is included under the assessment of agricultural land holdings in Tables 12-50, 12-51 and 12-52 of Chapter 12: Population and Health Part B [APP-055].</p>

**Table 1-13 - Traffic and Transport**

Ref. No.	Question to:	Question	Applicant's Response
TT.1.1.	Applicant	In paragraph 2.5.59 of the ES [APP-037] reference is made to footways being provided over the Highlaws Junction, with paragraph 2.5.62 stating that footways would be provided over the Fenrother Junction and paragraph 2.5.64 stating that footways would be provided over the West Moor Junction What provision is made for other non-motorised users at these junctions?	<ol style="list-style-type: none"> <li>1. The current design for the Highlaws, Fenrother and West Moor junctions includes a 2m wide footway which the Applicant considers to be of sufficient width to accommodate the expected pedestrian usage. Details of each of these overbridges is shown on the Structures Engineering Drawings and Sections [APP-012].</li> <li>2. For the Fenrother junction, a maximum of 4 pedestrians and 2 cyclists were observed during the day. At Highlaws, a maximum of 2 pedestrians and 14 cyclists were observed and at West Moor junction the equivalent maximum daily figures were 12 pedestrians and 16 cyclists. No equestrians were recorded crossing the A1 at any of the junctions, although 2 were recorded travelling away from the A1 at Highlaws.</li> <li>3. Further details of the surveys of pedestrians, cyclists and equestrians are submitted at Deadline 1 (Appendix TT.1).</li> <li>4. The Applicant considers that based upon these data, a limited number of cyclists and equestrians using the overbridges would utilise the 6.6m wide carriageway. This is consistent with the side roads linking with the junctions where there is no separate provision for cyclists and equestrians.</li> </ol>
TT.1.2	Applicant	Paragraph 4.1.10 of the ES [APP-039] states that a sensitivity analysis was carried out, in order to test whether the predicted traffic levels would materially affect assessments for the revised opening year and design year. The result of this sensitivity analysis was that there would be increases in vehicle movements (up to 4%) in the opening year (2024), and a decrease in predicted vehicle movements (up to 3%) in the design year (2039). Explain why there was a decrease in predicted vehicle movements in the design year.	<ol style="list-style-type: none"> <li>1. In reviewing the written questions received from ExA, it has been identified that statements in the DCO submission regarding results of sensitivity tests relating to updates to published traffic forecasts and revised Scheme opening year are not correctly stated, although these are purely transcription errors which do not have any impact on any traffic and transport related assessment or appraisal work within the wider submission. .</li> <li>2. It is noted that erroneous statements occur in paragraph 2.4.18 and 4.1.10 of the ES Chapter 2 and Chapter 4, 1.5.1 of the HRA and paragraph 4.7.3 of the Case for the Scheme.</li> <li>3. Throughout the project lifecycle, updates to the traffic model input parameters have been made in order to reflect the evolution of the Scheme design, the associated cost, the construction programme and published updates to other input parameters such as values of time and national traffic forecasts.</li> <li>4. The traffic model was originally developed using Road Traffic Forecasts published in 2015. In March 2019. A sensitivity test was undertaken to quantify the impacts of the revised Road Traffic Forecasts 2018 using the original opening and design year. Subsequently, a further test was undertaken to quantify the impact of a change in opening year from 2023 to 2024. Initially this test involved modelling the year 2024, but with no</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response									
			<p>change in the design year, which remained at 2038. This test resulted in the forecast figures reported in error at paragraph 4.1.10 of the ES and the other locations listed above (+4% and -3%).</p> <p>5. The final sensitivity tests undertaken in August 2020 considered the changes for the updated opening and design years in combination with Road Traffic Forecasts 2018, and it is this Test which should be referred to in paragraph 4.1.10 of the ES and the other locations listed above. The tests actually results in forecast changes as follows:</p> <p>6. <i>The result of this sensitivity analysis was that there would be increases in vehicle movements of around 4% in the opening year (2024) and around 6% in the design year (2039).</i></p> <p>7. Therefore, there is no predicted decrease in vehicle movements in the revised design year.</p> <p>8. Importantly, the traffic modelling (strategic and operational) and economic appraisal submitted in the DCO Application are based on the original opening year and design years using the correct RTF 2018 forecasts. Therefore, this mis-transcription does not impact on the outcome of any of assessments reported in the DCO Application.</p>									
TT.1.3	Applicant	<p>In paragraph 3.7.4 of the Case for the Scheme [APP-344] it is stated that in 2038 in a 'without Part A' scenario, the model forecasts show that it would take users around 10½ minutes to travel along the route in both directions. By 2051 this is predicted to increase to 12 minutes travelling northbound and 11½ minutes travelling southbound. Paragraph 3.7.5 explains the changes with Part A in place while paragraphs 3.7.6 and 3.7.7 present the position for Part B.</p> <p>Do the figures for travel times only take account of Part A compared with Part A improvements or do they consider the entire Scheme improvements? The same question applies to Part B. Please clarify and provide comparable figures for without improvements and with improvements for the entire.</p>	<ol style="list-style-type: none"> <li>1. These figures in the Case for the Scheme [APP-344] are stated for each part separately. The figures quoted compare the forecast journey times for each separate Part compared with the no Scheme scenario (as opposed to the 'no Part' scenario).</li> <li>2. The equivalent analysis for the Scheme (compared with no Scheme) is as follows:</li> <li>3. In 2023, without the Scheme, model forecasts show that it takes users between 25 and 26 minutes to travel along the section of the A1 between Morpeth and Ellingham in either direction. This increases to 25½-27½ minutes in 2038 and 26½-28 minutes in 2051.</li> <li>4. With the Scheme in place, travel times are forecast to reduce to around 21 minutes in 2023, a saving of 4-5 minutes. In 2038, travel times are forecast to reduce to 21-21½ minutes, saving users between 4½ and 6 minutes. In 2051, the time saving is between 5½ and 6 minutes, with users taking 21-22 minutes to travel between Morpeth and Ellingham.</li> </ol>									
TT.1.4	Applicant	<p>Paragraph 4.4.1 of the Case for the Scheme [APP-344] states that the Average Annual Daily Traffic (AADT) flows for the A1 between Morpeth and Felton are around 10,000 vehicles a day in each direction of which approximately 11% are identified as HGVs. It is noted that the percentage of HGVs is significantly higher than the average figure for rural A roads of around 6% as reported by DfT.</p> <p>Paragraph 4.4.5 states that AADT flows for Part B are around 5,000 vehicles a day in each direction of which approximately 15% are identified as HGVs.</p> <p>How do these figures compare with other parts of the Strategic Road Network for example other parts of the A1 and the A6 in the North West?</p>	<ol style="list-style-type: none"> <li>1. Analysis of annual reports from the Applicant's online data website WebTRIS records for 2019 gives the following AADT flows and HGV percentages for other parts of the SRN. Note NB and SB denote northbound and southbound flows respectively. Data for the A6 has been taken from DfT's Road Traffic Statistics data as this is not part of the SRN and therefore not covered by WebTRIS.</li> </ol> <p>A Roads:</p> <table border="1"> <thead> <tr> <th>Site</th> <th>AADT Traffic Flow</th> <th>HGV %</th> </tr> </thead> <tbody> <tr> <td>A1 at Berwick-upon-Tweed (WebTRIS Site 9752) NB</td> <td>5,132</td> <td>15.3%</td> </tr> <tr> <td>A1 at Berwick-upon-Tweed (WebTRIS Site 9752) SB</td> <td>5,353</td> <td>14.9%</td> </tr> </tbody> </table>	Site	AADT Traffic Flow	HGV %	A1 at Berwick-upon-Tweed (WebTRIS Site 9752) NB	5,132	15.3%	A1 at Berwick-upon-Tweed (WebTRIS Site 9752) SB	5,353	14.9%
Site	AADT Traffic Flow	HGV %										
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A1 at Berwick-upon-Tweed (WebTRIS Site 9752) SB	5,353	14.9%										

Ref. No.	Question to:	Question	Applicant's Response		
			A1 at Gateshead (WebTRIS Site 9802) NB	28,197	9.5%
			A1 at Gateshead (WebTRIS Site 9801) SB	30,162	9.0%
			A19 at Teesside Park (WebTRIS Site 9323) NB	26,324	9.2%
			A19 at Teesside Park (WebTRIS Site 9324) SB	27,077	9.6%
			A66 between Darlington and Stockton (WebTRIS Site 9313) WB	15,572	7.3%
			A66 between Darlington and Stockton (WebTRIS Site 9312) EB	15,494	7.6%
			A6 east of Newtown (DfT Site 46167) NB	6,245	10.9%
			A6 east of Newtown (DfT Site 46167) SB	6,890	11.8%
			Motorways:		
			<b>Site</b>	<b>AADT Traffic Flow</b>	<b>HGV %</b>
			M6 at Penrith (WebTRIS Site 9510) NB	14,946	25.5%
			M6 at Penrith (WebTRIS Site 9509) SB	14,491	24.9%
			M6 at Preston (WebTRIS Site 7512) NB	74,282	12.2%
			M6 at Preston (WebTRIS Site 7510) SB	74,750	12.5%
			M53 at Ellesmere Port (WebTRIS Site 7280) NB	31,254	8.7%

Ref. No.	Question to:	Question	Applicant's Response			
			<table border="1"> <tr> <td>M53 at Ellesmere Port (WebTRIS Site 7281) SB</td> <td>32,041</td> <td>8.8%</td> </tr> </table> <p>2. There is considerable variability in HGV percentages across the other locations on the SRN in the north of England, however this analysis shows that the 11%-15% around the Scheme area is consistent with other sections of the A1, which also have higher HGV percentages than the national average of 6%. HGV percentages also vary significantly across motorways in the north of England, with some higher and some lower than the national average of 11% for motorways.</p> <p>3. AADT volumes for the Scheme section of the A1 are similar to the levels on the A1 north of the Scheme (around Berwick) but are lower than the rest of the SRN locations presented.</p>	M53 at Ellesmere Port (WebTRIS Site 7281) SB	32,041	8.8%
M53 at Ellesmere Port (WebTRIS Site 7281) SB	32,041	8.8%				
TT.1.5	Applicant	<p>Table 7 of the Case for the Scheme [APP-344] provides thresholds of proximity and scale of development into the uncertainty log.</p> <p>How were these thresholds determined? Were the authorities consulted?</p>	<p>1. In order to develop robust forecasts, the Preliminary Design uncertainty log has identified developments coming forward not just in the detailed modelled area in Northumberland, but also the surrounding districts adjacent to the A1. Future development information has been obtained for the following local authorities:</p> <ul style="list-style-type: none"> <li>• Northumberland County;</li> <li>• Northumberland National Park Authority;</li> <li>• Scottish Borders Council;</li> <li>• North Tyneside Council;</li> <li>• Newcastle City Council;</li> <li>• Gateshead Council.</li> </ul> <p>2. The thresholds were identified by using professional judgement influenced by proportionality and impact on scheme assessment in line with guidance in TAG Unit M4. The approach has been verified post implementation by checking the proportions of specific development growth as a percentage of total growth. It was not considered necessary to consult the authorities because there has been no departure from standard guidance and this aspect is not considered controversial.</p> <p>3. Likely future developments identified within each of the districts were categorised in accordance with the uncertainty log classifications set out in TAG Unit M4 (Table A2) which gives clear indication of how the planning status of a development translates through to TAG probability of completion. Both Residential and Employment developments have been classified as 'near certain', 'more than likely', 'reasonably foreseeable' and 'hypothetical.'</p> <p>4. It is not practical to consider every potential development within the defined area and TAG Unit M4 does not require this. Many developments will be too minor to have any bearing on the forecasts and a judgement is required as to what should and should not be included within the uncertainty log. Therefore, minimum thresholds were used to select which residential and employment developments to include in the uncertainty log.</p> <p>5. For developments outside Northumberland, only those within 2km of the A1 (and also A19 and A1068 in the case of North Tyneside) and with a minimum of 200 dwellings or 2 hectares of employment land were selected. Within Northumberland, the threshold criterion was reconfigured to include developments within 10km of the A1 and with a minimum of 150 dwellings or 1 hectare of employment land, reflecting the influential nature of the A1 on strategic travel patterns across wide areas of the county. For those strategically significant Northumberland developments more than 10km away from the A1, an expanded criterion was used with a minimum of 500 residential dwellings and 5 hectares of employment land.</p>			

Ref. No.	Question to:	Question	Applicant's Response														
			6. Table 7 of the CftS [APP-344] presents the geographical range and size threshold of developments explicitly included within the modelling. Developments not explicitly included are implicitly included within the generalised background growth.														
TT.1.6	Applicant	In paragraph 4.7.3 of the Case for the Scheme [APP-344] it is stated that a decrease in predicted vehicle movements (up to 3%) in the design year (2038) is expected.  What is the basis for a decrease in vehicle movements particularly when there is a predicted increase in vehicle movements (up to 4%) in the opening year (2024)?	<ol style="list-style-type: none"> <li>1. As detailed in the response to answer to TT 1.2 above, there is an error in paragraph 4.1.10 of the ES [APP-039] and a similar error occurs in paragraph 4.7.3 of the Case for the Scheme [APP-344]. This should state:</li> <li>2. The result of this sensitivity analysis was that there would be increases in vehicle movements of around 4% in the opening year (2024) and around 6% in the design year (2039).</li> <li>3. Therefore, there is no predicted decrease in vehicle movements in the revised design year.</li> <li>4. It is confirmed that all of the traffic modelling (strategic and operational) and economic appraisal submitted in the DCO are based on the original opening year and design years using RTF 2018 forecasts. Therefore, this error does not impact on the outcome of any of assessments reported in the DCO Application.</li> </ol>														
TT.1.7	Applicant	Table 9 of the Case for the Scheme [APP-344] provides Annual Average Daily Traffic Forecasts.  Within this context, the Applicant is asked to provide an overview of the Scheme construction vehicle numbers which would use the A1. This should address all construction compounds but with particular reference to the use of the main compound at West Moor junction for the construction of Part B.	<ol style="list-style-type: none"> <li>1. Forecast daily construction traffic figures are provided in Table 5.1 Appendix 5.2 Construction Traffic Assessment Part A [APP-199] and Table 5.1 Appendix 5.2 Construction Traffic Assessment Part B [APP-270].</li> <li>2. These are a total of 406 vehicles at Warrener's Cottage in Part A, 392 between Part A and Part B and 255 in Part B (annual average daily flows at 2022).</li> </ol>														
TT.1.8	Applicant	Paragraphs 4.82 and 4.83 of the Case for the Scheme [APP-344] address journey times and reliability for 2013 and 2051.  As with ExQ1 TT.1.3 the Applicant is asked to address this for Part B and for the entire Scheme.	<ol style="list-style-type: none"> <li>1. The equivalent section for Part B is in paragraph 4.9.8-4.9.11 of the Case for the Scheme [APP-344].</li> <li>2. The equivalent analysis for the Scheme is as follows:</li> <li>3. In 2023, without the Scheme, model forecasts show that it takes users between 25 and 26 minutes to travel along the section of the A1 between Morpeth and Ellingham in either direction. This increases to 25½-27½ minutes in 2038 and 26½-28 minutes in 2051.</li> <li>4. With the Scheme in place, travel times are forecast to reduce to around 21 minutes in 2023, a saving of 4-5 minutes. In 2038, travel times are forecast to reduce to 21-21½ minutes, saving users between 4½ and 6 minutes. In 2051, the time saving is between 5½ and 6 minutes, with users taking 21-22 minutes to travel between Morpeth and Ellingham.</li> </ol>														
TT.1.9	Applicant	In Tables 20 and 21 of the Case for the Scheme [APP-344] no figures are presented for the Intermediate Peak. Why not?	<ol style="list-style-type: none"> <li>1. Operational tests of junction capacity in the interpeak were not reported as it can be seen from the results presented in Tables 20 and 21 of the Case for the Scheme [APP-344] that the junctions are forecast to operate well within capacity during peak periods, when traffic flows are higher than during the interpeak periods.</li> <li>2. Vehicle turning flows (in PCUs) for each of the junctions (South Charlton West and South Charlton East) are shown below, and demonstrate that in all cases, the interpeak values are less than or equal to the peak values that were used in the presented peak assessments.</li> </ol> <p><b>South Charlton West Turning Flows:</b></p> <table border="1"> <thead> <tr> <th>From</th> <th>To</th> <th>AM</th> <th>IP</th> <th>PM</th> </tr> </thead> <tbody> <tr> <td rowspan="2">A1 Slip Road</td> <td>B6341</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>B6347</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	From	To	AM	IP	PM	A1 Slip Road	B6341	0	0	0	B6347	0	0	0
From	To	AM	IP	PM													
A1 Slip Road	B6341	0	0	0													
	B6347	0	0	0													

Ref. No.	Question to:	Question	Applicant's Response				
				A1 Overbridge	0	0	0
			B6341	B6347	0	0	0
				A1 Overbridge	16	21	36
				A1 Slip Road	105	128	146
			B6347	A1 Overbridge	12	20	20
				A1 Slip Road	7	6	11
				B6341	0	0	0
			A1 Overbridge	A1 Slip Road	7	11	8
				B6341	25	16	29
				B6347	17	19	37
			<b>South Charlton East Turning Flows:</b>				
			<b>From</b>	<b>To</b>	<b>AM</b>	<b>IP</b>	<b>PM</b>
			A1 Slip Road	A1 Overbridge	18	11	23
				B6347	2	5	13
			A1 Overbridge	B6347	28	41	56
				A1 Slip Road	0	0	0
			B6347	A1 Slip Road	4	5	3
				A1 Overbridge	34	38	55
			3. Additionally, for completeness, the junction assessment results for the IP period are presented below, showing that the new junctions are forecast to operate well within capacity in the IP period too.				
			<b>South Charlton West IP Capacity Assessment:</b>				
			Movement	RFC	Queue (PCU)		
			A1 Slip Road	0	0		
			B6341	0.11	0.12		
			B6347	0.03	0.03		
			A1 Overbridge	0.05	0.05		
			<b>South Charlton East IP Capacity Assessment:</b>				
			Movement	RFC	Queue (PCU)		

Ref. No.	Question to:	Question	Applicant's Response									
			<table border="1"> <tr> <td>A1 Overbridge Left Turn</td> <td>0.06</td> <td>0.06</td> </tr> <tr> <td>A1 Overbridge Right Turn</td> <td>0</td> <td>0</td> </tr> <tr> <td>B6347 Right Turn</td> <td>0.06</td> <td>0.06</td> </tr> </table>	A1 Overbridge Left Turn	0.06	0.06	A1 Overbridge Right Turn	0	0	B6347 Right Turn	0.06	0.06
A1 Overbridge Left Turn	0.06	0.06										
A1 Overbridge Right Turn	0	0										
B6347 Right Turn	0.06	0.06										
TT.1.10	Applicant	<p>Paragraph 4.9.29 of the Case for the Scheme [APP-344] states that the wider impacts for the Scheme have been calculated using WSP's Wider Impacts in Transport Appraisal (WITA) tool. The spreadsheet tool emulates the methodology set out in WebTAG A2.1.</p> <p>Why was the WITA used instead of WebTAG A2.1?</p>	<p>1. At the time of the Wider Impacts benefits assessment the DfT WITA tool was still in Beta form and was not producing correct output. WITA reflects the guidance within TAG and the WSP tool was developed to emulate the methodology set out in WebTAG A2.1 using the equations further detailed in A2.4. The same approach is used by DfT. The emulator has previously been accepted for use by Highways England, Transport for the North and the DfT for assessment of wider impact benefits for the Trans-Pennine Tunnel and the M60 North West Quadrant. With subsequent DfT corrections to the DfT WITA tool both approaches produce identical outputs and the choice of platform for the calculations is immaterial.</p>									
TT.1.11	Applicant	<p>Table 22 of the Case for the Scheme [APP-344] shows the Wider Impact Benefits over the 60 year appraisal period. Explain why / how the impacts for the full appraisal period are so much greater than those achieved in 2051.</p>	<p>1. Table 22 of the Case for the Scheme [APP-344] presents Wider Impact Benefits results for the three individual model years. The columns headed 2023, 2038 and 2051 contain the values for a single year. These results are interpolated across the full 60 year appraisal period to provide the overall results which are presented in the final column of the table - hence why the results for the full 60-year appraisal period are so much higher than for individual years.</p>									
TT.1.12	Applicant	<p>It is stated in paragraph 4.10.8 of the Case for the Scheme [APP-344] that the average collision rate between 2012 and 2016 is 169 collisions per billion vehicle miles. The national average rate for all A Roads is 466 collisions per billion vehicle miles and for rural A Roads, this value drops to 270 collisions per billion vehicle miles. This analysis shows that along the Scheme, the average collision rate is lower than the national average between 2012 and 2016.</p> <p>Average collision rates are below the national average rate which indicates that the proposed improvements are not primarily to address accident rates. The Applicant is asked to comment including with reference to Table 25.</p>	<p>1. As detailed in Table 23 of the Case for the Scheme [APP-344], the recorded accident rate from 2012 to 2016 in the Scheme area is 169 collisions per billion vehicle miles. It is correct that this is lower than the national average for all A roads of 466 collisions per billion vehicle miles and lower than the national average for rural A roads of 270 collisions per billion vehicles miles.</p> <p>2. As detailed in Table 25 of the Case for the Scheme [APP-344], the recorded casualty rate from 2012 to 2016 in the Scheme area is 341 casualties per billion vehicles miles. The DfT 'Casualties involved in Reported Road Accidents' (RAS30) dataset does not include casualty rates by road type but the casualty rate in the Scheme area is also lower than the national average for all roads of 627 casualties per billion vehicle miles.</p> <p>3. Although the accident and casualty rates for the Scheme area are lower than average, the average KSI ratio from 2012-2016 was 23%, as presented in Table 24. This is above national average of 16% for A Roads and 20% for rural A Roads. This demonstrates that although accident rates are lower on this section of road, when they do occur, they are more likely to result in a fatality or serious injury than national average for this road type.</p> <p>4. More detailed analysis of the accident records for the Scheme area were undertaken and are described in paragraphs 4.10.14 to 4.10.22 of the Case for the Scheme [APP-344]. This analysis identified cluster sites and common themes, including clusters of accidents around existing at grade junctions and accidents caused by vehicles colliding with oncoming traffic in single carriageway sections. Whilst the existing accident rates for the Scheme area are lower than national average, this further analysis suggests that the Scheme will have accident benefits along the A1 as the Scheme incorporates dualling and the closure or conversion of existing at grade junctions, which would reduce the risk of these type of accidents occurring. As summarised in paragraph 4.10.27, Case for the Scheme [APP-344] overall, the Scheme is forecast to save 414 accidents over the appraisal period.</p>									

Ref. No.	Question to:	Question	Applicant's Response								
			<p>5. In the context of the wider Scheme appraisal, accident benefits are not the largest source of benefits. User Benefits assessed through TUBA account for around 2.5 times more monetised benefits than the accident savings as a result of the Scheme and there are £16.8m more benefits from indirect tax revenues than from accident saving benefits. However, the monetised benefits from accident savings are greater than the benefits from the wider impacts or reliability assessments.</p>								
TT.1.13	Applicant	<p>Paragraph 4.10.25 of the Case for the Scheme [APP-344] states that overall, there are forecast to be accident savings along the Scheme links compared to the without Scheme scenario. Accident benefits are also forecast on parallel routes to the Scheme including the A1068, A697, A696 and A68. These benefits are a result of reductions in traffic on these roads as traffic switches to using the A1 on completion of the Scheme. Paragraph 4.10.6 confirms that there would be a general increase in traffic flows being drawn onto the A1 as a result of the Scheme.</p> <p>To what extent would the growth in traffic on completion of the Scheme be as a result of redistribution from other roads? Should this be seen as a benefit or disbenefit of the Scheme?</p>	<p>1. The below table presents 2-Way Annual Average Daily Traffic (AADT) modelled flows for Part A of the Scheme. When comparing the 2038 Without Scheme scenario with the 2015 Base the increase attributed to traffic growth is approximately 6,000 vehicles. A further increase of approximately 13,000 vehicles is forecast as a result of the scheme. All of this further increase can be attributed to traffic re-assigning from alternative routes.</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>2-Way AADT</th> </tr> </thead> <tbody> <tr> <td>2015 Base Year</td> <td>19,598</td> </tr> <tr> <td>2038 Without Scheme</td> <td>25,916</td> </tr> <tr> <td>2038 With Scheme</td> <td>38,865</td> </tr> </tbody> </table> <p>2. Whilst there is an increase in traffic along the Scheme sections of the A1 there are still considerable accident benefits as the Scheme converts to dual carriageway which has lower accident rates than single carriageways. There are also benefits on alternative routes due to the decrease in traffic, as indicated on Figure 21 and described in paragraphs 4.10.24 to 4.10.27 of the Case for the Scheme [APP-344]. These are in addition to the considerable journey time saving benefits also reported. These journey time savings are forecast even with the additional traffic on the route.</p> <p>3. Overall, there are considerable accident benefits as a result of the Scheme as demonstrated by the accident appraisal results. This can be attributed to the conversion of the Scheme to a safer standard of road in combination with removing traffic from alternative routes and should be seen as a benefit of the Scheme.</p>	Scenario	2-Way AADT	2015 Base Year	19,598	2038 Without Scheme	25,916	2038 With Scheme	38,865
Scenario	2-Way AADT										
2015 Base Year	19,598										
2038 Without Scheme	25,916										
2038 With Scheme	38,865										
TT.1.14	NCC	<p>Paragraph 4.11.16 of the Case for the Scheme [APP-344] states that surveys have been undertaken to establish which pathways and junctions were commonly used by WCH (walkers, cyclists and horse-riders) users.</p> <p>Does NCC wish to comment on the location and / or outputs of these surveys?</p>									
TT.1.15	Applicant	<p>According to paragraph 4.11.21 of the Case for the Scheme [APP-344] there would be a number of Public Rights of Way (PRoW) that would be directly affected by the Scheme and would be permanently closed or diverted during operation. It indicates that the PRoWs that will be closed as a result of the Scheme are not frequently used with less than five users observed at each site over the six survey days. Additionally, paragraph 5.3.12 states that</p>	<p>1. Paragraphs 4.11.16-4.11.19 of the Case for the Scheme [APP-344] describe the locations of the surveys and a summary of the results. Further details of the surveys are submitted at Deadline 1 (Appendix TT.1)</p> <p>2. As reported in Paragraph 12.10.10 and Table 12-49 of Chapter 12: Population and Health Part B [APP-055] a number of PRoWs are proposed to be stopped up (PRoW Reference 129/014, 129/022, 129/013, 110/003, 129/009 and 129/024), or permanently diverted or amended (PRoW Reference 110/004, 110/013, 110/019, 110/010, 129/021 and 129/004) during the operation period. PRoWs that will be closed as a result of the Scheme are not frequently used, with less than five users observed at each site over the six survey days as shown by the data in Appendix TT.1.</p>								

Ref. No.	Question to:	Question	Applicant's Response
		<p>the inclusion of grade-separated junctions and changes to PRow would improve connectivity and safety, and therefore benefit users.</p> <p>The Applicant is asked to confirm the details of the surveys which were undertaken which led to the proposed closures and permanent diversions. How would the inclusion of grade-separated junctions and changes to PRow benefit users when it is proposed to permanently close or divert a number of PRows? Following the publication of the Applicant's response to this question at Deadline (D)1, IPs are invited to comment on this response by D2.</p>	<ol style="list-style-type: none"> <li>The closure and diversion of PRows is predicted to increase journey length for the majority of WCH users. However, WCH provision is proposed over the Heckley Fence Accommodation Overbridge and Charlton Mires Junction. These facilities are considered an improvement to the existing cycle and footpath provision as the grade separated WCH crossings of the A1 reduce the need for WCH to cross the highway at grade and interact with traffic. As the volume of traffic interacting with WCH would be reduced to zero, it is considered that relief from severance would be substantial during operation.</li> <li>The residual effects to be experienced by users of these PRows taking account of the provision of mitigation is detailed in Table 12-49 Chapter 12: Population and Human Health Part B [APP-055].</li> </ol>
TT.1.16	Applicant	<p>Paragraph 4.11.24 of the Case for the Scheme [APP-344] notes that although there are closures of PRows as a result of the Scheme, with increased walking times in some cases, these closures are not expected to have a substantial impact due to the low usage of the PRows. Improvements to facilities for WCHs through the inclusion of footways crossing the A1 will provide benefits to WCHs. Overall, the Scheme is considered to have a slight beneficial to moderate adverse impact on WCHs.</p> <p>The Applicant is asked to substantiate this conclusion and to comment on the effects of these proposed changes on the wider WCH network. Following the publication of the Applicant's response to this question at Deadline (D)1, IPs are invited to comment on this response by D2.</p>	<ol style="list-style-type: none"> <li>The benefits to WCH are recognised due to the provision of grade separated facilities, where there previously was none, and the adverse effects are due to the severing or lengthening of WCH journeys via PRow. Although there would be diversions and additional journey lengths along some PRow, The Scheme would not sever walking, cycling and horse riders from community facilities and crossing over the A1 would be safer, maintaining east to west connectivity across the Scheme for access to the wider PRow network. This is as assessed in Section 12.10 of Chapter 12: Population and Human Health Part A and Chapter 12: Population and Health Part B [APP-055].</li> </ol> <p><b>Part A</b></p> <ol style="list-style-type: none"> <li>The permanent impacts to WCH for Part A are reported in Table 12-38 of Chapter 12: Population and Health Part A [APP-054], with the residual effects following the inclusion of mitigation reported in Table 12-46 Chapter 12 Population and Human Health Part A [APP-054].</li> <li>A number of PRows are proposed to be permanently stopped up (PRow Reference 423/001, 423/013 and 422/011), or permanently diverted or amended (PRow Reference 407/018, 407/001, 423/017, 422/002, 422/020, 115/009, 115/008 and 115/016). Users of one WCH route are reported as experiencing a moderate adverse impact (423/001) as a result of proposed diversion of the footpath. Users of the remaining PRow are predicted to experience either slight adverse or slight beneficial residual impacts.</li> <li>As stated in Paragraph 12.10.16 of Chapter 12: Population and Human Health Part A, there are a number of community facilities that could be accessed by WCH. The sensitivity of the existing community links (including those between residents within the vicinity of Tritlington Church of England First School, and for non-motorised means of accessing Fairmoor Cemetery and Northgate Hospital) crossing Part A and accessing community facilities are of medium sensitivity value as there are limited alternative facilities. The magnitude of change is considered to be slight as the community would still be able to access community facilities and private residences during the construction period through the implementation of traffic management regimes. Therefore, the significance of effect on communities in relation to community severance for WCH is considered to be slight adverse (not significant) during construction. During operation (as stated in paragraph 12.10.22), permanently diverting traffic from the A1 onto the new offline section of Part A near to Tritlington Church of England School would reduce traffic near to the school, making it safer for people to access and increasing amenity for the school. Overall, during operation with mitigation, there is likely to be a slight beneficial permanent effect (not significant), relieving severance along some portions of</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
			<p>the route and enhancing the amenity value for some community facilities. Access to Fairmoor Cemetery and Northgate Hospital by WCH is not anticipated to be adversely affected during operation,</p> <p><b>Part B</b></p> <ol style="list-style-type: none"> <li>1. The permanent impacts to WCH for Part B are reported in Table 12-41 of Chapter 12: Population and Health Part B [APP-055], with the residual effects following the inclusion of mitigation reported in Table 12-49 Chapter 12 Population and Human Health Part B [APP-055].</li> <li>2. 12 PRowS are proposed to be stopped up (PRow Reference 129/014, 129/022, 129/013, 110/003, 129/009 and 129/024), or permanently diverted or amended (PRow Reference 110/004, 110/013, 110/019, 110/010, 129/021 and 129/004) during the operation period., with one PRow potentially temporarily affected by construction vehicles. Temporary and permanent diversions are assessed in Table 12-49 Chapter 12: Population and Health Part B [APP-055].</li> <li>3. The diversions and closures of the PRow are not predicted to sever WCH and communities within the Study Area from community facilities, however it is predicted that some severance will occur on individual PRow recreationally (as detailed for those PRow listed in Table 12-49 of Chapter 12: Population and Human Health Part B [APP-055], specifically 110/004, 129/014, 110/013, 129/022, 129/013, 110/019, 110/010, 129/021, 110/003, 129/009 and 129/004). Mitigation in the form of the provision of grade separated crossings at Heckley Fence Accommodation Overbridge and Charlton Mires Junction has been embedded in the Scheme design to mitigate severance impacts and provide benefit to WCH.</li> <li>4. As reported in Paragraph 12.10.6 – 12.10.7 and Paragraph 12.10.9 of Chapter 12: Population and Health Part B [APP-055] there are no community facilities along the route considered to be accessed by WCH. As it is anticipated that residents of communities within the Study Area surrounding Part B, would access community facilities in Alnwick by vehicular journeys, it is not anticipated that there would be any severance for WCH from community facilities during operation of Part B.</li> <li>5. It should be noted that the moderate adverse effects reported are in reference to the assessment as reported in the Environmental Statement and in accordance with the assessment criteria used for Chapter 12: Population and Human Health [APP-055]. The reference to “a not substantial impact” within the Case for the Scheme could be taken out of context if compared with the Chapter 12 assessment and the significance terminology used for the effects reported above. Whilst a moderate adverse effect (which is significant for environmental impact assessment) is reported for WCH during operation within Chapter 12, in reality the number of users adversely affected from this change is not likely to be large in volume, and therefore the effect is not likely to be substantial. Evidence of the level of use of the PRow network is provided through survey data in Appendix TT.1.</li> <li>6. Overall, whilst there will be effects on individual PRow, it is considered that these impacts should be afforded limited weight.</li> </ol>
TT.1.17	Applicant	Paragraph 1 of Appendix C of the Case for the Scheme [APP-344] refers to the proposed A1 Alnwick to Ellingham dualling scheme. The title provided above paragraph 1	<ol style="list-style-type: none"> <li>1. An updated version of Appendix C of the Case for the Scheme [APP-344] is submitted at Deadline 1 which details the wider impact assessment of the Scheme, instead of only Part B as previously submitted (see Appendix TT.2). This does not change the conclusions set out in the Case for the Scheme.</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		refers to A1 'Morpeth to Felton' and 'Alnwick to Ellingham' Dualling. Please clarify the area to which Appendix C refers.	
TT.1.18	NCC	Is NCC, as Highway Authority content with the scope of the Construction Traffic Management Plan (CTMP) [APP-347]? Does section 5.10 of the CTMP provide adequate guidance at this stage to guide the scope of the PRoW Management Plan to be secured through R4?	
TT.1.19	Applicant	The CTMP [APP-347] sets out in section 2.3 estimates of the amounts of different materials needed for construction. In general terms, how do these amounts convert to vehicle movements?	<ol style="list-style-type: none"> <li>1. The materials required for the construction of the Scheme are detailed in Table 13-15 in Chapter 13: Material Resources Part A [APP-056] and Table 13-15 in Chapter 13: Material Resources Part B [APP-057], and are derived from the Bill of Quantities.</li> <li>2. For each type of material, the number of vehicles has been calculated based on the maximum loadings for that vehicle type. The movements have been profiled across the construction programme to provide estimated movements.</li> </ol>
TT.1.20	Applicant	In their Relevant Representations, Amble Town Council [RR-002] and Tom Lloyd [RR-015] question why access to Causey Park Bridge is being reduced in favour of Fenrother junction. The Applicant is asked to provide evidence for this proposed change. NCC are also asked to comment as the highway authority.	<ol style="list-style-type: none"> <li>1. While the Applicant agrees that the Scheme will result in a change to junction provision at Causey Park compared to the existing provision, locating a grade separated junction at Fenrother as opposed to Causey Park is not a change in the Scheme design, Fenrother was confirmed as the junction location in the Preferred Route Announcement. The location of the at Fenrother junction was chosen in preference to Causey Park based on the traffic model forecasts which showing more vehicles per hour using the junction. In addition, the Fenrother junction provides improved east-west connectivity across the A1 and the existing local road network is more suitable to deal with the forecast traffic movements generated by the new junction.</li> <li>2. The flows on the Widdrington Road approach to the Causey Bridge junction on the existing A1 are low (less than 3 vehicles per minute in each direction during morning and evening peak periods). With the Scheme in place, these flows are forecast to reduce or remain at a similar level, whilst flows on the de-trunked A1 are forecast to reduce significantly (from around 900 pcu per hour in each direction to around 100 pcu per hour in each direction), leading to reduced junction delays. The increased distance and associated time that drivers will need to travel to join the junctions at West Moor (around 4km) or Fenrother (around 3km) will be offset by the forecast overall reductions in journey time reported in section 4.9 of the Case for the Scheme [APP-344].</li> </ol>
TT.1.21	Applicant	In their Relevant Representation NCC [RR-001] raise concerns about the proposed Charlton Mires junction in terms of capacity, public transport provision and the speed limit. The Applicant is asked to respond.	<p><b>Capacity:</b></p> <ol style="list-style-type: none"> <li>1. Section 4.9 of the Case for the Scheme [APP-344] details the operational modelling of the proposed junctions on the A1 including the proposed Charlton Mires junction which was undertaken using industry standard software developed by the Transport Research Laboratory (TRL). Forecast traffic flows from the 2038 with Scheme strategic model were used. The analysis concludes that the proposed junction is forecast to operate well within capacity (with a ratio of flow to capacity or RFC below 0.85) and with minimal queueing (fewer than one vehicle queueing on average on each approach).</li> </ol> <p><b>Speed Limit:</b></p> <ol style="list-style-type: none"> <li>2. The detailed design of the side roads to national speed limit adjoining Charlton Mires, have been agreed in principle with NCC (in line with NCC's Residential Roads and Footpaths in Northumberland design</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>guidance) with traffic calming measures, subject to approval by the Secretary of State in discharging requirement 3 of the dDCO [APP-014]. This issue is recorded as item 13 in Table 3-2 of the NCC Statement of Common Ground.</p> <p><b>Public Transport:</b></p> <p>3. The Applicant confirms that the existing bus stops at Charlton Mires and along the B6341 will be removed as part of the Scheme as set out in section 2.5.204 of Chapter 2 – The Scheme [APP-037]. The Applicant also confirms that two new bus stops are proposed along the B6341 to the west of the A1 to replace these, and ensure continued access to public transport as also set out in section 2.5.204 of Chapter 2. It was recognised in Chapter 12: Population and Human Health [APP-055], Section 12.10 that usage of these services (as reported by the service provider) is low. Temporary bus stops would be provided during construction of Part A and B. The exact location of these temporary locations would be finalised prior to construction in discussions with the service provider and NCC as the Highway Authority. The Applicant does not propose to remove connectivity to existing bus stops on the A1 north of the new Charlton Mires junction as part of the Scheme. The features raised by NCC have been confirmed by the bus provider as markers that denote the boundary between fare zones, rather than bus stops.</p> <p>4. Liaison with NCC is ongoing and clarifications on the associated issues raised in their Relevant Representation [RR-001] will be captured in the SoCG.</p>
TT.1.22	Applicant	<p>In their Relevant Representation NCC [RR-001] seek further information in respect of whether peak hour flows have been assessed in the ES and whether discrete junction modelling has been undertaken.</p> <p>The Applicant is asked to respond.</p>	<p>1. Peak hour flows have been used within the following assessments within the ES:</p> <ul style="list-style-type: none"> <li>• Air quality assessment: Chapter 5, Air Quality Part A [APP-040] and Chapter 5, Air Quality, Part B [APP-041] – Dispersion modelling undertaken based on Average Annual Daily Traffic (AADT) 24 traffic data split into AM, PM, inter-peak and off-peak periods of the day. Traffic data generated from macro-simulation traffic modelling (SATURN) which includes detailed Scheme and junction designs.</li> <li>• Climate assessment: Chapter 14, Climate Part A [APP-058] and Chapter 14, Climate Part B [APP-059] - AADT 24 data, which includes peak flows, has been used for the Greenhouse Gas (GHG) traffic assessment.</li> <li>• Population and Human Health assessment: Chapter 12, Population and Human Health Part A [APP-054] and Chapter 12, Population and Human Health Part B [APP-055] - Peak traffic flows (AM and PM) have been used for driver stress calculations (in accordance with the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 9, Vehicle Travellers guidance).</li> </ul> <p>2. Section 4.9 of the Case for the Scheme [APP-344] details the junction modelling which has been undertaken for the proposed junctions on the A1. The modelling concludes that all junctions assessed are forecast to operate well within capacity and with minimal queuing (no more than one vehicle on average) in all time periods on either the Local Highway Network and Strategic Road Network. Detailed junction modelling has not been undertaken for the de-trunked sections of the A1, as the significant forecast reduction in flows will lead to reduced delays compared with the without Scheme scenario.</p> <p>3. As noted in the responses to RR 1.1.5a and 1.1.5b above, the Scheme does not include a commitment to delivering changes to the cross section of the de-trunked A1 to provide facilities for pedestrians and cyclists and therefore no detailed junction modelling of such potential changes has been undertaken at this stage.</p>
TT.1.23	Applicant	<p>NCC [RR-001] as local highway authority is seeking clarification in respect of the extent of highway adoption in relation to the de-trunked A1 and the new local highway</p>	<p>1. The extents of highway adoption and permanent boundaries for the Applicant and NCC have been discussed and agreed in principle and are set out in Appendix TT.3 submitted at Deadline 1 in response to First Written Questions</p>

Ref. No.	Question to:	Question	Applicant's Response
		<p>network outwith the carriageway and footway areas shown in the submitted plans. In addition, a number of other Relevant Representations raise the issue of highway adoption / responsibilities.</p> <p>The Applicant is asked to clarify this matter.</p>	<p>2. The Applicant proposes for the following list of roads to be adopted by the local authority:</p> <p><b>Part A</b></p> <p><b>West View;</b></p> <ol style="list-style-type: none"> <li>1. Realigned section of High Highlaws Road approaching Highlaws Junction (2/A in the Rights of Way and Access Plans [APP-009]).</li> <li>2. De-trunked A1, from Priests Bridge (PA 3/5 in the Rights of Way and Access Plans [APP-009] to the new West Moor roundabout, including the realignments related to Fenrother Lane (East) (4/B and 4/C in the Rights of Way and Access Plans [APP-009]) and the new link road (8/B in the Rights of Way and Access Plans [APP-009]).</li> <li>3. Bywell Road (8/A in the Rights of Way and Access Plans [APP-009]).</li> <li>4. Realigned section of West Moor Road approaching West Moor Junction (9/A in the Rights of Way and Access Plans [APP-009]).</li> </ol> <p><b>Part B</b></p> <ol style="list-style-type: none"> <li>1. Rock South Farm Access Road (from PA 14/2 to PA 15/5 in the Rights of Way and Access Plans [APP-009]). West Linkhall Access Road (from PA 15/3 to PA 16/1 in the Rights of Way and Access Plans [APP-009]).</li> <li>2. East Linkhall Access Road (from PA 15/4 to PA 16/4 in the Rights of Way and Access Plans [APP-009]).</li> <li>3. It is agreed in principle that side roads and link roads will be adopted by NCC. Section 5.2.2 of the outline CEMP [APP-346] confirms that side roads and link roads will be adopted by NCC. Private Means of Access will stay with the appropriate landowner.</li> </ol>

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