

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

**Scheme Number: TR010059**

## **7.21 Applicant's Response to ExA's Further Written Questions**

Rule 8(1)(b)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

April 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Examination Procedure) Rules  
2010**

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

Development Consent Order 20[xx]

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**Applicant's Response to ExA's Further  
Written Questions**

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# **1 APPLICANT'S RESPONSE TO EXAMINING AUTHORITY'S FURTHER 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 (ExA's) Further Written Questions (WQs) published on 19 March 2021.

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

Ref. No.	Question to:	Question	Applicant's Response
GEN.2.1	Applicant	<p>Certain sections of the Design Manual for Roads and Bridges (DMRB) have been recently updated or updated following the preparation of the some of the documents that accompany the application. Paragraph 3.4 of Applicant's Written Summary of Oral Submissions at Hearings – ISH2 [REP4-025] states that appropriate parts of the DMRB that are relevant are extracted from the DMRB and appended to the Outline CEMP at D4.</p> <p>The Applicant is asked to provide a full list of the sections of the DMRB that have been superseded since the preparation of the documents in support of the application and toappend this to the next version of the outline CEMP.</p>	<ol style="list-style-type: none"> <li>1. It has been agreed with Northumberland County Council (NCC) that Volume 10, Section 0, Part 2 (HA 87/01–Environmental Functions) &amp; 3 (HA 88/01-Landscape Elements) of DMRB documents will be appended to the Landscape Environmental Management Plan (LEMP).</li> <li>2. Appendix C: Former and Updated DMRB Guidance details the former DMRB guidance that has been superseded and a link to the archived DMRB guidance documents where applicable.</li> <li>3. In order to determine the implications of the updated DMRB guidance to the conclusions of the Environmental Statement (ES), a sensitivity test was undertaken with the following aims: <ol style="list-style-type: none"> <li>a) To identify key changes in the assessment methodology, comparing the old and new versions of the guidance against the (Environmental Impact Assessment (EIA) for the Scheme.</li> <li>b) To determine whether there would be changes to the significant effects reported in this ES if the updated guidance had been used for the assessment.</li> </ol> </li> <li>4. The findings of the sensitivity test are presented in Appendix 4.5: DMRB Sensitivity Test of the ES [APP-198]. For some environmental topics, further assessment was required in order to fully determine the implications, as detailed in: <ol style="list-style-type: none"> <li>a) Appendix 5.8 Air Quality DMRB Sensitivity Test Part A [APP-205]</li> <li>b) Appendix 6.10 Noise and Vibration DMRB Sensitivity Test Part A [APP-215]</li> <li>c) Appendix 9.27 Biodiversity DMRB Sensitivity Test Part A [APP-253]</li> <li>d) Appendix 10.6 Road Drainage and the Water Environment DMRB Sensitivity Test Part A [APP-259]</li> <li>e) Appendix 11.5 Geology and Soils DMRB Sensitivity Test Part A [APP-265]</li> <li>f) Appendix 5.7 Air Quality DMRB Sensitivity Test Part B [APP-275]</li> <li>g) Appendix 6.10 Noise and Vibration DMRB Sensitivity Test Part B [APP-285]</li> <li>h) Appendix 9.12 Biodiversity DMRB Sensitivity Test Part B [APP-310]</li> <li>i) Appendix 10.5 Road Drainage and the Water Environment DMRB Sensitivity Test Part B [APP-315]</li> <li>j) Appendix 11.7 Geology and Soils DMRB Sensitivity Test Part B [APP-323]</li> <li>k) Appendix 16.4 Air Quality Likely Significant Effects of the Scheme [APP-330]</li> <li>l) Appendix 16.5 Noise and Vibration Likely Significant Effects of the Scheme [APP-331]</li> <li>m) Appendix 16.7 Biodiversity DMRB Sensitivity Test: The Scheme [APP-333]</li> <li>n) Environment Impact Assessment - Updated Biodiversity Air Quality DMRB Sensitivity Assessment [REP3-010]</li> </ol> </li> <li>5. The DMRB Volume 11 Section 2 Part 5 together with IAN 125/15-Supplementary guidance for users of DMRB Volume 11 'Environmental Assessment' was superseded by DMRB LA 104 Environmental Assessment and Monitoring. The updated guidance requires consideration of environmental factors set out in the EIA Directive 2014/52/EU, together with the consideration of heat and radiation and major accidents and disasters.</li> <li>6. These environmental factors are: <ol style="list-style-type: none"> <li>a) Population and human health;</li> </ol> </li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<ul style="list-style-type: none"> <li>b) Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;</li> <li>c) Land, soil, water, air and climate;</li> <li>d) Material assets, cultural heritage and the landscape;</li> <li>e) The interaction between the factors referred to in points (a) to (d).</li> </ul> <p>7. As the ES has been prepared in line with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) the assessment covers the relevant environmental factors and is therefore compliant with LA 104.</p>
GEN.2.2	Applicant	Are there any changes to Government Policy or Guidance, resulting from the United Kingdom's departure from the European Union which have implications for the Application?	<ol style="list-style-type: none"> <li>1. The Government sought to ensure that there would be no substantive changes to environment policy when the United Kingdom left the European Union (EU) at the end of December 2020. Substantive changes to environment policy would have likely impacted the Application, more so than any other policy change and to a degree where the Applicant would have needed to undertake further assessment as a result.</li> <li>2. As such there have been no changes to Government Policy or Guidance in relation to the Application resulting from the United Kingdom's departure from the EU. All EU regulations and legislation in relation to EIA remain valid and there are therefore no implications for the Application for the Scheme.</li> </ol>
GEN.2.3	Applicant	<p>At Deadline 1 the Applicant submitted a revised version of the Denwick Burn Culvert Structural DCO Drawing [REP1-004]. The key indicates that the revision reflects amendments in response to relevant representation.</p> <p>The Applicant is asked to confirm to which relevant representation this relates.</p>	<ol style="list-style-type: none"> <li>1. REP1-004 responds to the Environment Agency's Relevant Representation [RR-004].</li> </ol>
GEN.2.4	Applicant	<p>The Applicant's response to GEN.1.21 [REP1-032] indicated that the outline CEMP [APP- 346] requires a Landscape Management Plan to be implemented once the scheme is operational.</p> <p>Why is there not a requirement to produce a Landscape and Environmental Management Plan prior to construction?</p>	<ol style="list-style-type: none"> <li>1. The Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) requires the preparation of a LEMP to be implemented prior to the construction of each Part of the Scheme, this is secured through item ExA: SL100 within Table 3.1 Register of Environmental Actions and Commitments: The Scheme. As such, a LEMP will be produced during the detailed design stage and prior to construction for both Parts A and B; and it will cover both the construction and operational phases.</li> </ol>
GEN.2.5	Applicant	<p>The Applicant's response to GEN.1.35 [REP1-032] indicated that Appendix GEN.4 [REP1- 036] 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.</p> <p>Have the potential measures been discussed with individual receptors and/ or IPs? If not, why not?</p>	<ol style="list-style-type: none"> <li>1. Appendix GEN.4 to the Applicant's Response to the ExA's First Written Questions [REP1-036] provides a justification for the residual significant effects reported in Chapter 5 to Chapter 17 of the ES [APP-040 to 062] and why no further mitigation is proposed to be implemented. No further mitigation is proposed because mitigation measures are not feasible to reduce the residual significant effects anticipated as a result of the Scheme. As no further mitigation has been proposed, no consultation with individual receptors and / or Interested Parties has been undertaken.</li> <li>2. However, individual receptors and Interested Parties have been consulted on mitigation measures that form part of the Scheme. Consultation has been via direct consultation between environmental specialists and individual receptors / Interested Parties, as well as formal consultation. Further details are provided in the Statement of Common Ground with Northumberland County Council [REP4-017], Natural England [REP4-017],</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
			Environment Agency [REP4-018], Historic England [REP4-019] and Forestry Commission [REP4-020] (updated Statement of Common Grounds to be submitted at Deadline 5) and Consultation Report [APP-021].
GEN.2.6	Applicant	<p>In commenting on D1 submissions, NCC stated [REP2-025] in respect of Appendix GEN.4[REP1-036] that it did not agree that there are no opportunities to improve mitigation for residents and road users at West Moor; and believed that this can be achieved without blocking open views looking north from properties via planting in the area marked for topsoil storage to the west of the proposed junction. The Applicant responded [REP3-024] stating that should this additional block of woodland be provided, it was concerned that there would be an adverse effect on R35 as a result of the loss of the open aspect, currently afforded to views from the north facing elevation, and it was for this reason that the Applicant does not consider such provision to be appropriate.</p> <p>Has the Applicant discussed this with the individual receptor? If not, why not?</p>	<p>1. Discussions with NCC agreed specific mitigation measures developed for the area to the west of West Moor junction, comprising increased density of roadside trees at the interface with the diverted West Moor Road, and the slip road to the West Moor junction. It was agreed with NCC that the inclusion of a greater number of trees within this boundary would provide sufficient additional screening to views from the west, including for the occupants of local dwellings and users of West Moor Road travelling in an easterly direction, such that findings of the assessment were agreed. This is evidenced in item 5.7 of Table 3-1 - Issues related to the Draft Development Consent Order (DCO) within the SoCG with NCC updated at Deadline 4, refer to [REP4-016]. However, the Applicant met with the resident/s of West Moor Cottage during the statutory consultation on Part A on 04/07/2018, where their concerns over maintaining their view of the open fields to the north was raised. As part of the targeted consultation on Part A in January 2019 the stakeholder confirmed their objection to the proposed planting on the neighbouring plot, citing an impact on their outlook. As such, the proposed additional planting would avoid the unnecessary limitation of views to the north by woodland, which reflects the discussions which have been held with the local resident of West Moor Cottage.</p>
GEN.2.7	NCC	<p>At D2 the Applicant submitted an update to the Rights of Way and Access Plan [REP2-003]. This was updated to address comments made by NCC at D1.</p> <p>What are NCC's comments on the updated plan?</p>	<p>1. The Public Rights of Way (PROW) Officer from NCC had a call with the Applicant after Deadline 2, on 17/02/2021. The Applicant awaits NCC's response at Deadline 5 and will respond at Deadline 6.</p>
GEN.2.8	Millhouse Developments	<p>The submission by Youngs RPS on behalf of Millhouse Developments [REP2-027] included the statement that "the initial proposals put forward by the Highways Agency (sic) made no access provisions for any purpose to the land that is owned by our client but not required for the dualling works to the A1. A contrived access arrangement is now proposed through neighbouring land which is to be restricted for agricultural use only. This is inadequate for our clients purposes, particularly in view of the currently unrestricted access to their site from the A1 and the historic planning consent for 'Roadside service incorporating petrol filling station and shop' (reference CM/00/D/337 and CM/04/D.550)." The Applicant responded to this representation at D3 [REP3-024] and NCC also commented [REP3-029]. Further comments were provided in the Applicant's Response to D3 Submissions [REP4-024]. Millhouse Developments is asked to respond to those comments.</p>	<p>1. The Applicant awaits Millhouse Development's response at Deadline 5 and will respond at Deadline 6.</p>

Ref. No.	Question to:	Question	Applicant's Response
GEN.2.9	Applicant	The Applicant confirmed [REP1-032] that at Lionheart Enterprise Park, they would require a smaller temporary land take than was assessed in the ES. The required area would occupy approximately 40,000m <sup>2</sup> . As set out in the Applicant's Comments on the LIR [REP3-025] this aspect was discussed with the landowner on 08/12/2020, when it was confirmed that it would be possible to reduce the scheme compound area so that there is no hindrance to the implementation of the landowner's recent planning permission. The Applicant considers that it is not anticipated that the scheme would impact on the wider policy aspiration for commercial development in this area as it is likely that the scheme would be completed before the land is required for commercial development. The Applicant is asked to explain how these matters can be secured through the DCO.	<ol style="list-style-type: none"> <li>1. This land is confirmed to be excluded and will be shown and thus secured on the Land Plan [APP-006] to be submitted for Deadline 6. The Book of reference will also be updated accordingly.</li> </ol>
GEN.2.10	Applicant	<p>The Applicant's Written Summary of Oral Submissions relating to ISH2 (page 18) [REP4- 025] states that the HE Design Panel was focused was on the Coquet Bridge and expressed the view that the new bridge should marry in with the existing structure as far as possible whilst taking on board the latest design requirements and looking to improve on operational safety. With regard to the rest of the scheme the Design Panel was content for this to be designed by the experts in delivering such schemes with the confines of the DMRB guidance. Appendix E – Bridge Design Philosophy [REP4-030] describes an early meeting with the HE Design Panel in 2015 which considered the scheme as a whole.</p> <p>Did the Design Panel consider Part A and Part B? The Applicant is asked to provide evidence of the Design Panel's deliberations about the Proposed Development.</p>	<ol style="list-style-type: none"> <li>1. A meeting of the Highways England Design Panel took place on 27/11/2015. On the agenda was the consideration of the A1 Morpeth to Felton (Part A) The presentation gave an introduction to the overall A1 in Northumberland programme and the team had sought advice from the panel on the factors to consider relating to the River Coquet bridge.</li> <li>2. Highways England's Design Panel terms of reference requires that schemes seek their advice where these schemes are in sensitive locations or expected to have a substantial impact on the surrounding landscape. Initial assessment of the Scheme concluded that Coquet Valley would be impacted during construction and LCA 38b Lowland Rolling Farmland at Longhorsley would be subject to a significant effect in year 1 due to it hosting the offline section of Part A. Both of these sections are within Part A. The landscape setting to Part B was not identified as being within a sensitive landscape, and as an online improvement to an existing feature of the landscape it was not considered necessary to refer the design to the Design Panel. Therefore, the Applicant only presented Part A and the site of the proposed bridge over the River Coquet.</li> <li>3. As evidence, the redacted official minutes to the meeting are included as Appendix A to this document at Deadline 5.</li> </ol>
GEN.2.11	NCC	<p>In responding to NCC's Comments on D1 Submissions [REP2-025], in particular in respect of REP1-023, the Applicant stated [REP3-024] that: "The Outline CEMP [REP1-023 and 024] states that plant stock will be planted using a combination of whips and transplants which NCC does not agree with. The Applicant has therefore updated the Outline CEMP to include provision (refer to S-L5 in Table 3-1 - REACs: The Scheme) for the inclusion of standard and feathered trees within the detailed landscape design and is submitted at D3."</p> <p>Is NCC content with this proposed change?</p>	<ol style="list-style-type: none"> <li>1. The Applicant awaits NCC's response at Deadline 5 and will respond at Deadline 6.</li> <li>2. Item 5.16 of Table 3-1 - Issues related to the Draft Development Consent Order (DCO) within the SoCG with NCC updated at Deadline 4 [REP4-016] identifies that NCC are content that all proposed landscape and visual mitigation measures are appropriate and adequate.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
GEN.2.12	Applicant	<p>Paragraph 3.1.4 of the outline CEMP [REP4-013] states that each commitment contains a cross-reference to the relevant ES Chapter (and paragraph number) from which it derives and that proposed mitigation measures can also be searched for within the REAC tables for ease of navigation</p> <p>Are all Design and Mitigation Measures and their Delivery Mechanisms within the ES transferred to the outline CEMP? For example, DM001 in Table 9.23 of the ES [APP-048] is not readily apparent in the outline CEMP.</p>	<ol style="list-style-type: none"> <li>1. All Design and Mitigation Measures and their Delivery Mechanisms within the ES have been transferred to the Outline CEMP [APP-013 and 014] (and as updated at Deadline 5).</li> <li>2. DM001 in Table 9-23 of Biodiversity Part A [APP-048] refers to permits and assents that would be required prior to the commencement of construction works. This includes an Environment Agency Permit for works in and around watercourses and Site of Special Scientific Interest (SSSI) Assent from Natural England for works within and adjacent to the River Coquet and Coquet Valley Woodlands SSSI.</li> <li>3. Table 4-1 of the Outline CEMP [APP-013 and 014] (and as updated at Deadline 5) details the consents and permission potentially required for the construction works. Table 4-1 includes Environmental Permits for Flood Risk Activities for works on or near a main river and Natural England Assent for proposed River Coquet bridge construction works. Paragraph 1.1.4 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) has been updated to clarify this.</li> </ol>
GEN.2.13	Applicant	<p>The Applicant's Written Summary of Oral Submissions at Hearings [REP4-025] in respect of ISH2 outlined the approach to aesthetics with further details on the design of structures for the scheme provided as Appendix E: Bridge Design Philosophy [REP4-030].</p> <p>Why did the original application not include a design statement?</p>	<ol style="list-style-type: none"> <li>1. A Design Statement is not a required application document, as set out in section 37(3) of the Planning Act 2008 and the section 55 checklist appended to PINS Advice Note Six (Appendix 3). The Applicant considers on a case by case basis whether the inclusion of a Design Statement would support a DCO application. These are typically provided by the Applicant on their Complex Infrastructure projects (CIP) where the design can be technically challenging and complex in nature. In those cases, the Design Statement helps support the application in aiding the ExA and Interested Parties to better understand the highly involved design process. The Applicant concluded for the Scheme that due to the nature of the design, which mainly involves dualling of the existing A1, is neither complex nor technically challenging [ and which has been fully assessed and set out in the Chapter 16: Assessment of Cumulative Effects of the ES [APP-062] that a Design Statement was not required to support the application.</li> </ol>
GEN.2.14	Applicant	<p>Throughout the Examination the Applicant has provided SoCG in line with the Rule 6 Letter request.</p> <p>For clarity, the Applicant is asked that in future iterations, matters agreed, matters not agreed and matters subject to on-going discussion are clearly identified and the summary position recorded in the Statement of Commonality for SoCG.</p>	<ol style="list-style-type: none"> <li>1. The Applicant confirms to the ExA that future iterations of the Statement of Commonality (including that submitted at Deadline 5) will be revised to clearly identify matters that are agreed, matters that are not agreed and matters that are the subject of on-going discussions.</li> </ol>

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

Ref. No.	Question to:	Question	Applicant's Response
AQ.2.1	Applicant	<p>Paragraph 5.8.19 of the ES for Part A [APP-040] and paragraph 5.8.12 of the ES for Part B [APP-041] both state that, at a regional level, the Proposed Development would increase emissions of all pollutants due to the increase in vehicle-km travelled, as it would have a greater effect than the improvements in traffic flows brought</p>	<ol style="list-style-type: none"> <li>1. The objectives of the Environment Act and UK Air Quality Strategy relate to compliance with air quality standards for the concentration of pollutants in air within a specified timescale (and in some cases, with a permitted number of exceedances) rather than emissions levels. Whilst the concentration of pollutants is linked to the emissions of pollutants, the relationship is complex and dependent on the spatial and temporal</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>about by the scheme.</p> <p>How does this assist in the delivery of the objectives of the Environment Act and UK AirQuality Strategy?</p>	<p>variation in emissions and their dispersion in air. As such, there are no emissions standards / levels set at the regional or local level within the Strategy, just the ambient air quality standards. As demonstrated by the overall assessment results reported in Section 5.10 in Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041] , the increase in regional emissions does not affect the UK's ability to comply with the objectives of the Environment Act and the UK Air Quality Strategy.</p> <p>2. Whilst the regional emissions set out in Paragraph 5.8.19 of Chapter 5 Air Quality Part A [APP-040] and paragraph 5.8.12 of Chapter 5 Air Quality Part B [APP-041] were included to ensure compliance with the reporting criteria set out in DMRB guidance document HA207/07, it is noted that the requirement for the reporting of regional emissions has been removed from the updated DMRB guidance document LA105 (Air Quality).</p>
AQ.2.2	NCC	Is NCC content that the Proposed Development will not significantly increase the levels of air pollution within the wider area by increasing the number of vehicles?	
<b>Part A</b>			
AQ.2.3	Applicant Natural England	<p>NE's Written Representation [REP2-029] confirms that the issue of the approach to air quality impacts on the River Coquet and Coquet Valley Woodlands SSSI remains unresolved.</p> <p>Both NE and the Applicant are asked to provide an update on discussions on the matter and an indication of how matters can be successfully resolved.</p>	<ol style="list-style-type: none"> <li>1. As stated by Natural England [REP2-029] and detailed within the Statement of Common Ground with Natural England [REP4-017], the Applicant and Natural England do not agree on the approach to air quality assessment detailed in the updated DMRB guidance (LA 105 Air Quality).</li> <li>2. This matter is currently under discussion at a national level between the Applicant's and Natural England's national specialists, with this national level approach being agreed by both parties as the preferable way forward. However, it has also been agreed that it may be necessary to seek agreement at a scheme level (i.e. for this Scheme) depending on the timescales of discussions at a national level. The Applicant and Natural England continue to engage to reach agreement on the air quality impacts on the River Coquet and Coquet Valley Woodlands SSSI as a result of the DMRB sensitivity assessment. As detailed within Natural England's written representation [REP2-029], "<i>Natural England's advice is that this matter is capable of being overcome.</i>" The Applicant also agrees with this position (as detailed in the Applicant's response to Natural England's relevant representation [REP3-026].</li> <li>3. Appendix E represents a letter submitted to the Inspectorate by Natural England on 31/03/2021 that confirms agreement with this position.</li> </ol>
AQ.2.4	Applicant	<p>Paragraph 5.6.3 of the ES [APP-040] refers to criteria being applied to only those road links that lie within the Traffic Reliability Area (TRA), in accordance with DMRB Volume 11, Section 3, Part 1 Air Quality.</p> <p>Can the Applicant provide more detail regarding what makes up a TRA and how it has influenced the determination of the Affected Road Network (ARN)? Can the Applicant also confirm the status of the DMRB guidance to which paragraph 5.6.3 refers?</p>	<p><b>Traffic Reliability Area (TRA)</b></p> <ol style="list-style-type: none"> <li>1. The Affected Road Network (ARN) considered within the air quality assessment is limited to those links within the TRA which meet the DMRB HA 207/07 scoping criteria, as listed at paragraph 5.6.4 Chapter 5 Air Quality Part A [APP-040]. Further detail as to the determination of the TRA is provided below.</li> <li>2. The Traffic Data used in the assessment presented in Chapter 5 Air Quality Part A [APP-040] has been obtained from the forecast traffic model produced for the appraisal of the Scheme. The forecast model was built from a base year model, which was calibrated and</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>validated with observed traffic data. The traffic model contains a representation of the road network that would be affected by the change in traffic patterns as a result of the Scheme.</p> <ol style="list-style-type: none"> <li>The model has been built specifically for the assessment of the Scheme, with the "inner" area of the road network (that includes or is adjacent to the A1 in Northumberland) modelled in detail, and the rest of the road network modelled in less detail. As the "inner" area is calibrated and validated from observed traffic data to a much greater degree, this area is considered to be more accurate in representing the traffic flows. This area has been included as the TRA.</li> <li>In accordance with DMRB HA 207/07, determining which areas of the model were to be modelled in more detail and thus form the TRA was based on professional judgement at the outset of the building of the model. The TRA included the A1 in Northumberland as well as key parallel corridors including the A697 and the A1068 and the lesser roads in between these.</li> </ol> <p><b>DMRB guidance</b></p> <ol style="list-style-type: none"> <li>The DMRB guidance referred to in paragraph 5.6.3 of Chapter 5 Air Quality Part A [APP-040] is DMRB document HA207/07. Since the assessment was carried out, HA207/07 has been withdrawn and replaced with DMRB document LA105. A review of the potential differences to the assessment arising from the change in guidance document has been undertaken in Appendix F of Appendix 16.4: Air Quality Likely Significant Effects of the Scheme [APP-330], including the change to the wording of the scoping criteria used to determine the ARN. Specifically, paragraph 1.2.1 of Appendix F to Appendix 16.4: Air Quality Likely Significant Effects of the Scheme [APP-330] states that:</li> <li>"the change to scoping criteria is unlikely to increase the extent of the ARN for the Scheme."</li> </ol>
AQ.2.5	Applicant	<p>A significant number of sites included in Table 5-12 of the ES [APP-040] present values in excess of the critical level (30 µg/m<sup>3</sup>) or lower critical load for the most sensitive features.</p> <p>How would the Proposed Development minimise or improve pollutant concentrations?</p>	<ol style="list-style-type: none"> <li>It should be noted that Table 5-12 of Chapter 5 Air Quality Part A [APP-040] represents the future baseline for ecological receptors, i.e. without the Scheme. A number of ecological receptors (sites designated for nature conservation) included in Table 5-12 of Chapter 5 Air Quality Part A [APP-040] experience values in excess of the critical level (30 µg/m<sup>3</sup>) in the absence of the Scheme. Further, the baseline nitrogen deposition rate (N/ha/yr) exceeds the lower critical load for the most sensitive feature for the majority of surveyed sites/transects in the absence of the Scheme.</li> <li>Whilst the Scheme results in an overall increase in the number of vehicles using the A1, the design of the Scheme seeks to minimise pollutant concentrations by relieving congestion. The Scheme would result in more efficient travel (i.e. a reduction in emissions per vehicle) where congestion is relieved.</li> <li>It is also noted that local road travel is not the principal contributor to nitrogen deposition levels, and there is action being taken at a national level to reduce emissions from sectors, e.g. agriculture, that are responsible for elevated levels of nitrogen deposition.</li> <li>The ecological impact assessment of changes in operational air quality in accordance with IAN 174/13 is detailed in Section 9.10, Chapter 9: Biodiversity Part A [APP-048] for the ecological receptors detailed in Table 5-12 of Chapter 5: Air Quality Part A [APP-040]. Overall, this concludes that the changes in NO<sub>x</sub> and nitrogen deposition as a result of the Scheme would result in, at worst, slight adverse (not significant) effects to ecological</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
			<p>receptors. As such, there are no mitigation measures proposed to minimise pollutant concentrations.</p> <p>5. The Scheme results in an improvement for a single ecological receptor, Ulgham Meadows Local Nature Reserve (LNR), where there is a predicted decrease in nitrogen deposition as a result of the Scheme. This is due to the increase in capacity for vehicular traffic along the A1 as a result of the Scheme, drawing traffic off other roads and thereby reducing associated vehicular emissions in proximity to the LNR. This results in a slight beneficial (not significant) effect.</p>
AQ.2.6	Applicant	<p>Table 5-15 of the ES [APP-040] Summary of Notable Impacts on Annual NO<sub>x</sub> Concentrations (µg/m<sup>3</sup>) for 2023 at Ecological Sites appears to indicate that in all but one of the sites previously identified there will be an increase in the Annual NO<sub>x</sub> Concentrations in the Do-something scenario when compared to the Do-minimum.</p> <p>Can the Applicant explain the reason for this increase and why it is predicted?</p>	<ol style="list-style-type: none"> <li>1. The Scheme results in an increase in traffic flow along the A1 and a change in route alignment. The increase in pollutant concentrations is caused by a combination of the overall increase in vehicle emissions along the A1 and changes to the geometry of the road, where the distance between the designated sites and the road is reduced.</li> <li>2. The increase in emissions is caused by the increase in overall flow along the A1, partially offset in places by congestion relief/increases in speeds (in the form of a modelled speed band change) which reduces the mass of emissions per vehicle.</li> </ol>
AQ.2.7	Applicant	<p>Paragraph 5.7.21 of the ES [APP-040] states that with the forecast replacement of older, more polluting technologies in the vehicle fleet with cleaner technologies, pollutant concentrations in 2023 are predicted to be lower than in 2015.</p> <p>Considering the timescale for the Proposed Development, has such a tendency been observed?</p>	<ol style="list-style-type: none"> <li>1. Monitored concentrations of NO<sub>2</sub> within Northumberland show a decreasing trend since 2015 (the Scheme Baseline Year). Northumberland County Council state within their 2020 Annual Status Report [accessed via: <a href="https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Public-Protection/Pollution/2020-LAQM-Annual-Status-Report.pdf">https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Public-Protection/Pollution/2020-LAQM-Annual-Status-Report.pdf</a> on 25/03/2021].</li> <li>2. "Data for all pollutants has previously indicated a downward trend although this seems to be levelling off somewhat... For the eleven longest established diffusion tube locations, many of the sites do show a clear downward trend."</li> <li>3. This trend can also be seen graphically in Figure A.1 – Trends in Annual Mean NO<sub>2</sub> Concentrations from Automatic Monitors of the Northumberland County Council 2020 Annual Status Report, which shows a decreasing trend in concentrations of NO<sub>2</sub> monitored by continuous analysers at Blyth (2007 to 2013) and Cowpen (2007 to 2018).</li> </ol>

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

Ref. No.	Question to:	Question	Applicant's Response
BIO.2.1	Applicant	<p>The Preliminary Bat Roost Assessment Verification Survey Report [REP1-015] states that the 2020 survey identified 27 trees that were previously surveyed in 2016/17 and have increased in suitability to Moderate or High, or were additional trees recorded in 2020 that were classified as Moderate or High roosting suitability that will either be felled or subject to high levels of disturbance during construction. The Report states that further survey is proposed for the 27 individual trees and that the Applicant is</p>	<ol style="list-style-type: none"> <li>1. The Applicant would like to correct the number of trees identified for further survey in the Preliminary Bat Roost Assessment Verification Survey Report, which should be 26 (T105A was listed twice, in error, in Table 4-1 [REP1-015]).</li> <li>2. The 26 trees have been subject to further assessment in October 2020 and February 2021, comprising an aerial climb and inspection (where this was safe to do so) and/or an inspection of features with the use of a camera on a telescopic pole. The findings of the further assessment shall be documented within an update of the Preliminary Bat Roost</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		<p>arranging access for the completion of a climb and inspect survey during the winter/spring of 2020/21 as an alternative survey method to support the verification survey.</p> <p>The Applicant is asked to provide an update in respect of this proposed survey.</p>	<p>Assessment Verification Survey Report and submitted at Deadline 6. A summary of the results is presented below.</p> <ol style="list-style-type: none"> <li>Access was not achieved for a single tree (T20.17). This tree therefore remains of Moderate roosting suitability, as identified within the Preliminary Bat Roost Assessment Verification Survey Report [REP1-015]. A further 18 trees were downgraded from High to Moderate roosting suitability or maintained a Moderate roosting suitability classification following the further survey (T2A, T29A, T44A, T53A, T55A, T68A, T105A, T20.9, T20.52, 20.57, T20.58, T20.77, T20.97, T20.107, T20.122, T20.123, T20.132 and T20.135). Measure S-B7 of the Outline CEMP [REP4-013 and 014] (and as submitted at Deadline 5) has been updated to confirm that these trees would be subject to further survey (dusk emergence/dawn re-entry surveys) to confirm the presence/likely absence of roosting bats. The surveys would be undertaken pre-construction, prior to the felling of the trees, between May and September and in accordance with good practice guidelines published by the Bat Conservation Trust. In addition, as detailed within the existing text of S-B7, "... those trees where suitability for roosting bats remains (Moderate or High suitability), although presence of a roost has not been confirmed, should be soft-felled under ecological supervision (by the ECoW [Ecological Clerk of Works] (suitably experienced and licensed)). This will consist of the removal of major branches and limbs followed by section felling of the main trunk, with these lowered to the floor for inspection by the ECoW." If the surveys identify a bat roost(s), the Applicant would liaise with Natural England and obtain a licence to permit actions that may impact the bat roost(s).</li> <li>Five trees (T108A, T109A, T110A, T111A and T20.76) were downgraded from Moderate roosting suitability to Low roosting suitability. In accordance with best practice, these trees would be subject to a pre-fell inspection to confirm that there have been no changes in roosting suitability. This pre-fell inspection is detailed in measure S-B7 of the Outline CEMP [REP4-013 and 014] (and as submitted at Deadline 5).</li> <li>Two of the trees (T20.72 and T20.73) were downgraded from Moderate to Negligible roosting suitability. As such, no further survey or mitigation is required.</li> <li>The Applicant is engaging with Natural England to confirm their agreement with the approach to mitigation outlined above. At the time of writing, the Applicant is awaiting a response. Any engagement shall be captured within the Statement of Common Ground.</li> </ol>
BIO.2.2	The Woodland Trust	<p>ExQ1 BIO.1.6 asked the Woodland Trust 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. No response was received to BIO.1.6.</p> <p>The Woodland Trust is further asked to respond.</p>	
BIO.2.3	EA Applicant	<p>The Applicant commented on responses to ExQ1 [REP2-020] including the EA's response to BIO.1.9 which focused on the impact of the Proposed Development on otters. The EA's representation at D4 [REP4-076] also addressed the impact of the Proposed Development on otters. The EA is asked to respond to the Applicant's comment. The Applicant is asked to respond to the EA's comments.</p>	<ol style="list-style-type: none"> <li>The Applicant has provided a detailed response to the Environment Agency's Deadline 4 submission [REP4-076] in the Applicant's Responses to Deadline 4 Submissions (document reference 7.22) submitted at Deadline 5.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
BIO.2.4	NE NCC	<p>The Applicant submitted an Updated Biodiversity Air Quality Assessment at D3 [REP3-010].</p> <p>NE is asked to comment on the report generally and particularly in respect of the impacts on the River Coquet and Coquet Valley Woodlands SSSI. Are NE's concerns resolved and if not, what are the consequences? NCC is also asked to comment on the findings of the report.</p>	
BIO.2.5	NCC	<p>In its LIR [REP1-071] NCC stated (paragraph 5.48) that it was considered far from clear that the loss of ancient woodland was being addressed satisfactorily from a spatial point of view in terms of the wording of Policies ENV1 and QOP 4 in the emerging Northumberland Local Plan. It was recognised by NCC that while the policies cannot be given full weight, neither of the parts quoted is the subject of significant outstanding objections. The Applicant responded to the LIR at D3 [REP3-025].</p> <p>NCC is asked to comment on the Applicant's response within the context of NCC's statement that the overall ancient woodland strategy is welcomed (LIR 6.7.10).</p>	
BIO.2.6	NCC	<p>The Applicant's Comments on the LIR [REP3-025] responding to paragraph 6.7.1 of the LIR indicate that the Applicant has issued additional assessment information comprising Updated HRA Reports [REP1-012 and REP1-013 ] and HRA Addendum Report [REP1-043]; Biodiversity No Net Loss Assessment for the Scheme [REP2-009]; Annex A – Approach to the Assessment of Losses and Gains of Watercourse [REP2-010]; and Updated Biodiversity Air Quality DMRB Sensitivity Assessment [REP3-010].</p> <p>NCC has not yet commented on these documents and is asked to do so.</p>	
BIO.2.7	NE	<p>In responding to HE's WR [REP2-029] the Applicant [REP3-026] confirmed that it was continuing to discuss with NE the update of Letters of No Impediment.</p> <p>Can NE provide an indication of when these revisions will be provided?</p>	
BIO.2.8	Applicant	<p>Paragraph 4.5.12 of the Ancient Woodland Strategy [REP4-008] states that the proposed Woodland Creation Area would be retained as woodland in perpetuity. The Executive Summary notes that this is based on a comment from NE. How would the Woodland Creation Area be secured in perpetuity through the DCO? Is an amendment to R15 necessary?</p>	<p>1. Requirement 15 of Schedule 2 to the dDCO [REP4-004 and 005] (as updated at Deadline 5) provides that no removal of ancient woodland is to take place until an ancient woodland strategy has been approved by the Secretary of State, following consultation with Natural England and the relevant planning authority. Requirement 15(2) provides that the ancient woodland strategy submitted to the Secretary of State shall be based on the outline Ancient Woodland Strategy. Paragraph 4.5.12 of the outline Ancient Woodland Strategy [REP4-008 and 009] provides that the woodland creation area would be retained in perpetuity.</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>2. Requirement 15(3) provides that the authorised development must be constructed in accordance with the approved ancient woodland strategy. Following the permanent acquisition of the land constituting the Woodland Creation Area (as shown on the Land Plans [APP-006], parcel 9/1b), the Applicant would control the relevant land and, pursuant to section 161 of the Planning Act, a breach of the terms of this requirement in respect of that land would constitute a criminal offence.</p>
BIO.2.9	EA	<p>Appendix F – Proposed Woodland and Marginal Planting Plan [REP4-031] describes how the marginal planting and riparian woodland is proposed to offset the impacts to watercourses. The plan was produced in response to discussion at ISH2 involving the Applicant and the EA.</p> <p>The EA is asked to comment on the proposals and whether they adequately offset the impacts to watercourses.</p>	
BIO.2.10	Applicant	<p>The Applicant submitted a Biodiversity No Net Loss Assessment for the Scheme at D2 [REP2-009].</p> <p>Can the Applicant comment on any responses received from IPs regarding the assessment?</p>	<p>1. The Applicant received comments from Natural England on the Biodiversity No Net Loss Assessment for the Scheme issued at Deadline 2 [REP2-009] and the supporting Annex A - Approach to the Assessment of Losses and Gains of Watercourses [REP2-010] via email on 11/02/2021. This is captured within the Statement of Common Ground with Natural England issued at Deadline 4 [REP4-017].</p> <p>2. Natural England confirmed that they had not been in a position to study the document in detail but highlighted the following:</p> <ul style="list-style-type: none"> <li>a) Natural England acknowledged that while the Scheme will regrettably result in the loss of ancient woodland from within the River Coquet and Coquet Valley Woodlands SSSI this has been addressed in the Ancient Woodland Strategy [REP4-008 and 009] developed for the Scheme.</li> <li>b) "Overall the Scheme will not achieve no net loss due to the loss of hedgerow and river habitat and consideration must be given to what additional measures can be put in place to remediate for these losses."</li> <li>c) Natural England stated that if the Change Request to the application submitted at Deadline 4 were accepted then the No Net Loss Assessment will need to be revised further.</li> </ul> <p>3. Regarding the loss of hedgerow habitat, the Applicant has issued an updated Biodiversity No Net Loss Assessment for the Scheme at Deadline 5 due to an error in the calculation presented in the version submitted at Deadline 2 [REP2-010]. The calculation presented in the Deadline 2 submission [REP2-010] overestimated the amount of retained hedgerow but significantly underestimated the amount of created hedgerow. The updated Biodiversity No Net Loss Assessment for the Scheme submitted at Deadline 5 confirms that the Scheme would result in a net gain of hedgerow habitat.</p> <p>4. The Applicant issued a revised Biodiversity No Net Loss Assessment for the Scheme for the Change Request at Deadline 4 [REP4-058 and 059]. An updated version of this document has also been issued at Deadline 5 to update the calculation due to the error associated with hedgerow. The updated Biodiversity No Net Loss for the Scheme for the Change Request confirms that the Scheme (inclusive of the proposed changes) would result in a net gain of hedgerow habitat.</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>5. Regarding the loss of watercourse, the Applicant confirmed to Natural England within an email dated 16/02/2021 that this matter would be discussed further. The Applicant is engaging with the Environment Agency and Natural England regarding the extent to which compensation for the loss of watercourse (running water) habitat is required.</p> <p>6. In response to Natural England's comment regarding the need to revise the No Net Loss Assessment in response to the Change Request, the Applicant provided a response to Natural England within the email dated 16/02/2021 and during a teleconference on 17/03/2021. The Applicant confirmed the Change Request would impact woodland (for which compensation is addressed within the Ancient Woodland Strategy (as issued at Deadline 4 [REP4-054 and 055])) and habitats within the River Coquet and Coquet Valley Woodlands SSSI (a statutory designation). Therefore, the habitat loss associated with the Change Request is excluded from the no net loss calculation in accordance with the methodology of the assessment (see paragraph 2.4.1(2) [REP4-054 and 055]). As such, the proposed changes to the Scheme would not change the calculations of the Biodiversity No Net Loss Assessment for the Scheme. Nevertheless, an updated Biodiversity No Net Loss Assessment for the Scheme for the Change Request was submitted at Deadline 4 [REP4-054 and 055] and updated at Deadline 5.</p> <p>7. Natural England confirmed within an email dated 17/03/2021 that "Natural England notes that, should the proposed amendments be accepted, the compensation for the area of woodland damaged/destroyed will be addressed in the Ancient Woodland Strategy. We also understand that impacts on the SSSI will be dealt with separately and that this is stated in the methods section of the BNNL." This email supersedes the comment made by Natural England within their email dated 11/02/2021 (item C within the list above). The Applicant is awaiting detailed comment on the Biodiversity No Net Loss Assessment for the Scheme [REP2-009].</p> <p>8. This engagement is captured within the updated Statement of Common Ground with Natural England issued at Deadline 5. The Applicant has not received comment from Natural England on the Biodiversity No Net Loss Assessment for the Scheme for the Change Request [REP4-054] issued at Deadline 4.</p> <p>9. A response from the Environment Agency is detailed within their Deadline 4 submission [REP4-076]. The Applicant has provided a detailed response to the Environment Agency's comments at Deadline 5. The loss of watercourse as a result of the Scheme was discussed with the Environment Agency during a meeting on 19/03/2021. Both the Applicant and the Environment Agency agree that it is not viable to create new lengths of watercourse as compensation for loss of watercourse channel [REP4-076]. Measures identified that collectively form the current package of compensatory works include riparian woodland planting, design of realigned watercourse channels (138m, Part A) to be better (in terms of environmental condition and biodiversity value) than that lost, retrospective installation of fish baffles on the existing culvert of the River Lyne (Part A), replacement of the wooden baffles within an existing culvert of Longdike Burn (Part A) to increase the life span of this feature and improvements to the 850m of Longdike Burn that falls within the Order limits. The Applicant considers the package of improvements to be sufficient to mitigate and/or offset the impacts of the Scheme with regard to loss of watercourse channel. However, in addition to measures currently proposed, the Applicant is exploring opportunities to improve lengths of other existing watercourses that fall within the Order limits to further compensate for the loss of watercourse channel. This may</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>involve the re-naturalising and re-meandering of historically heavily modified and straightened channels. This forms part of the ongoing discussions with the Environment Agency, with the next meeting scheduled for 23/04/21.</p> <p>10. The Applicant has not received responses from any other IPs in relation to the Biodiversity No Net Loss Assessment for the Scheme [REP2-009] or Biodiversity No Net Loss Assessment for the Scheme for the Change Request [REP4-054] issued at Deadline 4.</p>
Habitats Regulations Assessment (HRA) Report			
BIO.2.11		<p>The Applicant's response to BIO.1.38 explains that outdated figures were used in the HRA report [APP-342] to indicate traffic flows (annual average daily traffic), and these have now been updated to align with those presented in Tables 9 (Part A) and 18 (Part B) of the Case for the Scheme [APP-344] (see revised HRA Report [REP1-012]).</p> <p>In light of this omission, the Applicant is requested to confirm that the affected road network (referred to in the screening tables and used to determine air quality impacts) is based on the Scheme as a whole, and that the HRA screening for air quality impacts was updated when Part A and Part B were combined.</p>	<p>1. The Applicant confirms to the ExA that whilst outdated traffic flow figures were originally stated within the HRA Report [APP-342], the affected road network assessed within the HRA Report is based on the Scheme as a whole. The Applicant can also confirm that the screening for air quality impacts was also updated when Part A and Part B were combined.</p>
BIO.2.12	NE	<p>NE's response to BIO.1.47 states that "based on the submitted scheme NE has no concerns" regarding the issue of water pollution [REP1-076]".</p> <p>Can NE be explicit that it is content that the measures incorporated within the scheme to mitigate for pollution events and polluted surface water runoff (e.g. detention basins, filter strips, etc) are not necessary for a negative screening and that the intervening distance and natural dilution and settlement rates are sufficient on their own to conclude no likely significant effect on the relevant European Sites?</p>	



Ref. No.	Question to:	Question	Applicant's Response
BIO.2.13	Applicant	<p>In responding to BIO.1.50 the Applicant has provided an assessment of the impacts from the Scheme alone to the black-headed gull feature of the Coquet Island SPA, as this was omitted from the original submission.</p> <p>As with the assessment of the Northumberland Marine SPA (Table 2-4 [AS-003]) can the Applicant confirm that there are no known projects or schemes that would incur impacts to the black-headed gull population of the Coquet Island SPA or with loss of functional habitat (arable or wetland) that, in combination with the Scheme, would constitute a likely significant effect?</p>	<ol style="list-style-type: none"> <li>1. The Applicant confirms to the ExA that there are no known projects or schemes that would incur impacts to the black-headed gull population of the Coquet Island SPA that, in combination with the Scheme, would constitute a likely significant effect.</li> <li>2. Due to the distance of the Scheme from the Coquet Island SPA (12.1km in a straight line (at its closest point) and 24.5km downstream via the River Coquet (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 Land-take section of Table 2-5 (page 77) of the HRA Report [REP4-056 and 057]).</li> <li>3. In relation to the in-combination effects that may arise from loss of functional habitat, 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</li> <li>4. considered by the Applicant to be a proportionate approach given the very small contribution to the loss of functional habitat for black-headed gull incurred by the Scheme (approximately 0.06% of available terrestrial foraging habitat).</li> <li>5. 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</li> <li>6. 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>7. The assessment confirmed there are no other current DCO 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>

**Table 1-4 - Compulsory Acquisition and Temporary Possession**

Ref. No.	Question to:	Question	Applicant's Response
CA.2.1	Applicant	<p>In the Written Summary of Oral Submissions relating to CAH1 (page 13) [REP4-025] it is stated that the Applicant was to update paragraph 6.1.3 of the Statement of Reasons to ensure that the ownership position East Cottage and Charlton Mires Farmhouse was clear.</p> <p>No update to the Statement of Reasons was submitted at D4 and</p>	<ol style="list-style-type: none"> <li>1. Paragraph 6.1.3 of the Statement of Reasons was only amended in the version submitted at Deadline 4 for the Change Request [REP4-048 and 049]. An updated version of the Statement of Reasons [APP-018] is submitted at Deadline 5 to incorporate the amendment at paragraph 6.1.3 of the Change Request Statement of Reasons [REP4-048 and 049].</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		therefore the Applicant is asked to undertake this for Deadline 5.	
CA.2.2	Applicant	<p>In the Written Summary of Oral Submissions relating to CAH1 (page 16) [REP4-025] it is stated that discussions about the relocation of the 66kV cable with Northumberland Estates are ongoing.</p> <p>The Applicant is asked to provide an update on these matters at Deadline 5.</p>	<ol style="list-style-type: none"> <li>1. The Applicant continues to engage in discussions with Northumberland Estates via their appointed agent, with the most recent site meeting on 09/03/2021 and telephone conversation taking place on 22/03/2021.</li> <li>2. The Applicant's District Valuer is working closely with Northumberland Estates' agent to produce a written agreement that all parties are content with. The Applicant expects to be in a position to provide a more substantive update at Deadline 6. This will be recorded in the Compulsory Acquisition Schedule submitted at that Deadline.</li> </ol>
CA.2.3	Applicant	<p>The Written Summary of Oral Submissions relating to CAH1 (page 16) [REP4-025] states that the Applicant confirmed that the involvement of landowners in the drainage design would be recorded in a private agreement, with the reasonable costs of the contractors to be met by the Applicant. As such no changes to the dDCO [REP3-004 and 005] would be required.</p> <p>How can the ExA/ SoS be assured that the Applicant will cover the reasonable costs of landowners in the drainage design if this is covered by a private agreement rather than the DCO?</p>	<ol style="list-style-type: none"> <li>1. The Applicant has to date paid all reasonable costs incurred by landowners impacted by the A1 in Northumberland scheme. The Applicant will continue to reimburse landowners through its existing arrangements.</li> <li>2. Whilst compensation is not a matter for the examination, it can reasonably be expected that landowners and those advising them will seek to achieve at least as good an outcome as would be achieved under the compensation code. Essentially, if a landowner seeks to address a matter by private agreement, it is not for the ExA to examine that, but it can assume that the landowner will seek to rely upon assurances given, especially when these mirror the code.</li> <li>3. The compensation code, which governs the principles of compensation, includes disturbance under Rule 6 of Section 5 of the Land Compensation Act 1961. Disturbance includes costs reasonably associated with the compulsory purchase. The expenses incurred as a result of the landowners' interaction with the drainage design will be assessed by the District Valuer on behalf of the Applicant for its reasonableness and recommended for payment where appropriate. In support of these assurances the Applicant will include a reference to Rule 6 of the Compensation Code within the private agreement.</li> </ol>

**Table 1-5 – Draft Development Consent Order**

Ref. No.	Question to:	Question	Applicant's Response
DCO.2.1	Applicant	<p>In commenting on NCC's response to DCO.1.44, the Applicant indicated [REP2-020] that the widths of the proposed Public Rights of Way (PRoW) have not been included in Schedule 4 of the dDCO due to potential on-site variances. However, the Applicant did confirm that the widths of the proposed PRoW would be specified in the PRoW Management Plan as part of the final CEMP.</p> <p>Where is this commitment confirmed?</p>	<ol style="list-style-type: none"> <li>1. The Outline Construction Environmental Management Plan (CEMP) [REP4-013 and 014] is updated at Deadline 5. Clause S-PH7 is being updated to state that the PRoW Management Plan will be required to include the widths of the proposed PRoW.</li> <li>2. The specific widths for types of PRoW are captured in the Statement of Common Ground (SoCG) with NCC [REP4-016] submitted at Deadline 5.</li> </ol>
DCO.2.2	Applicant	<p>Sch. 1 The Applicant's Written Summary of Oral Submissions relating to ISH1 (page 9) [REP4-025] (2.19) states that the location of the footnotes has been changed in the latest iteration of the DCO so as to avoid confusion.</p>	<ol style="list-style-type: none"> <li>1. This is a compatibility issue between the OPSI template and track changes. In the clean version of the Deadline 4 DCO, the footnote references are (a) and (b).</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		Should the references be a) and b) instead of b) and d)?	
DCO.2.3	NCC	The Applicant's Comments on Responses to ExQ1 – Appendix A PRoW Response [REP2-021] provides comments on NCC's response to DCO.1.44 and specifically proposed changes to Schedules 3 & 4 of the dDCO. Can NCC confirm that it is content with the proposed changes to Schedules 3 & 4 of the dDCO?	
DCO.2.4	Applicant	Sch. 2 R1 – Interpretation. The definition of “culvert management plan” is described as ‘the document of that description listed in Schedule 12 and certified as the <u>outline ancient woodland strategy</u> by the Secretary of State for the purposes of this Order’ Change the underlined words to ‘culvert management plan’.	1. This has been corrected in the Deadline 5 version of the DCO.
DCO.2.5	Applicant	Sch. 2 R3 – Detailed Design. The Applicant's Written Summary of Oral Submissions relating to ISH1 (page 9) [REP4-025] states that R3 should be modified to include reference to ‘general arrangements plans’. Should the amendment to R3 in the dDCO state ‘arrangement’ rather than ‘arrangements’?	1. This has been corrected in the Deadline 5 version of the DCO.
DCO.2.6	NCC Applicant	Point 25 of NCC's Response to Action Points from Hearings [REP4-074] stated that there may be alternative wording which could make R4 clearer, easier to follow and more explicit as there is potentially multiple cross-referencing between documents. NCC is asked to expand on its concerns about the drafting of R4 and to propose amended wording at Deadline 5. The Applicant is asked to respond to NCC's suggestion at Deadline 6 unless the matter is agreed between the parties in the meantime.	1. The Applicant will continue to discuss matters with NCC and seek to reach an agreed position. The Applicant will respond at Deadline 6 if NCC responds at Deadline 5 and if the matter is not agreed with NCC.
DCO.2.7	Applicant	The Applicant's Written Summary of Oral Submissions at Hearings (page 22) [REP4-025] in commenting on ISH2 (4.15) stated that R5 of the DCO has been revised to include reference to production of the LEMP. The Applicant is asked to confirm where this change occurs.	<ol style="list-style-type: none"> <li>1. The revisions to requirement 5 of the draft DCO [REP4-004 and 005]. in relation to the submission of a LEMP have not yet been included. There are a number of possible approaches to this matter. These include (first) a straight-forward requirement to produce a LEMP with the required scope set out in requirement 5; (second) a requirement to produce a finalised LEMP based on an outline LEMP prepared during the examination; or (third) a requirement to produce a LEMP based on the parameters set out in a scoping document prepared during the examination.</li> <li>2. However, the detailed drafting will depend on what additional material is provided on the LEMP during the course of the examination. The Applicant is currently reviewing approaches to the preparation of LEMPs for other schemes and proposes to provide a further version of Requirement 5 at a future deadline.</li> <li>3. The Applicant assures the examining authority that the matter will be addressed either in requirement 5 or elsewhere in the dDCO or oCEMP before the close of the examination.</li> </ol>
DCO.2.8	Applicant	Sch. 2 R8 of the dDCO has been amended to include reference to the local flood authority. Should this reference be to the ‘lead local flood	1. This change has been made and a new definition added with reference to section 6(9) of the Flood and water Management Act 2010.

Ref. No.	Question to:	Question	Applicant's Response
		authority' and should this be defined in Article 2?	
DCO.2.9	Applicant	The Applicant's Written Summary of Oral Submissions relating to ISH1 (page 10) [REP4-025] (4.12) states that the requirement for an archaeological control plan in R4(2)(xii) has been consolidated in R9. The Applicant is asked to clarify where/ how this has been done.	1. The reference to the archaeological control plan has been removed from requirement 4 as this will be addressed by the written schemes of investigation required in Requirement 9.
DCO.2.10	NCC Applicant	Point 25 of NCC's Response to Action Points from Hearings [REP4-074] stated that the Council was satisfied that R9 provides for archaeological remains to be identified and recorded but recognised that alternative wording could make the requirement clearer, easier to follow and more explicit. NCC is asked to expand on its concerns about the drafting of R4 and to propose amended wording at D5. The Applicant is asked to respond to NCC's suggestion at D6 unless the matter is agreed between the parties in the meantime.	1. Noted. The Applicant is awaiting a response from NCC.
DCO.2.11	Applicant	Sch. 2 R10 of the dDCO is headed 'Safeguarding of listed milestones'. As the requirement also refers to a non-designated milestone should 'listed' be removed from the title? In addition, should the reference to local planning authority be changed to relevant planning authority?	1. The Applicant agrees "listed" should be removed from the title to avoid confusion. 2. The Applicant agrees that "local planning authority" should be "relevant planning authority". However, as per DCO.2.12, the role of the relevant planning authority in Requirement 10 has been revised so that it is consistent with the approach in the REAC. These changes have been made in the Deadline 5 DCO draft.
DCO.2.12	Applicant	Sch. 2 R10 of the dDCO states that no part of the authorised development is to commence until a written scheme for the protection of the grade II listed milestones and the non-designated milestone has been submitted to and approved by the local planning authority in consultation with Historic England and the Milestone Society. How does this relate to Item A-CH2 of the REAC [REP4-013] which states that the Method Statement will be approved by the SoS following consultation with NCC as set out in R10?	1. To date, Requirement 10 has stated that the written scheme for the protection of the milestones be submitted to and approved by the local planning authority in consultation with Historic England and the Milestone Society. Item A-CH2 of the Outline Construction Management Plan [REP4-013 and 014] has been updated to state the Method Statement will be approved by the Secretary of State following consultation with NCC, Historic England and the Milestone Society and Requirement 10 has been revised on the same basis. This follows the same approach as the rest of the requirements where the Secretary of State is the approval authority with the relevant planning authority being a consultee.
DCO.2.13	Applicant	Sch. 2 R15(1) states that the ancient woodland strategy should be submitted to and approved in writing by the SoS, following consultation with NE and the relevant planning authority on matters related to <u>its</u> function. Should it be 'matters related to <u>their</u> functions'?	1. The correct form should be "matters related to <u>its</u> function" although "functions" is also acceptable. 2. This is because the noun "authority" is singular and hence the correct pronoun is "its". Whilst colloquially a planning authority is often referred to in the plural because it has a number of members, in strict, legal drafting the correct form should be adopted. 3. The word function could be used because the function of the authority is overall as local planning authority. Alternatively, it could be expressed in the plural since the authority has a number of subsidiary functions in that role. Hence, either is acceptable. 4. The pronoun " <u>its</u> " has been retained, but the word "function" has been changed to the plural "functions".
DCO.2.14	NCC	Sch. 4 - Permanent Stopping up of Streets, Public Rights of Way and Private Means of Access. Is NCC content with the Applicant's proposed changes to Sch. 4 at D4?	



Ref. No.	Question to:	Question	Applicant's Response
DCO.2.15	Applicant	Sch. 12. A number of documents in Sch. 12 have incomplete references. For example, the Noise Addendum is referenced 6.22 when the document itself is referenced TR010059/6.22. The Applicant is asked to provide comprehensive references where these are not currently provided.	1. Full references have been included in the Deadline 5 version of the draft DCO.
DCO.2.16	Applicant	Sch. 12. The Rights of Way and Access Plans was revised at D2 [REP2-003] and the Vegetation Clearance Plans [REP4-003] were revised at D4. These revisions are not included in Sch. 12. The Applicant is asked to review all revisions including the use of revision 0. This has been used for documents submitted during the Examination but not for those which were in the application version of the dDCO.	1. The Applicant has reviewed Schedule 12 of the DCO and it has been updated at Deadline 5 where required.
DCO.2.17	Applicant	Sch. 12. Sch. 12 references environmental masterplans for Part A and Part B as certified documents. The Applicant is asked to explain where, if at all, these are referenced within the dDCO and in responding to this question to provide the Examination Library reference.	1. The environmental masterplans have been deleted from the DCO [REP4-004 and 005] and will not be prepared, as the pertinent information is shown in the Landscape Mitigation Plan Part B [APP-144] and the Landscape Mitigation Masterplan Part A [REP4-010].
DCO.2.18	Applicant	At D2 and D3 the Applicant provided a Schedule of Changes to the dDCO. The Applicant did not provide such a document at D4 (although it is referenced in the document tracker [REP4-002]) and is requested to do so for any subsequent revisions to the dDCO.	1. A Schedule of Changes was provided associated with the Change Request [REP4-047] which also included a description of the changes in the version of the dDCO that was not related to the change request [REP4-004 and 005] i.e. it was a combined document.
DCO.2.19	Applicant	All plans/ drawings/ sections forming Volume 2 of the application appear to be included in Sch.12. Should Examination documents forming part of Volume 2 also be Certified Documents (Denwick Burn Culvert Structural DCO drawing [REP1-004], GEN.2 Existing and Proposed Carriageway Area Within Order Limits Plans WQ GEN 1.6 [REP1-034] and Proposed Highways Adoption & Maintenance Responsibilities [REP3-003])?	1. Denwick Burn Culvert Structural DCO drawing [REP1-004] was an extract from the "Structures Engineering Section Drawings Plan" pack and will be included in the D5 full suite of Structures Engineering Drawings and Sections (document reference 2.8). 2. The Applicant does not consider that REP1-034 or REP3-003 should be certified documents as they are not referred to in the DCO [REP4-004 and 005].

**Table 1-6 - Geology and Soils**

Ref. No.	Question to:	Question	Applicant's Response
<b>Part A</b>			
GS.2.1	Applicant	Considering that the local geology of Part A is varied and given that it is not known exactly where all piling operations will be undertaken and therefore exact ground conditions, how can the Applicant be certain that, within the limits of the DCO, the impacts of the Proposed Development	1. This is not an issue peculiar to the Scheme and is tackled in a similar way for major infrastructure projects of scale. 2. The methodology for the assessment of potential impacts in relation to Geology and Soils is provided in Chapter 11: Geology and Soils Part A [APP-052] and follows relevant UK guidance referenced in the chapter. The assessment has been completed in

Ref. No.	Question to:	Question	Applicant's Response
		are as predicted?	<p>consideration of the available baseline data including a comprehensive ground investigation completed in 2018. The assessment concludes that with respect to identified sensitive Geology and Soils receptors the Scheme would only present one significant effect, associated with the permanent loss of agricultural soils.</p> <p>3. In the instances of limited baseline data a conservative, worst case assessment has been completed, for example areas of surveyed agricultural land have been assessed as the most sensitive best and most versatile land. In the context of geological receptors, no highly sensitive (e.g. regionally important geological sites) have been identified within the Order limits. The potential for ground instability has been recognised as a potential effect, in particular in relation to the coal mining legacy in areas of the Scheme, potential effects associated with ground instability have been assessed as in significant in consideration that the requirement for mitigation measures will be integral to detailed design.</p> <p>4. Further, it is acknowledged in the assessment (Paragraph 11.9.20, Chapter 11: Geology and Soils Part A of the ES [APP-052] that further ground investigation will be required at detailed design to further assess the requirements for mitigation of ground stability risks, in particular in relation to the identified coal mining legacy in areas of the Scheme. This is secured by reference S-GS12 of the Outline Construction and Environmental Management Plan (Outline CEMP) [REP4-013 and 014] (and as updated at Deadline 5). The final design within the parameters authorised under the dDCO would then take account of that further investigation.</p> <p>5. As such, the potential for Part A to impact on ground stability during both construction and operation is recognised within Chapter 11: Geology and Soils Part A [APP-052] and the requirement for further ground investigation and incorporation of mitigation measures into detailed design is secured through reference S-GS12 of the Outline Construction and Environmental Management Plan (Outline CEMP) [REP4-013 and 014] (and as updated at Deadline 5).</p>
GS.2.2	Applicant	Paragraph 11.7.38 of the ES [APP-052] states that crown holes have been recorded over Causey Park mine workings, which demonstrates a hazard of gradual surface ground settlement or sudden ground collapse is present. Considering that the Mineral Safeguarding Area at Causey Park Bridge in within the OrderLimits, although in an area of temporary works, how has this been taken into consideration?	<p>1. The Mineral Safeguarding Area (MSA) at Causey Park Bridge is referenced in paragraph 11.7.34 of Chapter 11: Geology and Soils Part A [APP-052] and it is noted to be within the Order limits, although within an area of temporary works. As the MSA would not be permanently sterilised, the Scheme is not considered to have a significant adverse impact on the identified MSA. The assessment of potential impacts on permanent sterilisation of MSAs was scoped out of the assessment for Part A as a whole.</p> <p>2. In relation to potential ground stability issues associated with potential mine workings, the temporary works area at Causey Park Bridge is not located within a Coal Authority Development High Risk Area and as such further assessment of mining related hazards in this area was not required within the Coal Mining Risk Assessment (Appendix 11.4 Coal Mining Risk Assessment Part A [App-264]) completed for Part A.</p> <p>3. The Coal Mining Risk Assessment identifies and assesses the hazards associated with the Coal Authority Development High Risk Area at Causey Park to the north of Causey Park Bridge. While this identifies that crown holes have been recorded over the Causey Park mine workings, the Coal Mining Risk Assessment states that there is no positive evidence that workings exist beneath the proposed route of the Scheme to the north of Causey Park Bridge.</p> <p>4. The Coal Mining Risk Assessment [APP-264] recognised coal workings near Causey Park. As detailed in the Ground Investigation Report Part A [APP-262], additional Ground</p>



Ref. No.	Question to:	Question	Applicant's Response
			<p>Investigation works undertaken for Part A did not identify any mining related voids although anecdotal evidence suggests they may be present.</p> <p>5. As set out in commitment S-GS12 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), further intrusive ground investigation will be required at the detailed design phase, prior to construction for each of Part A and Part B to assess for the presence of shallow workings and inform grout stabilisation requirements. With the stipulation for additional ground investigation and consideration of instability risks as part of detailed design, this ensures that appropriate mitigation measures will be incorporated into the design.</p>
<b>Part B</b>			
GS.2.3	Applicant	<p>Paragraph 11.7.33 of the ES [APP-053] states that the Heckley Fence Development High Risk Area (DHRA) is located in close proximity to the proposed Heckley Fence Accommodation Overbridge which is due to be constructed using approach embankments and piled foundations. Furthermore, it also states that non conclusive evidence of mine workings has been determined and that further investigation is completed at the Heckley Fence DHRA.</p> <p>How would this be secured through the DCO?</p>	<ol style="list-style-type: none"> <li>1. To clarify, Paragraph 11.7.32 of Chapter 11 Geology and Soils Part B of the ES [APP-053] states in relation to the Heckley Fence Development High Risk Area that '<i>No conclusive evidence of mine workings has been determined in this area during ground investigation</i>' rather than '<i>non conclusive evidence</i>' as referenced in the question.</li> <li>2. The requirement for additional ground investigation to further establish the risks associated with coal mining related hazards is stated within reference S-GS12 of the Outline Construction and Environmental Management Plan (Outline CEMP) [REP4-013 and 014] (and as updated at Deadline 5). Requirement 4 of Schedule 2 to the dDCO [REP4-004 and 005] provides that no part of the authorised development is to commence until a CEMP, substantially in accordance with the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), for that part has been approved by the Secretary of State. Paragraph 2(a) of requirement 4 provides that the CEMP must reflect the mitigation measures set out in the REAC, while paragraph 3 requires the construction of the authorised development to be carried out in accordance with the approved CEMP.</li> </ol>

**Table 1-7 - Landscape and Visual**

Ref. No.	Question to:	Question	Applicant's Response
LV.2.1	Applicant	<p>Paragraph 7.4.8 of the ES Part B [APP-045] states that DMRB IAN 135/10 Landscape and Visual Effects Assessment has been replaced by DMRB LA 107 Landscape and Visual Revision 2.</p> <p>As this version of the document was used in the preparation of the ES, the Applicant is requested to submit a copy of DMRB IAN 135/10 for reference.</p>	<ol style="list-style-type: none"> <li>1. A copy of Interim Advice Note 135/10 has been appended to this response as Appendix B – Interim Advice Note 135/10.</li> </ol>
LV.2.2	Applicant IPs	<p>The plans which form Appendix LV.2 Trees to be Removed and Replaced at Coronation Avenue WQ LV.1.8 [REP1-044] are annotated 'Draft'.</p> <p>The Applicant is asked to explain how this relates to the requirement in R5(3) of the dDCO for the landscaping scheme to include a strategy for</p>	<ol style="list-style-type: none"> <li>1. The plans that form Appendix LV.2 Trees to be Removed and Replaced at Coronation Avenue WQ LV.1.8 [REP1-044] were provided to support the proposals and further discussions with IPs in relation to the number and location of replacement trees. The Applicant can confirm that this design is now agreed with NCC, as evidenced in 5.14 of Table 3-1 - Issues related to the Draft Development Consent Order (DCO) within the Statement of Common Ground (SoCG) with NCC updated at Deadline 4 [REP4-016].</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		the replacement of trees which are to be removed at Coronation Avenue? IPs are asked to comment on the proposals for Coronation Avenue.	Furthermore, agreement has been reached on the provision of advanced nursery stock to replace the Coronation Avenue trees, this is evidenced in item 5.16 of Table 3-1 - Issues related to the Draft Development Consent Order (DCO) within the SoCG with NCC updated at Deadline 4, refer to [REP4-016], this identifies that NCC are content that all proposed landscape and visual mitigation measures are appropriate and adequate, and secured through S-L4 in Table 3.1 Register of Environmental Actions and Commitments: The Scheme of the Outline CEMP [REP4-013 and 014] updated at Deadline 4. Reference could be included in R5(3)(d) to the strategy for replacement of trees on Coronation Avenue being based on [REP1-044]. The Applicant is discussing this approach with NCC and would intend to provide the relevant drafting in a future update of the draft DCO.
LV.2.3	Applicant	The dDCO [REP4-004] defines in Part 1 the "landscape mitigation masterplan" as the documents "comprising (first) landscape mitigation masterplan Part A; (second) (third) landscape mitigation plan including assessment parameter 3 being the documents of that description listed in Schedule 12 (documents to be certified) and certified as such by the SoS for the purposes of this Order". The Applicant is asked to clarify the position of the landscape mitigation masterplan for Part B.	1. There was text missing from the definition of the "landscape mitigation masterplan" in relation to Part B and this has been corrected in the draft DCO [REP4-004 and REP4-005] and as submitted at Deadline 5.
LV.2.4	Applicant	Vegetation Clearance Plans [REP4-003] are representative of a "worst case scenario" and need to be considered alongside the Landscape Mitigation Masterplans [APP-095] and [APP-144] for both parts A and B. Nevertheless, a significant amount of vegetation, including a large number of established trees are identified as, potentially, being lost to the scheme. Can the Applicant provide further certainty regarding how decisions will be made in relation to tree preservation and how the Applicant proposes to minimise loss of existing vegetation?	1. The removal of vegetation will only be undertaken where it is necessary to construct the Scheme, this is secured within item S-L2(a) of the Outline CEMP [REP4-013 and 014], and as submitted at Deadline 5. Accordingly, if at detailed design the existing vegetation does not need to be removed either fully or in part, the remaining vegetation would be retained and would be protected in accordance with item S-L5(a) of the outline CEMP [REP4-013 and 014], and as submitted at Deadline 5. With regard to how the decision will be made as to whether vegetation is to be cleared, in accordance with S-B10 in of the outline CEMP [REP4-013 and 014], and as submitted at Deadline 5, states "Site/vegetation clearance and tree felling will be kept to a minimum as far as practicable to reduce the impacts of habitat loss and fragmentation. Areas of clearance, particularly those within temporary works, will be identified within a works plan and agreed with the ECoW." In this way, any vegetation clearance will be identified and agreed prior to its removal, and the ECoW would be able to challenge its removal where appropriate or agree suitable protection and additional mitigation measures.
LV.2.5	Applicant	The Applicant has stated that there is the possibility of using further mitigation measures to reduce landscape impacts, particularly in relation to receptors R35, R36, R37 and R93 (these could also be relevant for receptors R58, R59, R68, R70, R71 and R72). However, the Applicant states that further planting may result in adverse effects due to loss of openness. Has the Applicant assessed whether this would be the case and if so, can they explain who would be adversely affected by additional planting?	1. The Applicant has, in Table 1 - Part A: Summary of Significant Effects in Appendix GEN.4 Justification for Significant Residual Effects WQ GEN.1.35 [REP1-036], considered the impact that additional mitigation measures in the form of permanent fencing or additional roadside planting would have on the individual receptors and how this might impact on the perception of the landscape character. It was concluded that extensive lengths of fencing would be incongruous within the open countryside, and that should more extensive mitigation measures in the form of substantial and additional roadside planting be included; this would limit some of the remaining views of the Scheme and of associated traffic movements. However, this would ultimately establish as a linear

Ref. No.	Question to:	Question	Applicant's Response
			<p>wooded corridor, and this would be at odds with the wider less heavily wooded landscape features of the landscape.</p> <p>2. The landscape is for the most part unwooded, with extensive areas of open countryside and medium to small blocks of woodland. There is an absence of extensive woodland, and as such, the mitigation design set out in Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144] has sought to reflect the local variations in woodland cover. Were extensive and additional areas of woodland be proposed, these would adversely impact on the perception of landscape character within views from associated footpaths, and other visual receptors including residential receptors. It would also adversely impact on road users, whereby their views would be visually contained throughout, leading to a green tunnel effect.</p> <p>3. Nevertheless, the Applicant has reviewed the landscape strategy for Part A and updated the planting strategy to indicate where a greater density of trees would contribute towards reducing awareness of traffic. This is provided in Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010], and outlined below:</p> <p>4. For receptors R35, R36 and R37, including the new development that has taken place on West Moor Road between R35 and R37, tree planting along the proposed hedgerow that would run alongside West Moor Road and that ties into the West Moor Junction slip road, would be increased in density. This would have the effect of reducing awareness of the slip road, and junction to the east, whilst avoiding the loss of views of more open countryside to the north and north-west. However, it is considered that the significance of effect in summer of year 15, and when the trees would have matured sufficiently to contribute towards mitigating the Scheme, would be unchanged for R35, R36, and R37, the presence of the junction and changes to West Moor Road remaining noticeable features of the views. The minor magnitude of impact on highly sensitive receptors would likely remain as a moderate adverse (significant) effect. Should additional planting be provided, for example as a block of woodland extending west along West Moor Road, the occupants of dwellings to the south side of West Moor Road, with views to the north, would have their open aspect curtailed. Furthermore, when, the Applicant met with the resident/s of West Moor Cottage during the statutory consultation on Part A on 04/07/2018, concern over maintaining their view of the open fields to the north was raised. As part of the targeted consultation on Part A in January 2019 the stakeholder confirmed their objection to the proposed planting on the neighbouring plot, citing an impact on their outlook.</p> <p>5. The position of receptor R93 (Strafford House) immediately adjacent to the existing A1 and the Scheme limits what additional mitigation measures could be proposed. The retention of as much of the existing vegetation as possible would be key to mitigating potential effects on the occupants of the dwelling. The retention of the vegetation is secured through item S-L2 (a) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5). The minor magnitude of impact on a highly sensitive receptor would likely remain as a moderate adverse (significant) effect, irrespective of whether additional planting was to be provided.</p> <p>6. For receptors R58 and R59 within Causey Park Bridge, their position to the east of the Scheme, where it passes on embankment is challenging to mitigate. Nevertheless, the Applicant has proposed additional tree planting to be provided in conjunction with the</p>



Ref. No.	Question to:	Question	Applicant's Response
			<p>drainage attenuation basin in the intervening area to reduce the prominence of the embankment slope in views to the west. In the Design Year 15 (2039), the establishing tree cover would go some way to reducing the awareness of the Scheme, however, the relative height and presence of the noise barrier would likely remain visible. The minor magnitude of impact on a highly sensitive receptors would likely remain as a moderate adverse (significant) effect. Should additional planting be provided the impact on the occupants of the dwellings would be a further reduction in views to the west and this would be limited as a result of the drainage attenuation feature.</p> <p>7. For receptors R68 and R70 associated with Tindale Hill and Earsdon Moor House respectively, the location of the receptors on higher ground to the east of the Scheme, affords the occupants far-reaching views of the surrounding countryside within which the Scheme would become a new noticeable element. The Applicant has reviewed the landscape strategy for this area, and has indicated that tree planting within the proposed hedgerow should be increased in density in an effort to reduce the prominence of traffic movements. As outlined above in this response, proposing mass planting of long sections of roadside woodland would be inappropriate given the nature of the open countryside, and in itself would result in a modification to the features that contribute to its intrinsic landscape character. As such, the Applicant has provided what it feels is appropriate, given the far-reaching views of open countryside and the need to preserve landscape character, whilst mitigating the effects of traffic and the presence of the Scheme for the occupants of receptors R68 and R70. The minor magnitude of impact on a highly sensitive receptors would likely remain as a moderate adverse (significant) effect.</p> <p>8. For receptors R71 (Portland House) and R72 (Welbeck House), the location of the receptors immediately adjacent to the existing A1 limits what can be done as further mitigation measures to reduce visual impacts. As identified in Table 1 - Part A: Summary of Significant Effects in Appendix GEN.4 Justification for Significant Residual Effects WQ GEN.1.35 [REP1-036] there is scope to include additional planting, however at this location the additional planting would be on the far side of the realigned A1. Nevertheless, the Applicant has reviewed the landscape proposals, and to provide better integration of the Fenrother link has proposed increasing the number of indicative tree locations alongside the road. This would have the effect of increasing local tree cover and reducing awareness of the Fenrother junction to the west, and the occupants of dwellings and users of associated right of way. The effect of this would be to reduce the magnitude of impact in the summer of the design year 15 to negligible, which on a highly sensitive receptor would reduce the permanent effect to slight adverse, which is not significant.</p> <p>9. Amendments to the landscape strategy have been discussed and agreed with NCC, as evidenced in 5.13 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO) of Statement of Common Ground with Northumberland County Council - Rev 1 [REP4-016], in particular concerns that NCC had previously raised with regard to the communities at West Moor, Causey Park Bridge and Fenrother.</p>
LV.2.6	IPs	<p>Appendix LV3 Response to LV.1.13 [REP1-051] considers potential additional mitigation measures, their suitability and the prospect of potentially reducing significant effects to non-significant.</p> <p>What are the views of IPs in respect of these further potential mitigation measures?</p>	

Ref. No.	Question to:	Question	Applicant's Response
LV.2.7	Applicant	Commenting on NCC's response to LV.1.11, the Applicant stated [REP2-020] that in line with R5(1) of the updated dDCO the landscape strategy and supporting information, including the Landscape and Environmental Management Plan (LEMP), would be subject to approval by the SoS, in consultation with the LPA. Where within R5 is reference made to the LEMP? Why has an outline LEMP not been produced during the Examination?	<ol style="list-style-type: none"> <li>1. The revisions to requirement 5 of the draft DCO [REP4-004 and REP4-005] in relation to the submission of a LEMP have not yet been included.. There are a number of possible approaches to this matter. These include (first) a straight-forward requirement to produce a LEMP with the required scope set out in the requirement; (second) a requirement to produce a finalised LEMP based on an outline LEMP prepared during the examination; or (third) a requirement to produce a LEMP based on the parameters set out in a scoping document prepared during the examination.</li> <li>2. However, the detailed drafting will depend on what additional material is provided on the LEMP during the course of the examination. The Applicant is currently reviewing approaches to the preparation of LEMPs for other schemes and would propose to provide a further version of requirement 5 at a future deadline.</li> <li>3. The Applicant assures the Examining Authority that the matter will be addressed either in requirement 5 or elsewhere in the draft DCO [REP4-004 and REP4-005] or Outline CEMP [REP4-013 and REP4-014] before the close of the examination.</li> <li>4. In the meantime, the Applicant considers that the current Landscape Mitigation Masterplan Part A [REP4-010] provided at Deadline 4, alongside Appendix LV.2 Trees to be Removed and Replaced at Coronation Avenue WQ LV.1.8 - Rev 0 [REP1-044], Figure 7.10 Landscape Mitigation Plan Part B [APP-144], and the current Outline CEMP [REP4-013 and 014] provided at Deadline 4 (and updated at Deadline 5) provides sufficient information in order for the ExA to understand the location, extent and form of the replacement landscape features. This would be taken forward into the detailed design phase, where the principles and indicative design would be developed further alongside the development of a LEMP. This would be in accordance with the requirements of the LEMP as set out in item ExA: SL100 of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4. The delivery of the Outline CEMP is drafted into Requirement 4(1) of the updated draft DCO [REP4-004 and 005]. Furthermore Requirements 4(4-6) require the preparation of a Handover Environmental Management Plan (HEMP) and its implementation. The HEMP would set out the requirements with reference to how landscape features, such as hedgerows would be managed in the future, which was a concern that NCC had raised. The ExA should note that NCC are satisfied that the requirements of the LEMP are provided, and that the document should be produced prior to the commencement of the construction of the relevant Part. This has been agreed with NCC within Statement of Common Ground with Northumberland County Council [REP4-016], refer to item 5.12 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO).</li> </ol>
LV.2.8	Applicant NCC	Reference 1.1.23 of the Applicant's response to Relevant Representations [REP1-064] suggests that matters are agreed in relation to the replacement of any vegetation and trees to restore Coronation Avenue. Could both the Applicant and NCC confirm that this position is resolved?	<ol style="list-style-type: none"> <li>1. The Applicant confirms to the ExA that agreement has been reached with reference to the strategy to replace trees that form the Coronation Avenue, which would be removed as a result of the Scheme. This strategy is set out on Appendix LV.2 Trees to be removed and replaced at Coronation Avenue WQ LV.1.8 [REP1-044]. Agreement on this subject is evidenced in the Statement of Common Ground with Northumberland County Council - Rev 1 [REP4-016], refer to item 5.14 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO).</li> </ol>
LV.2.9	NCC	The Applicant's Response to Deadline 2 Submissions [REP3-024] noted that NCC has still to carry out a detailed review of Appendix	



Ref. No.	Question to:	Question	Applicant's Response
		LV.1 [REP1-050]. NCC is asked to respond.	
LV.2.10	NCC	As defined within Policy S5 of the Northumberland County and National Park Joint Structure Plan, a specific section of the scheme lies within the Green Belt [REP1-071]. The emerging NCC Local Plan seeks to confirm the boundaries of the Green Belt.  Could NCC confirm the status of the emerging policy and provide an update on when the emerging NCC Local Plan is expected to be adopted.	
LV.2.11	Applicant	Item S-L4 of Table 3.1 of the outline CEMP [REP4-013] indicates that plant stock will be planted using a combination of whips, transplants, feathered and standard tree nursery stock. For Part A, the exception is the replacement trees identified along Coronation Avenue. Here, it is currently proposed to replace trees to be lost to the Scheme along Coronation Avenue with trees of advanced nursery stock sizes at the time of planting in order to better integrate the replacement plant stock with that of the existing trees.  Can the Applicant clarify if planting for areas other than Coronation Avenue will use larger trees rather than all whips?	1. The Applicant can confirm that all areas of planting for Part A, with the exception of the Coronation Avenue trees would comprise a mixture of whips, transplants, feathered and standard trees, appropriate to the location. Larger stock i.e. feathered (natural tree form) typically range from 1.75 – 2.5m in height, and standard trees (clear stemmed) range from 2.5 – 3m in height. As part of the detailed design, the larger stock would be included either as individual trees within hedgerows, or within larger planting areas where a more immediate impact is required for screening or integration purposes. In areas of woodland where an immediate impact is not required, transplants and whips would be specified, these establishing quickly as younger trees require less intensive management as they acclimatise to their growing conditions.
LV.2.12	Applicant	ES Appendix 7.5 (Arboricultural Report) (Part A) [APP-220] and ES Appendix 7.1 (Part B) [APP-286] include in Section 6 matters to address tree protection. Some of the statements are imprecise and permissive. The Applicant is asked to expand upon the statements in paragraphs 6.1.3-6.1.10 to provide greater precision and to explain how these principles for tree protection would be secured through the DCO.	1. The Applicant has reviewed the statements in paragraphs 6.1.3 – 6.1.10 of ES Appendix 7.5 (Arboricultural Report) (Part A) [APP-220] and ES Appendix 7.1 (Part B) [APP-286] and repeated here in italics, and expanded on these to provide greater precision and certainty for delivery, including how these are secured through the DCO:  <i>6.1.3. Trees up to 15 m outside of the Scheme Order Limits will be assessed prior to construction commencement to ensure that appropriate mitigation is in place to protect root protection areas. The exact location and extent of buffer and protection measures to be employed will be considered during detailed design.</i>  2. The exact location and extent of buffer and tree protection measures to be employed will be determined following further arboricultural assessment which should be considered during detailed design. Any trees positioned up to 15m outside of the Scheme limits will need to be protected in accordance with a formalised Arboricultural Method Statement (AMS) which is to include a specification for the appropriate protective fencing specification in accordance with Section 6.2.2 of 5837:2012 <i>Trees in relation to Demolition Design and Construction – Recommendations</i> (BS5837:2012). The preparation of a the AMS is secured under item S-L8(g) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).  <i>6.1.4. Construction within ancient woodland areas have been reduced to the minimum practicable to facilitate construction.</i>  3. The construction of the Scheme has minimised the impacts to ancient woodland as far as practicable to facilitate construction only. Excavation protection zones of at least 15 m

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			<p>shall be established around retained ancient woodland areas to avoid soil compaction and root damage. The haul road may encroach within this zone but is to be designed to mitigate any further impacts. Due to the topography and nature of the site, it will not be possible to install protective fencing in accordance with BS5837:2012 "Trees in relation to design, demolition and construction. Recommendations" at all locations. Temporary fencing (BS5837:2012 compliant or otherwise) and Root Protection Areas would be made clearly visible, and their locations included in site inductions to all staff. Any protective fencing would also be designed to be resilient to flooding as the lower sections of the fence may be subject to periodic flood events. The provision of root protection zones is secured under item S-L8(b) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5). An appropriate AMS to detail how the above and below ground elements of the retained trees will be protected shall be developed prior to the start of works at detailed design. The AMS will be developed in partnership with the detailed design of the Scheme at all stages.</p> <p><i>6.1.5. Trees will be protected using protective measures such as ground protection within the root protection areas (RPA) and protective fencing on the boundary of the calculated RPA.</i></p> <p>4. In accordance with BS5837:2012, the principal means of tree protection for retained trees and woodland (above and below ground) is with appropriately specified fencing/barriers. The land would be protected by a fence that defines the RPA, in order to prevent any construction activity being undertaken within the defined area... The establishment of an RPA is secured under item S-L8(b) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).</p> <p><i>6.1.6. Excavations can be carried out using manual techniques to reduce soil disturbance.</i></p> <p>5. Where appropriate, excavations can be carried out by hand within the RPA as defined by the protective fence, providing that these works are specified within an AMS to be formalised at detailed design. Due to the limited details available at present, including precise extents of incursions into the RPAs of several retained trees relating to below ground infrastructure, it is not known if there would be adequate space for these to be installed outside of RPAs. This will need to be determined at detailed design and appropriate mitigation specified within the AMS. In all instances, incursions in the RPA should be avoided and if there is found to be sufficient space outside of the RPAs for services to be located, these are to be exploited. If services do enter RPAs the use of hand digging as detailed in the National Joint Utilities Group publication 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' (NJUG 10, Volume 4, 2007)' will be undertaken to minimise the impact on the tree roots. The preparation of the AMS that would outline when and how manual techniques should be adopted is secured under item S-L8(g) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).</p>

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			<p><i>6.1.7. No-dig construction can be prescribed at detailed design for access routes and footways to reduce or avoid root and soil disturbance.</i></p> <p>6. Where appropriate, the use of no-dig construction will be specified at detailed design with a working methodology for its application, use and installation specified within the AMS. The preparation of the AMS that would outline when and how no-dig techniques should be adopted, is secured under item S-L8(g) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), and states '<i>No-dig construction will be prescribed at detailed design...</i>'.</p> <p><i>6.1.8. Working areas can be minimised as far as is practicable to and access routes diverted away from sensitive arboricultural features.</i></p> <p>7. Working areas will be minimised as far as is practicable and access routes diverted away from sensitive arboricultural features to minimise any impacts (above and below ground). These will be determined within the AMS, the preparation of which is secured under item S-L8(g) of Table 3.1 – Register of Environmental Actions and Commitments: The Scheme in the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), which states '<i>Working areas will be minimised...</i>'.</p> <p><i>6.1.9. Pruning would be carried out in accordance with BS3998:2010 Tree Work. Recommendations. To mitigate damage during trees works.</i></p> <p>8. Pruning shall be carried out in accordance with BS3998:2010 Tree Work. Recommendations, to mitigate damage during trees works. All pruning works will need to be identified and appropriately specified within the AMS to be prepared at detailed design once the spatial requirements, including construction spatial requirements, are clearly identified and understood. The requirement for pruning in accordance with best practice is secured within S-L8(f and g) of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).</p> <p><i>6.1.10. All Tree Works and Construction will be undertaken in accordance with BS5837:2012 Trees in relation to design, demolition and construction. Recommendations. All works to support mitigation of tree impacts will be incorporated into an Approved Arboricultural Method Statement at detailed design stage. This in turn will support the Construction Environmental Management Plan (CEMP).</i></p> <p>9. In determining what arboricultural works would be required the Applicant is committed to avoid the unnecessary removal of vegetation, as such it will only be undertaken where it is necessary to construct the Scheme. Arboricultural works will be approached in line with the AMS, and the preparation of this document is required within S-L8(g) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4.</p> <p>10. The premise is that vegetation would not be unnecessarily removed, this is secured within item S-L2(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4. Accordingly, if at detailed design the existing vegetation does not need to be removed either fully or in part, the remaining vegetation would be retained and would be protected in accordance with item S-L5(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4 (and as updated at Deadline 5).</p>



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LV.2.13	Applicant	<p>In response to the ExA's question at ISH2 of how many trees would be lost within woodland groups the Applicant stated [REP4-025] that the assessment of woodlands looked at the woodland parcel as a whole and the trees they contained. However, the assessment for woodlands was not presented on a tree by tree basis within the arboricultural reports.</p> <p>Notwithstanding that it is normal practice for the compensation value to be based on the area of habitat affected rather than individual trees, the Applicant is asked to clarify, if necessary within a range, the number of trees likely to be removed from each woodland area. In addition, demonstrate how the DCO can ensure that the number of trees to be removed both individually and within woodland it can be minimised.</p>	<ol style="list-style-type: none"><li>1. The density of woodland varies considerably across the Scheme. The number of trees removed within woodland will depend on the nature of the woodland, the form of the individual trees and their maturity. The woodland areas have not been previously surveyed to determine the density of the trees within the woodland and in the absence of detailed survey information with regards to accurate planting densities or tree spacings, it is not possible or appropriate to provide specific numbers of trees to be removed.</li><li>2. To provide a high-level understanding of impacts at an individual tree level, we have adopted a sampling method. This sampling method determines an approximation of the number of trees; with a minimum of 75 mm stem diameter when measured at 1.5 m above ground level in accordance with BS5837:2012, within a defined quadrant area. The quadrant area is defined as an area 5 m x 5 m = 25 m<sup>2</sup> of total canopy coverage. The known Area of Impact (Canopy (ha)) has been presented in Table 5-2 – Potential Impact Summary of ES Appendix 7.5 Arboricultural Report Part A [APP-220] with further clarification over the Total area of Canopy removed (m2) is provided in further detail below.</li><li>3. The average number of trees within the quadrant is determined by using the average recorded crown spreads (m) as referenced in Appendix A – Survey Schedule of ES Appendix 7.5 Arboricultural Report Part A [APP-220] and calculating the total canopy ground coverage (m). This equates to a sum of crown spread squared (m2) x Pi (3.142). This sum has been applied to each of the woodlands to be impacted. The woodlands have been sub-divided into four broad woodland types.</li><li>4. The broad woodland types devised for the purpose of addressing the approximate number of individual trees affected are defined as follows:  <b><u>Ancient semi natural Woodland</u></b> 5. Ancient woodland is defined as any area that has been continuously wooded since 1600 AD and accounts for approximately 2% of the United Kingdom's land area. As presented in ES Appendix 7.5 Arboricultural Report Part A [APP-220] a review of Defra's MAGIC website (which provides geographic information about the natural environment from across UK government) on 14 March 2019 identified three ancient woodland , referenced as W120, W121 and W122;  <b><u>Young/Immature Woodland</u></b> 6. 1/3rd to 2/3rd estimated life expectancy and containing trees defined as "young" and "semi-mature" in Appendix A of ES Appendix 7.5 Arboricultural Report Part A [APP-220];  <b><u>Mature Woodland</u></b> 7. &gt; 2/3rd estimated life expectancy and containing trees defined as "mature" in Appendix A of ES Appendix 7.5 Arboricultural Report Part A [APP-220]; and,  <b><u>Plantation/s</u></b> 8. Woodlands referred to as 'plantations' within Appendix A of ES Appendix 7.5 Arboricultural Report Part A [APP-220] regardless of age class.</li></ol>



Ref. No.	Question to:	Question	Applicant's Response
			<p>9. The approximate total number of individual tree losses for each of the woodland types is provided below.</p> <p><b><u>Ancient semi-natural Woodland</u></b></p> <ol style="list-style-type: none"><li>1. Woodlands W120, W121, W122 are identified as Ancient semi-natural woodland.</li><li>2. W120 has a total canopy area of 7,808m<sup>2</sup> with a loss of canopy cover of 4,392m<sup>2</sup></li><li>3. W121 has a total canopy area of 8,477m<sup>2</sup> with a loss of canopy cover of 1,234m<sup>2</sup></li><li>4. W122 has a total canopy area of 5,017m<sup>2</sup> with a loss of canopy cover of 4,180m<sup>2</sup></li><li>5. Using the sampling method outlined above, it assumed that the following trees will be removed from each of these woodlands:<ul style="list-style-type: none"><li>- 87 individual trees will be removed from W120. The individual trees within W120 possess an average crown spread of 4m, a canopy coverage of 50.3m<sup>2</sup> per tree.</li><li>- 26 individual trees will be removed from W121. The individual trees within W12 possess an average crown spread of 4m, a canopy coverage of 50.3m<sup>2</sup> per tree; and,</li><li>- 334 individual trees will be removed from W122. The individual trees within W12 possess an average crown spread of 2m, a canopy coverage of 12.6m<sup>2</sup> per tree.</li></ul></li></ol> <p><b><u>Young/Immature Woodland</u></b></p> <ol style="list-style-type: none"><li>1. Approximately 586 individual trees removed from Young/Immature Woodlands. These can be summarised as follows:<ul style="list-style-type: none"><li>- 3 trees removed from W134. W134 has a total canopy area of 2,700m<sup>2</sup> with a loss of canopy cover of 72m<sup>2</sup>. The individual trees within W134 possessed an average crown spread of 3m, a canopy coverage of 28.27m<sup>2</sup> per tree.</li><li>- 514 trees removed from W29. W29 has a total canopy area of 18,734m<sup>2</sup> with a loss of canopy cover of 3,634m<sup>2</sup>. The individual trees within W29 possessed an average crown spread of 1.5m, a canopy coverage of 7.06m<sup>2</sup> per tree.</li><li>- 31 trees removed from W5. W5 has a total canopy area of 1,681m<sup>2</sup> with a loss of canopy cover of 867m<sup>2</sup>. The individual trees within W5 possessed an average crown spread of 3m, a canopy coverage of 28.27m<sup>2</sup> per tree.</li><li>- 36 trees removed from W77. W77 has a total canopy area of 33,965m<sup>2</sup> with a loss of canopy cover of 4,019m<sup>2</sup>. The individual trees within W77 possessed an average crown spread of 6m, a canopy coverage of 113.09m<sup>2</sup> per tree.</li><li>- 2 trees removed from W81. W81 has a total canopy area of 4,622m<sup>2</sup> with a loss of canopy cover of 123m<sup>2</sup>. The individual trees within W81 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li></ul></li></ol> <p><b><u>Mature Woodland</u></b></p> <p>Approximately 1,705 individual trees removed from Mature Woodlands. These can be summarised as follows:</p>

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			<ul style="list-style-type: none"><li>- 70 trees removed from W128. W128 has a total canopy area of 5,934m<sup>2</sup> with a loss of canopy cover of 3,520m<sup>2</sup>. The individual trees within W128 possessed an average crown spread of 4m, a canopy coverage of 50.23m<sup>2</sup> per tree.</li><li>- 31 trees removed from W13. W13 has a total canopy area of 2,357m<sup>2</sup> with a loss of canopy cover of 2,357m<sup>2</sup>. The individual trees within W13 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li><li>- 1 tree removed from W135. W135 has a total canopy area of 1,164m<sup>2</sup> with a loss of canopy cover of 11m<sup>2</sup>. The individual trees within W135 possessed an average crown spread of 3m, a canopy coverage of 28.27m<sup>2</sup> per tree.</li><li>- 6 trees removed from W16. W16 has a total canopy area of 21,533m<sup>2</sup> with a loss of canopy cover of 501m<sup>2</sup>. The individual trees within W16 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li><li>- 663 trees removed from W22. W22 has a total canopy area of 23,378m<sup>2</sup> with a loss of canopy cover of 4,689m<sup>2</sup>. The individual trees within W22 possessed an average crown spread of 1.5m, a canopy coverage of 7.06m<sup>2</sup> per tree.</li><li>- 876 trees removed from W23. W23 has a total canopy area of 11,670m<sup>2</sup> with a loss of canopy cover of 11,003m<sup>2</sup>. The individual trees within W23 possessed an average crown spread of 2m, a canopy coverage of 12.56m<sup>2</sup> per tree.</li><li>- 31 trees removed from W25. W25 has a total canopy area of 7,301m<sup>2</sup> with a loss of canopy cover of 2,420m<sup>2</sup>. The individual trees within W25 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li><li>- 8 trees removed from W33. W33 has a total canopy area of 6,911m<sup>2</sup> with a loss of canopy cover of 1,091m<sup>2</sup>. The individual trees within W33 possessed an average crown spread of 7m, a canopy coverage of 153.93m<sup>2</sup> per tree.</li><li>- 2 trees removed from W53. W53 has a total canopy area of 2,024m<sup>2</sup> with a loss of canopy cover of 170m<sup>2</sup>. The individual trees within W53 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li><li>- 17 trees removed from W69. W69 has a total canopy area of 11,292m<sup>2</sup> with a loss of canopy cover of 2,663m<sup>2</sup>. The individual trees within W69 possessed an average crown spread of 7m, a canopy coverage of 153.93m<sup>2</sup> per tree.</li></ul> <p><b><u>Plantations</u></b></p> <ol style="list-style-type: none"><li>1. Approximately 1,177 individual trees removed from Plantations. These are summarised as follows:<ul style="list-style-type: none"><li>- 15 trees removed from W125. W125 has a total canopy area of 1,298m<sup>2</sup> with a loss of canopy cover of 411m<sup>2</sup>. The individual trees within W125 possessed an average crown spread of 3m, a canopy coverage of 28.27m<sup>2</sup> per tree.</li><li>- 328 trees removed from W127. W127 has a total canopy area of 1,020m<sup>2</sup> with a loss of canopy cover of 1,020m<sup>2</sup>. The individual trees within W127 possessed an average crown spread of 1m, a canopy coverage of 3.14m<sup>2</sup> per tree.</li></ul></li></ol>

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			<ul style="list-style-type: none"><li>- 110 trees removed from W14. W14 has a total canopy area of 3,984m<sup>2</sup> with a loss of canopy cover of 1,386m<sup>2</sup>. The individual trees within W14 possessed an average crown spread of 2m, a canopy coverage of 12.56m<sup>2</sup> per tree.</li><li>- 300 trees removed from W15. W15 has a total canopy area of 5,583m<sup>2</sup> with a loss of canopy cover of 3,779m<sup>2</sup>. The individual trees within W15 possessed an average crown spread of 2m, a canopy coverage of 12.56m<sup>2</sup> per tree.</li><li>- 54 trees removed from W4. W4 has a total canopy area of 5,761m<sup>2</sup> with a loss of canopy cover of 678m<sup>2</sup>. The individual trees within W4 possessed an average crown spread of 2m, a canopy coverage of 12.56m<sup>2</sup> per tree.</li><li>- 173 trees removed from W6. W6 has a total canopy area of 5,934m<sup>2</sup> with a loss of canopy cover of 2,170m<sup>2</sup>. The individual trees within W6 possessed an average crown spread of 2m, a canopy coverage of 12.56m<sup>2</sup> per tree.</li><li>- 195 trees removed from W70. W70 has a total canopy area of 7,064m<sup>2</sup> with a loss of canopy cover of 3,822m<sup>2</sup>. The individual trees within W70 possessed an average crown spread of 2.5m, a canopy coverage of 19.63m<sup>2</sup> per tree.</li><li>- 2 trees from W74. W74 has a total canopy area of 3,445m<sup>2</sup> with a loss of canopy cover of 115m<sup>2</sup>. The individual trees within W74 possessed an average crown spread of 5m, a canopy coverage of 78.53m<sup>2</sup> per tree.</li></ul> <ol style="list-style-type: none"><li>1. For the purposes of the calculations, each woodland type is as defined with reference to both 'Age Class' and 'Notes' columns of the Survey Schedule provided in Appendix A of ES Appendix 7.5 Arboricultural Report Part A [APP-220]. The data has been classified into four broad woodland types. The woodland composition and age range of the trees are the basis for the approximation of individual tree numbers to be removed.</li><li>2. For the purpose of providing an approximation of the 'Total Area of Canopy' as calculated in Technical Note 2 – Response to LV.1.7 [REP1-051] it has been assumed on the basis of a complete canopy coverage for each of the woodlands with no breaks or gaps in the canopy coverage.</li><li>3. Further, it has been assumed that the canopy coverage for each woodland type is closed i.e., persists without gaps or breaks which tends towards overestimating the number of trees impacted. This is further evident where no exception has been made for natural or managed glades, rides or natural decline/death of trees which inherently creates gaps in live crown growth.</li><li>4. The Applicant considers that the assumptions above balance the inability to record any trees which may occur in the understorey or shrub layer of a woodland; trees which could not be visually captured beneath those upper canopy layer trees, providing a conservative estimation of the number of trees to be removed.</li><li>5. As set out in paragraphs 6.1.3 – 6.1.10 of ES Appendix 7.5 (Arboricultural Report) (Part A) [APP-220] and ES Appendix 7.1 (Part B) [APP-286], and as expanded on in the Applicant's response to ExA question LV.2.13 above, the preparation of the Arboricultural Method Statement will set out how vegetation is to be removed in order to minimise its impact on adjacent vegetation. It will also set out how works within the vicinity of</li></ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>vegetation to be retained should be carried out, the aim being to avoid unnecessary damage to the roots of individual trees and avoid their removal. As such, the removal of vegetation will only be undertaken where it is necessary in order to construct the Scheme, this is secured within item S-L2(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4. Accordingly, if at detailed design the existing vegetation does not need to be removed either fully or in part, the remaining vegetation would be retained and would be protected in accordance with item S-L5(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4.</p> <p>With regard to how the decision will be made as to whether vegetation is to be cleared, in accordance with S-B10 in of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4. In this way, any vegetation clearance will be identified and agreed prior to its removal, and the ECoW would be able to challenge its removal where appropriate or agree suitable protection measures.</p>
LV.2.14	Applicant	<p>In response to ExQ1 LV.1.11 NCC [REP1-073] made a number of criticisms of the Landscape Mitigation Masterplans. In response [REP2-020] the Applicant stated that it would include an action to prepare a Landscape and Ecological Management Plan and set out what the contents of this document will comprise in the updated Outline CEMP at D3. Action ExA: S-L100 in the outline CEMP [REP4-013] confirms that the Applicant will prepare a LEMP for each of Part A and Part B, prior to construction commencing and will include a range of elements with other documents to support the production of the LEMP identified.</p> <p>Does not the range of supporting documents confirm NCC's concerns about the difficulty of having to review multiple plans? The Applicant is asked to consider the submission of a LEMP during the Examination which would also provide an opportunity for IPs to comment on it.</p>	<ol style="list-style-type: none"> <li>1. The Applicant considers that the current Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010] provided at Deadline 4, alongside Appendix LV.2 Trees to be Removed and Replaced at Coronation Avenue WQ LV.1.8 - Rev 0 [REP1-044], Figure 7.10 Landscape Mitigation Plan Part B [APP-144], and the current Outline CEMP [REP4-013 and 014] provided at Deadline 4 (and as updated at Deadline 5) provides sufficient information in order for the ExA and NCC to understand the location, extent and form of the replacement landscape features. In the Statement of Common Ground with Northumberland County Council [REP4-016], refer to item 5.12 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO) NCC confirm that "<i>the mitigation strategy provides sufficient information relating to species and future management, in order that significant effects are adequately mitigated.</i>"</li> <li>2. However, as explained in LV2.7, the Applicant is giving further consideration to the approach to the preparation of a LEMP for this Scheme, including revisions to the draft DCO [REP4-004 and 005]. This will be addressed within the scope of the examination.</li> </ol>
LV.2.15	Applicant	<p>The justification for residual significant effects and no further mitigation measures in relation to "Effects on the perception of landscape character in LCA 38b Lowland Rolling Farmland –Longhorsley, 35a Broad Lowland Valley – Coquet Valley and 17 Coquet Valley" and "Local landscape area of the River Coquet bridge", included in GEN.4 Justification for Significant Residual Effects WQ GEN.1.35 [REP1-036] appears to be missing reference to the type of Significance of Environmental Effect identified.</p> <p>Could the text in the justification be corrected in order to reflect this?</p>	<ol style="list-style-type: none"> <li>1. In relation to the Effects on the perception of landscape character in LCA 38b Lowland Rolling Farmland –Longhorsley, 35a Broad Lowland Valley – Coquet Valley and 17 Coquet Valley bridge in year 1 of operation, the text should read:</li> <li>2. "<i>The assessment of landscape and visual effects for Part A as set out in Chapter 7: Landscape and Visual Part A of the ES [APP044] has identified that a single landscape character area would be subject to a significant effect (moderate adverse) during operation in year 1. This would be in advance of the establishment of the mitigation planting as indicated on Figure 7.8 Landscape Mitigation Masterplan [APP-095]. Potential additional mitigation measures comprising for example, extensive lengths of hoardings or temporary screen fences would be inappropriate within the scale and nature of the landscape, these being absent within the landscape, and their presence potentially leading to an increased adverse impact and significance of effect. To this end, the Applicant does not consider that additional measures to mitigate the Scheme's effects on landscape character during operation would be appropriate.</i>"</li> <li>3. In relation to the Local landscape area of the River Coquet bridge in year 1 of operation, the text should read:</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
			<p>4. "The assessment of landscape and visual effects for Part A as set out in Chapter 7: Landscape and Visual Part A of the ES [APP044] has identified that a single landscape character area would be subject to a significant effect (large adverse) during operation in year 1. This would be in advance of the establishment of the mitigation planting as indicated on Figure 7.8 Landscape Mitigation Masterplan [APP-095]. Potential additional mitigation measures comprising for example, extensive lengths of hoardings or temporary screen fences would be inappropriate within the scale and nature of the landscape, these being absent within the landscape, and their presence potentially leading to an increased adverse impact and significance of effect. To this end, the Applicant does not consider that additional measures to mitigate the Scheme's effects on landscape character during operation would be appropriate."</p>
LV.2.16	ApplicantNCC	<p>In response to [REP1-036], NCC has raised concerns [REP2-025] in relation to the mitigation measures for receptors at VP27 – View looking northeast from Howdens Glebe cottages, off West Moor Road, and also road users at West Moor.</p> <p>Can the Applicant provide an update on this matter?</p>	<p>1. The Applicant has discussed the concerns raised by NCC with reference to viewpoint 27, and can confirm that with the addition of tree planting within the proposed hedgerow and extending along the edge of the West Moor junction slip road, that sufficient screening has been provided in order that once established, the western edge of the West Moor junction would be integrated within associated views from the west. This has been agreed and is evidenced in the Statement of Common Ground with Northumberland County Council [REP4-016], refer to item 5.13 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO). However, the tree planting should not be so dense that views from nearby receptor R35 of open countryside are lost. The additional tree planting is indicated on Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010] provided at Deadline 4.</p>
LV.2.17	NCC	<p>[REP1-036] identifies that residential receptors at VP1, VP6, VP10 and VP36 will be subject to adverse visual effects. The justification provided states that these will typically arising where views would be experienced at close quarters or where existing open and expansive elevated views of open countryside would be impacted by the construction of the Scheme.</p> <p>Does NCC agree with this assessment and that no further mitigation measures are necessary?</p>	
LV.2.18	NCC	<p>[REP1-036] identifies that PRoW users in relation to VP4, VP6, VP29, VP32, VP33, VP37 will be subject to large adverse visual effects. It also identifies that Users of Long Distance Path VP24 will too be subject to large adverse visual effects. The justification provided states that these will typically arising where views would be experienced at close quarters or where existing open and expansive elevated views of open countryside would be impacted by the construction of the Scheme.</p> <p>Does NCC agree with this assessment and that no further mitigation measures are necessary?</p>	
LV.2.19	Applicant	<p>[REP1-036] states that residential receptors VP27, PRoW users of VP8, VP32, VP33, VP 37, Road users at VP27 will be subject to</p>	<p>1. With reference to residential and road users represented by viewpoint 27, the Applicant can confirm that with the addition of tree planting within the proposed hedgerow and</p>

Ref. No.	Question to:	Question	Applicant's Response
		<p>moderate adverse visual effects. The justification provided states that the Applicant considers that should additional mitigation measures be employed to reduce the visual impact of the Scheme they would remain subject to a significant effect as effects typically remaining due to the loss of an existing open aspect or wide-ranging views should dense belts of planting or screen fences be employed to screen views of the Scheme.</p> <p>Could the Applicant provide further justification for this assessment with particular reference to why dense belts of planting or screen fences would not be preferable to theresidual view?</p>	<p>extending along the edge of the West Moor junction slip road, as indicated on Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010], is considered sufficient in providing screening to views from the west, including road users represented by viewpoint 27 such that, once established, the western edge of the West Moor junction would be integrated within associated views from the west. This has been agreed with NCC, and is evidenced in the Statement of Common Ground with Northumberland County Council [REP4-016], refer to item 5.13 in Table 3-1 - Issues related to the Draft Development Consent Order (DCO). However, the tree planting should not be so dense that views from nearby receptor R35 of open countryside are lost. The additional tree planting is indicated on Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010] provided at Deadline 4.</p> <p>2. With reference to users of PRow represented by VP8 which is identified as being subject to a moderate adverse (significant) effect during construction and which would be permanent in nature. The moderate adverse effect arises primarily where the orientation of the PRow runs directly towards the Scheme, and views of the open countryside towards Fenrother are afforded. The Applicant considers that were a dense belt of planting to be provided it would need to extend from the Fenrother junction south for several hundred metres. , The open characteristics of the landscape, and the intervisibility between Tritlington and Fenrother to the east would be eroded, as such the Applicant considered it of greater importance that the intervisibility would be maintained and proposed a hedgerow with intermittent tree planting to disrupt views of the Scheme and associated traffic. As a result, the overbridge of the Fenrother junction would remain a noticeable and permanent element of the view, and the moderate adverse effect would be permanent. Were a screen fence to be provided, the fence would provide a screen to elements of the Scheme and traffic in year 1, but would not provide screening substantially greater than the hedgerow and intermittent trees proposed. Fencing would also be at odds with the surrounding landscape, where similar features do not exist and if constructed would have an urbanising effect on an area of open countryside.</p> <p>3. With reference to users of PRow represented by VP32 which is identified as being subject to a large adverse (significant) effect during construction and in winter year 1, reducing to moderate adverse (significant) in summer year 15, which would be permanent in nature. Impacts would arise as a result of the presence of the Scheme including a lay-by, within the middle ground of the view, with views of Causey Park Bridge beyond. The Applicant considers that were more extensive, dense belt of planting be provided it would screen more of the Scheme in the summer of year 15. However, in establishing a belt of planting, the intervisibility with Causey Park Bridge would be substantially reduced and the sense of openness of the countryside between Causey Park Hag and Causey Park Bridge would be eroded. The Applicant has proposed the inclusion of a hedge that would be untrimmed and allowed to grow out, which in combination with intermittent trees would provide a screen to cars and in part high-sided vehicles. Nevertheless, the Scheme would remain a noticeable new element within the view and the moderate adverse (significant) effect would remain as a permanent effect. With the exception of the scattered properties, built form is not a particular feature and fencing is largely absent from the landscape. Were a screen fence to be erected this would be at odds with the characteristics of the open countryside and if constructed would have an urbanising effect on an area of open countryside. The Applicant considers that the proposed hedgerow and intermittent trees</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>would provide a comparable level of screening by summer year 15, but be a more appropriate form of mitigation within the landscape.</p> <p>4. With reference to users of PRoW represented by VP33 which is identified as being subject to a large adverse (significant) effect during construction, reducing to moderate adverse (significant) in winter year 1 and summer year 15, which would be permanent in nature. The viewpoint is elevated and looks south-west towards the Fenrother junction with far reaching views across open countryside. Impacts would arise as a result of the Scheme being visible in the middle distance, surrounded by fields and intervening hedgerows. With the exception of the block of existing woodland immediately east of the Fenrother junction, more extensive woodland is largely absent within the context of the Scheme. The Applicant considers that were more extensive, dense belt of planting be provided it would screen more of the Scheme in the summer of year 15, however the characteristics of the view would be modified with an extensive linear belt of woodland required over several hundred metres, that would be at odds with the surrounding characteristics. As such, the Applicant considers that the current proposal of a hedge that would be untrimmed and allowed to grow out, in combination with intermittent trees would provide a screen to cars and in part high-sided vehicles. Nevertheless, the Scheme would remain a perceptible new element within the view and the moderate adverse (significant) effect would remain as a permanent effect, although this is considered by the Applicant to be at the lower end of the scale. Built form is not a particular feature and fencing is absent from the landscape. Were a screen fence to be erected this would be at odds with the characteristics of the open countryside and if constructed would have an urbanising effect on an area of open countryside. The Applicant considers that the proposed hedgerow and intermittent trees would provide a comparable level of screening by summer year 15, but be a more appropriate form of mitigation within the landscape.</p> <p>5. With reference to users of PRoW represented by VP37, impacts arise as a result of the proximity of the viewpoint to the Scheme, the viewpoint being located immediately adjacent to the west. The Fenrother junction would be visible to the north, and the main alignment and associated traffic would form the dominant feature to the north-east and east. The Applicant considers that were more extensive, dense planting be provided, it would need to be provided to the west of the main alignment and extend south of the Fenrother junction. Whilst views from VP37 would be further screened by the woodland, there would be an impact on views from the west and Fenrother towards Tritlington, and intervisibility would be reduced as a result. As such, the Applicant considers that the current proposal of a hedge that would be untrimmed and allowed to grow out, in combination with intermittent trees would provide a screen to cars and in part high-sided vehicles, and as it matures it would reduce awareness of the Fenrother junction, in combination with woodland to the north. Built form is not a particular feature and fencing is absent from the landscape. Were a screen fence to be erected this would be at odds with the characteristics of the open countryside and if constructed would have an urbanising effect on an area of open countryside. The Applicant considers that the proposed hedgerow and intermittent trees would provide a comparable level of screening by summer year 15, but be a more appropriate form of mitigation within the landscape.</p>
Part A			



Ref. No.	Question to:	Question	Applicant's Response
LV.2.20	Applicant	The Landscape Mitigation Masterplan A was updated at D4 [REP4-010]. It is indicated in the cover letter [REP4-001] that it was submitted to reflect comments from CAH1. The Applicant is asked to specify the changes which have been made at D4.	1. Figure 7.8 Landscape Mitigation Masterplan Part A [REP4-010] provided at Deadline 4 was revised so that the hedgerow extending to the perimeter of the Warreners complex of buildings (chainage reference 10800 – 11080) has been changed from “Proposed Hedgerow – By agreement” to “Proposed Hedgerow – essential mitigation”. This was to provide reassurance to the adjacent residents that the hedgerow would be provided as part of the construction phase following concerns raised about privacy and security. This mitigation is secured through item S-L2(c) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4.
<b>Part B</b>			
LV.2.21	Applicant	Vegetation Clearance Plans [REP4-003] show the existing vegetation to be retained, the existing vegetation to be removed and also the results of the Arboricultural Survey. Can the Applicant confirm the intentions for vegetation removal in front of West Linkhall Farm and West Lodge at Charlton Hall? How would this be secured through the DCO?	<p>2. For the purposes of the assessment of impacts on existing landscape features as set out in Chapter 7: Landscape and visual Part B [APP-045], including existing vegetation in front of Linkhall Farm and West Lodge it has been assumed that this would be removed in its entirety, in order that the worst-case scenario has been assessed. Vegetation to be removed or retained is identified on Vegetation Clearance Plans Rev 1 [REP4-003] and is supported by the result of the arboricultural survey provided in Appendix 7.1 Arboricultural Report Part B [APP-286]. These documents indicate that the vegetation in question (refer to G97 on Figure 2 Tree Protection Plan (sheet 20 of 25) in Appendix 7.1 Arboricultural Report Part B [APP-286] is to be removed, however, the removal of vegetation will only be happen where it is necessary in order to construct the Scheme, this is secured within item S-L2(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4. Accordingly, if at detailed design the existing vegetation does not need to be removed either fully or in part, the remaining vegetation would be retained and would be protected in accordance with item S-L5(a) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4.</p> <p>3. With reference to Linkhall Farm, it has been assumed that the narrow belt of trees would be removed in order to construct the access road, however, it is possible that this would be retained and could be protected, as outlined above. Should retention not be possible the Applicant has indicated on Figure 7.10 Landscape Mitigation Plan Part B [APP-144] that replacement planting in the form of a linear belt of shrubs and trees would be planted, this would be similar to the nature of the vegetation that would be removed, and by summer year 15 the planting would have sufficiently established to provide a filtering effect to the adjacent Scheme.</p> <p>4. With reference to West Lodge, vegetation clearance was assumed for the purpose of forward visibility for drivers and to accommodate works to the existing watercourse and culvert. As outlined in the preceding paragraphs vegetation removal would only be undertaken in order to construct the Scheme, and it may be feasible to retain some of the existing woodland. Notwithstanding, should vegetation removal be required, the Applicant has identified on Figure 7.10 Landscape Mitigation Plan Part B [APP-144] that replacement planting in the form of a block of woodland would be planted, this would be similar to the nature of the vegetation that would be removed, and by summer year 15 the planting would have sufficiently established to provide a filtering effect to the adjacent Scheme.</p>



Ref. No.	Question to:	Question	Applicant's Response
			5. Where planting is required as indicated on Figure 7.10 Landscape Mitigation Plan Part B [APP-144], this is secured through item S-L2(c) of the Outline CEMP [REP4-013 and 014], submitted at Deadline 4 (and as updated at Deadline 5).

Table 1-8 - Material and Resources

Ref. No.	Question to:	Question	Applicant's Response
MR.2.1	Applicant	The Applicant's Comments on the LIR [REP3-025] responding to paragraph 6.10.2 of the LIR indicate that all practicable efforts will be made to achieve sustainable resource management and that information on achievements in this context will, where appropriate, be made available to NCC during detailed design. What is the mechanism by which this information will be provided?	<ol style="list-style-type: none"><li>1. This information will be provided through refined calculations within the Materials Management Plan (MMP) and Site Waste Management Plan (SWMP) in combination with plans and drawings of the site. Waste benchmarking would be provided where required.</li><li>2. The provision of the MMP and the SWMP will be secured through commitment S-M6 of the Outline Construction Environmental Management Plan (Outline CEMP) [REP4-013 and 014] (and as updated at Deadline 5). The MMP and SWMP are also listed as documents required to be included in the CEMP, which is approved by the Secretary of State following consultation with NCC, under requirement 4 of Schedule 2 to the dDCO [REP4-004 and 005].</li><li>3. The MMP and SWMP will provide for achievement of sustainable resource management initiatives and outcomes to be reported to NCC at a suitable level of detail to support its function(s). Where appropriate this information will be provided to NCC during detailed design. Both of these commitments are secured through commitment S-M6 of Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).</li></ol>
MR.2.2	NCC	The Applicant's Comments on the LIR [REP3-025] responding to paragraph 6.10.3 of the LIR address discrepancies raised by NCC in the potential capacity for inert landfill in the county as set out in Table 13-11 of the ES [APP-056] [APP-057]. Is NCC content with the Applicant's response?	

Table 1-9 - Noise and Vibration

Ref. No.	Question to:	Question	Applicant's Response
NV.2.1	Applicant	There are a significant number of the Construction Receptors identified in ES Figure 5.4 Construction Receptors Part A [APP-078] and Part B [APP-126]. Considering the potential impacts of the Proposed Development, particularly at construction stage, and that some mitigation measures are still not defined and are proposed to be developed at design stage, how can the full impacts of the Proposed Development be assessed and how can appropriate mitigation be secured?	<ol style="list-style-type: none"><li>1. The Figures referenced in this question relate to the assessment in Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041] rather than the Noise and Vibration assessment in Chapter 6: Noise and Vibration Part A [APP-042] and Chapter 6 Noise and Vibration Part B [APP-043]. Therefore, responses have been provided for both Noise and Vibration and Air Quality.</li></ol> <p><u>Air Quality</u></p> <ol style="list-style-type: none"><li>1. A construction dust assessment has been undertaken for the Scheme, as is set out in Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041]. An</li></ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>underlying assumption of the construction dust assessment is that best practice mitigation measures would be designed in order to ensure that there would be no significant air quality effect arising as a result of the construction of the Scheme.</p> <p>2. The result of the assessment is the identification of appropriate mitigation to be undertaken during the construction of the Scheme (set out in Section 5.9 Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041]), and the identification of sensitive receptors (set out in Figure 5.4 Construction Receptors Part A [APP-078] and Figure 5.4 Construction Receptors Part B [APP-126]). The mitigation measures included within Section 5.9 represent best practice measures to reduce dust emissions. These measures (S-A1 to S-A4) will be secured within the Outline Construction Environmental Management Plan (Outline CEMP) [REP4-013 and 014] (and as updated at Deadline 5) and will be refined for the specific requirements for the Scheme.</p> <p><u>Noise and Vibration</u></p> <p>1. This response addresses only construction noise and vibration impacts. Operational stage impacts are discussed in the response to written question NV.2.2 below.</p> <p>2. For the construction noise and vibration assessment, Figure 6.4 Receptors Affected by Earthworks and Bridge Construction Part A [APP-082] and Figure 6.4 Construction Noise Study Area Part B [APP-130] show the noise and vibration sensitive receptors within the construction stage study areas. The construction noise and vibration assessments are presented in Chapter 6: Noise and Vibration Part A [APP-042] and Chapter 6: Noise and Vibration Part B [APP-043] respectively.</p> <p>3. The noise and vibration assessments (not including the proposed mitigation measures) within Section 6.8 Potential Impacts of both Chapter 6: Noise and Vibration Part A [APP-042] and Chapter 6: Noise and Vibration Part B [APP-043] show that noise and vibration levels exceeding the significant observed adverse effect level (SOAEL) are predicted at some receptors within the respective study areas. It is noted within paragraph 6.8.22 of Chapter 6 Noise and Vibration Part A [APP-042] and paragraph 6.8.12 of Chapter 6 Noise and Vibration Part B [APP-043] that a significant adverse construction effect would arise where noise or vibration levels are predicted to exceed the adopted SOAEL thresholds for more than 10 out of any 15 days/nights, or any 40 days/nights in six consecutive months. It is therefore anticipated that, in the absence of mitigation measures to control noise and vibration, significant adverse effects could occur.</p> <p>4. Construction noise and vibration mitigation measures are discussed in Section 6.10 Design, Mitigation and Enhancement Measures within Chapter 6 Noise and Vibration Part A [APP-042] and Chapter 6 Noise and Vibration Part B [APP-043] and are provided in full in Appendix 6.8 Construction Noise and Vibration Mitigation Clauses Part A [APP-213] and Appendix 6.9 Construction Noise and Vibration Mitigation Clauses Part B [APP-283]. The mitigation measures include but are not limited to implementation of best practicable means to control noise and vibration and limiting of works durations where noise or vibration levels are anticipated to exceed the SOAEL. The construction noise and vibration mitigation measures are secured within the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) Table 3-1 rows S-N2 to S-N5.</p> <p>5. The mitigation measures aim to reduce noise and vibration levels and eliminate significant adverse effects during the construction stage as far as reasonably practicable. Whilst the</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>implementation of some of the secured construction mitigation measures may be refined at the detailed design stage and throughout the construction phase, the measures secured within the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), which aim to eliminate significant adverse effects, would be adhered to.</p> <p>6. As stated in Section 6.11 Assessment of Likely Significant Effects of Chapter 6 Noise and Vibration Part A [APP-042] and Chapter 6: Noise and Vibration Part B [APP-043], the secured mitigation measures would mitigate noise and vibration levels such that no significant adverse noise or vibration effects are anticipated during the construction stage.</p> <p>7. It is therefore considered that the construction stage noise and vibration assessment sufficiently assess the full impacts of the Scheme and appropriate mitigation measures are secured through the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5).</p>
NV.2.2	Applicant	<p>ES Figure 5.2 Human and Ecological Receptors Assessed Part A [APP-076] and HumanReceptors Assessed Part B [APP-124] identified a significant number of receptors.</p> <p>Considering the potential impacts of the Proposed Development and that some mitigationmeasures are still not defined and are proposed to be developed at design stage, how can the full impacts of the Proposed Development be assessed and how can appropriatemitigation be secured?</p>	<p>1. The Figures referenced in this question relate to the assessment in Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041] rather than the Noise and Vibration assessment in Chapter 6 Noise and Vibration Part A [APP-042], Chapter 6 Noise and Vibration Part B [APP-043] and the Noise Addendum [REP1-019] (submitted at Deadline 1). Therefore, responses have been provided for both Noise and Vibration and Air Quality.</p> <p><u>Air Quality</u></p> <p>1. As is set out in section 5.9 of Chapter 5 Air Quality Part A [APP-040] and Chapter 5 Air Quality Part B [APP-041], there are no operational air quality mitigation measures proposed for the Scheme as no significant air quality effects are anticipated.</p> <p><u>Noise and Vibration</u></p> <p>1. This response addresses only operational stage impacts. Construction stage impacts are discussed in the repose to question NV.2.1 above.</p> <p>2. For the operational stage assessment, Figure 1 Operational Road Traffic Noise Study Area, within Noise Addendum Appendix D Part 1 [REP1-021] shows the noise sensitive receptors considered within the operational stage assessment. The operational stage assessment for the Scheme is presented in the Noise Addendum [REP1-019].</p> <p>3. Design measures (as stated within Section 1.12 Design, Mitigation and Enhancement Measures of the Noise Addendum [REP1-019]) have been incorporated into the design of the Scheme to minimise operational road traffic noise levels as far as reasonably possible.</p> <p>4. The assessment of operational noise presented in Section 1.11 Potential Impacts of the Noise Addendum [REP1-019] incorporates the design measures but does not incorporate proposed mitigation or enhancement measures. Therefore, the assessment presented within Section 1.11, has been used to inform the appraisal of where mitigation and enhancement measures are required. The required mitigation and enhancement measures are discussed within Section 1.12 Design, Mitigation and Enhancement Measures of the Noise Addendum [REP1-019].</p> <p>5. Within this section, four noise barriers are discussed which are proposed for Part A of the Scheme (PNB1,2,3 and 4). PNB2 and 3 are included as mitigation measures for receptors which are predicted to experience significant adverse operational road traffic</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>noise effects at Causey Park and New Houses Farm respectively (receptor groups 10 and 11 from Table 1-30 within the Noise Addendum [REP1-109]. These barriers are secured within the Outline CEMP [REP4-103 and 014] (and as updated at Deadline 5) Table 3-2 rows A-N2 and A-N3 respectively and the attenuation afforded by these barriers has been incorporated into the final assessment of likely significance.</p> <p>6. At the time of writing the Noise Addendum [REP1-019], of the mitigation and enhancement measures presented within Section 1.12 Design, Mitigation and Enhancement Measures of the Noise Addendum [REP1-019], it could not be confirmed, due to potential design constraints, whether noise barriers PNB1 or PNB4 could be constructed. As such, as stated within paragraph 1.13.19 of the Noise Addendum [REP1-019], the noise reduction afforded by these barriers was not included in the final assessment of likely significance as summarised within Table 1-40 (within Section 1.13 Assessment of Likely Significant Effects of the Noise Addendum [REP1-019]), thereby representing a worst-case assessment.</p> <p>7. Since the submission of the Noise Addendum [REP1-019] it has been confirmed that PNB1 would be constructed as part of the Scheme. The acoustic attenuation afforded by PNB1 mitigates the significant adverse operational road traffic noise effect at Northgate Farm and a beneficial impact is predicted at this property in the short-term (non-significant). PNB1 is secured within the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) Table 3-2 row A-N4.</p> <p>8. Therefore, the only barrier which at this stage cannot be confirmed is PNB4, which is included as an enhancement measure for sensitive receptors within Felmoor Park and Bockenfield Holiday Park. As this is an enhancement barrier (which is not required to mitigate significant adverse effects), the approach taken for this Scheme is that the barrier must be value for money (in terms of a comparison of the cost of the barrier against the monetised acoustic performance of the barrier). In this location, further investigation is required during detailed design in order to determine whether this barrier can be built, whilst achieving the value for money criteria. This is committed to in row A-N5 of Table 3-2 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) which states:</p> <p><i>“A 3 m high reflective noise barrier will be provided in the location of the Felmoor Park and Bockenfield Holiday Park (PNB4). Although further investigation is required to determine whether the barrier can be built, it will be provided if it can be built meeting the value for money criteria.”</i></p> <p>9. As the barrier is not required to mitigate significant adverse effects, and if constructed may lead to significant beneficial operational road traffic noise effects (as stated in paragraph 1.13.18 of the Noise Addendum [REP1-019]) construction of the barrier would only lead to a betterment in terms of the reported operational noise impacts. If the barrier is not constructed, the Scheme wide design measures ensure that noise levels have been reduced as far as reasonably practicable.</p> <p>10. As stated above, as barriers PNB1 and PNB4 were not committed at the time of undertaking the assessment set out in the Noise Addendum [REP1-019] the noise reduction afforded by these barriers was not included in the summary of significant operational road traffic noise effects in Table 1-40 within the Noise Addendum [REP1-019], thereby representing a worst-case assessment.</p>



Ref. No.	Question to:	Question	Applicant's Response
			11. It is therefore considered that, whilst further work will need to be undertaken at the detailed design stage to confirm if PNB4 can be constructed, the assessment of operational noise presented in the Noise Addendum [REP1-019] fully assesses the impacts of the Scheme.
<b>Part A</b>			
NV.2.3	Applicant	<p>Paragraph 6.5.18 of the ES [APP-042] states that the entire length of the A1, between thenorth and south extent of Part A, would be laid with a Low Noise Surface, apart from on structures (River Coquet Bridge, Parkwood Subway and Burgham Park Underbridge) where Hot Rolled Asphalt would be laid.</p> <p>Could the applicant provide further information regarding why Hot Rolled Asphalt would belaid on those structures rather than the lesser noise emitting Low Noise Surface?</p>	<p>1. The Applicant can confirm that there is a requirement for Hot Rolled Asphalt (HRA) to be laid on bridges in accordance with DMRB Interim Advice Note (IAN) 96/07 Guidance on Implementing Results of Research on Bridge Deck Waterproofing. In June 2020 this guidance was superseded by DMRB design standard CD358, Waterproofing and surfacing of concrete bridge decks. This DMRB standard states that the asphalt layer directly overlaying the waterproofing system shall have a design (not in-situ) air void content of no more than 4% so that the amount of sub-surface water that enters the layer is low. When the surfacing layer above this is also low void HRA (&lt;4%) this would further reduce the risk of water entering the pavement and reduce the potential for water damage to the structure. Low Noise Surface layer does not meet the same criteria and would lead to more frequent, significant maintenance interventions. As there is no low noise material which would meet the requirements of DMRB for bridge surfaces, hot rolled asphalt is required to be used for these structures.</p>
NV.2.4	Applicant	<p>Table 6-31 of the ES [APP-042] Specific Noise Sensitive Receptor Summary and Determination of Significance – Operational Road Traffic Noise identifies two groups ofreceptors as experiencing noise increases of a major magnitude of impact as a direct result of Part A, and one group as moderate magnitude.</p> <p>What measures have been put in place in order to mitigate the impact of the ProposedDevelopment on these three groups?</p>	<p>1. This response has been prepared based on the Noise Addendum [REP1-019] (submitted at Deadline 1) which replaces the operational stage assessments presented within Chapter 6: Noise and Vibration Part A [APP-042], Chapter 6 Noise and Vibration Part B [APP-043] and Appendix 16.5 Noise and Vibration likely Significant Effects of the Scheme [APP-331]. Table 1-30 of the Noise Addendum [REP1-019] presents the equivalent information to Table 6-31 of Chapter 6: Noise and Vibration Part A [APP-042] based on the updated assessment.</p> <p>2. The four receptor groups which are stated in Table 1-30 of the Noise Addendum [REP1-019] as having short-term adverse impacts of moderate or major magnitude of impact are discussed further below. Receptor group 7 is also discussed as, although the predicted short-term magnitude of impact is minor, this was deemed a significant adverse effect (prior to the implementation of mitigation).</p> <p>3. For all receptors the design measures discussed in paragraphs 1.12.2 and 1.12.3 of the Noise Addendum [REP1-019] have been incorporated into the design of the Scheme. These measures include, a low noise road surface, which would be laid on the entire Scheme with the exception of structures; the horizontal alignment of the Scheme which avoids passing unnecessarily close to sensitive receptors where possible; and the vertical alignment of the Scheme which has been lowered as far as practicable given other design constraints.</p> <p><u>Group 7 (1 Receptor, Northgate Farm)</u></p> <p>1. Whilst the magnitude of impact in the short-term at this receptor is of minor adverse magnitude, this property has been predicted to experience a significant adverse effect as a result of the Scheme (prior to the implementation of mitigation) as discussed further in Table 1-30 of the Noise Addendum [REP1-019]. Whilst at the time of writing the Noise</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>Addendum [REP1-019] it was not guaranteed that the proposed noise barrier (PNB1) in this location could be constructed (meaning that the noise level reduction from this barrier was not included in the summary of likely significant noise effects from the Scheme), it has since been confirmed that the barrier would be constructed. The acoustic attenuation afforded by PNB1 mitigates the significant adverse operational road traffic noise effect at Northgate Farm such that a beneficial impact is predicted at this property in the short-term (non-significant) with PNB1 in place. PNB1 is secured through the Outline CEMP [REP4-013 and REP4-014] (and as submitted at Deadline 5) (Table 3-2 row A-N4).</p> <p><u>Group 8 (12 receptors)</u></p> <ol style="list-style-type: none"><li>1. Whilst moderate adverse noise level changes are predicted at these properties in the short-term, because of contextual factors discussed within Table 1-30 and paragraph 1.11.17 (which is reproduced below) of the Noise Addendum [REP1-019] the operational road traffic noise effects at these receptors are not considered to be significant. Therefore, operational noise mitigation measures are not considered necessary.</li><li>2. DMRB LA 111 describes a framework of contextual factors which should be considered in the determination of operational noise significant effects. Paragraph 1.11.17 of the Noise Addendum [REP1-019], in line with the DMRB LA 111 guidance, discusses in greater detail the approach to considering contextual factors, specifically for receptors predicted to experience noise level changes of moderate adverse magnitude of impact in the short-term. Paragraph 1.11.17 of the Noise Addendum [REP1-019] states:</li><li>3. "For receptors experiencing a short-term noise level change of moderate magnitude, which initially would be considered a significant effect, the full range of contextual factors (numerical and non-numerical) set out within Table 3-60 of DMRB LA 111 have been considered when determining whether the initial assessment of significance is retained or adjusted. The factors considered include the following:<ul style="list-style-type: none"><li>• Where within the range of the magnitude of impact category, the noise level changes fall.</li><li>• The magnitude of impact in the long-term.</li><li>• The absolute noise level with reference to the LOAEL (lowest observed adverse effect level) and SOAEL.</li><li>• The location of the receptor, in particular the setting and location of sensitive parts of the receptor.</li><li>• The acoustic context (whether the acoustic character of the area is likely to be changed<ul style="list-style-type: none"><li>• by the Scheme).</li></ul></li><li>• The likely perception of change by the residents (whether the Scheme results in noise level changes being more acutely perceived by receptors)."</li></ul></li><li>4. As discussed above, following consideration of these factors it was concluded that the noise level changes for receptors within this group are not anticipated to result in significant adverse operational road traffic noise effects and mitigation is therefore not considered necessary.</li></ol> <p><u>Group 9 (6 receptors in Fenrother)</u></p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>1. The receptors in this group are predicted to experience noise level changes in the short-term of moderate adverse magnitude and are considered to be significant adverse operational road traffic noise effects, as discussed further within Table 1-30 of the Noise Addendum [REP1-019]. As discussed in paragraph 1.12.8 of the Noise Addendum [REP1-019], mitigation measures were considered in the form of earth bunds and noise barriers for these receptors. However, given the distance from the Scheme carriageway to the receptors, a noise barrier or earth bund would not provide meaningful benefit in terms of noise level reduction at these receptors. As discussed in the Applicant's Response to ExA's First Written Questions [REP1-032] in the response to Question NV.1.3 other operational noise mitigation measures were considered but were not included. This is discussed further below (see Consideration of Additional Mitigation Measures).</p> <p><u>Group 10 (2 receptors in Causey Park)</u></p> <p>1. The receptors in this group are predicted to experience noise level changes in the short-term of major adverse magnitude and are considered to be significant adverse operational road traffic noise effects. As discussed within paragraph 1.12.7 of the Noise Addendum [REP1-019], noise barrier PNB2 is proposed in this area. Whilst the barrier provides a meaningful benefit in terms of noise level reduction, the attenuation afforded by the barrier is not sufficient to mitigate the effects such that they are no longer significant. The predicted magnitudes of impact with and without mitigation for the receptors within group 10 (Joiners Cottage and The Cottage, Causey Park) are presented in Table 1-39 of the Noise Addendum [REP1-019]. Despite the noise level reduction afforded by PNB2, at The Cottage, Causey Park, the predicted magnitude of impact with the barrier in place remains major adverse. At Joiners Cottage, Causey Park, with PNB2 in place, the predicted magnitude of impact is predicted to reduce from major adverse to moderate adverse (at the worst affected façades). As explained in detail in Note 1 of Table 1-39 [REP1-019], the greatest magnitude of change with PNB2 in place is major beneficial at Joiners Cottage. However, because of the moderate adverse impacts predicted at this receptor on other façades, it has still been considered to be a significant adverse operational road traffic noise effect. PNB2 is secured through the Outline CEMP [REP4-013 and REP4-014] (and as submitted at Deadline 5) (Table 3-1 row A-N2).</p> <p>2. As PNB2 is not predicted to ameliorate the significant adverse operational road traffic noise effects predicted for these two receptors, additional mitigation measures were considered. These are discussed further below (see Consideration of Additional Mitigation Measures).</p> <p><u>Group 11 (1 receptor at New Houses Farm)</u></p> <p>1. The receptor in this group is predicted to experience a noise level change in the short-term of major adverse magnitude and is considered to be a significant adverse operational road traffic noise effect. As discussed within paragraph 1.12.7 of the Noise Addendum [REP1-019], noise barrier PNB3 is proposed in this area. Whilst the barrier provides a meaningful benefit in terms of noise level reduction, the attenuation afforded by the barrier is not sufficient to mitigate the effect such that it is no longer significant. The predicted magnitudes of impact with and without mitigation for the receptor within group</p>

Ref. No.	Question to:	Question	Applicant's Response
			<p>11 is presented in Table 1-39 of the Noise Addendum [REP1-019]. Despite the noise level reduction afforded by PNB3, the predicted magnitude of impact with the barrier remains as major adverse at this receptor. PNB3 is secured through the Outline CEMP [REP4-013 and REP4-014] (and as submitted at Deadline 5) (Table 3-1 row A-N3).</p> <p>2. As PNB3 is not predicted to ameliorate the significant adverse operational road traffic noise effect for this receptor, additional mitigation measures were considered. These are discussed further below (see Consideration of Additional Mitigation Measures).</p> <p><u>Final Assessment of Significance</u></p> <p>1. Table 1-40 within the Noise Addendum [REP1-019] presents a summary of the residual significant operational road traffic noise effects including the proposed mitigation measures. As noted in paragraph 1.13.19 of the Noise Addendum [REP1-019], the noise reduction afforded by PNB1 and PNB4 was not included within this summary of residual significant effects given the uncertainty as to whether they could be constructed. As discussed above, it has since been confirmed that PNB1 would be constructed. The acoustic attenuation afforded by PNB1 mitigates the significant adverse operational road traffic noise effect at Northgate Farm and a beneficial impact is predicted at this property in the short-term (non-significant).</p> <p><u>Consideration of Additional Mitigation Measures</u></p> <p>1. The Applicant's Response to ExA's First Written Questions [REP1-032] discussed, in the response to Question NV.1.3, a number of alternative and additional operational noise mitigation measures which were considered. The measures considered were as follows:</p> <ul style="list-style-type: none"><li>• Road Speed and Vehicle Restrictions – 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 as acknowledged by DMRB LA 111, for roads such as the Scheme.</li><li>• Modifications to Affected Buildings – Receptor buildings themselves can be treated in order to improve the sound insulation of building façades whilst also considering appropriate ventilation provision. However, 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 noise levels incident on the façades of a receptor.</li><li>• Therefore, modifications to the building would not influence external noise levels and would not reduce the impacts at receptors predicted to experience significant adverse effects as a result of the Scheme. In addition, the absolute noise levels at the receptors within Groups 9, 10 and 11 (those which are predicted to experience residual significant adverse operational road traffic noise effects) are not high. 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 opening windows for ventilation and cooling.</li></ul> <p><u>Summary</u></p>



Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>1. In summary, mitigation has been considered for receptor groups 7- 11 within Table 1-30 of the Noise Addendum [REP1-019] as follows: <ul style="list-style-type: none"> <li>• Group 7 - As without mitigation, a significant adverse operational road traffic noise effect was predicted at this receptor, PNB1 was proposed. The noise level reduction afforded by PNB1 is sufficient such that, with the barrier in place, a non-significant beneficial impact is predicted at this receptor.</li> <li>• Group 8 - Whilst moderate adverse impacts are predicted at these receptors, as described above, due to contextual factors, these are not considered to be significant. Therefore, no operational noise mitigation measures are proposed.</li> <li>• Group 9 - Significant adverse operational road traffic noise effects are predicted for receptors in this group. Given the distance from the Scheme carriageway to the receptors, a noise barrier or earth bund would not provide meaningful benefit in terms of noise level reduction at these receptors. Therefore, no specific mitigation measures are proposed for receptors in this group.</li> <li>• Group 10 - As without mitigation, significant adverse operational road traffic noise effects were predicted at these receptors , PNB2 was proposed. Whilst PNB2 provides a meaningful benefit in terms of noise level reduction, the attenuation afforded by the barrier is not sufficient to mitigate the effects such that they are no longer significant.</li> <li>• Group 11 - As without mitigation, a significant adverse operational road traffic noise effect was predicted at this receptor, PNB3 was proposed. Whilst PNB3 provides a meaningful benefit in terms of noise level reduction, the attenuation afforded by the barrier is not sufficient to mitigate the effect such that it is no longer significant.</li> </ul> </li> <li>2. It should be noted that all of the above receptors benefit from the Scheme wide measures to reduce noise levels as far as practicable such as a low noise road surface and the horizontal and vertical alignment of the Scheme (as discussed in greater detail above).</li> </ol>
NV.2.5	Applicant and IPs	<p>Paragraph 6.9.32 of the ES [APP-042] states that reflective noise barriers are proposed for two locations.</p> <p>What other mitigation measures are being considered if these were not provided? Why are these only proposed and not agreed? How has the assessment of environmental impacts accommodated the uncertainty surrounding the proposed barriers?</p>	<ol style="list-style-type: none"> <li>1. This response has been prepared based on the Noise Addendum [REP1-019] which replaces the operational stage assessments presented within Chapter 6: Noise and Vibration Part A [APP-042], Chapter 6: Noise and Vibration Part B [APP-043] and Appendix 16.5 Noise and Vibration Likely Significant Effects of the Scheme. It is understood that this question is in reference to proposed noise barriers PNB1 and PNB4 which are referenced in both the Noise Addendum [REP1-019] and Chapter 6 Noise and Vibration Part A [APP-042].</li> <li>2. At the time of writing the Noise Addendum [REP1-019] of the mitigation and enhancement measures presented within Section 1.12 Design, Mitigation and Enhancement Measures of the Noise Addendum [REP1-019], it could not be confirmed, due to potential design constraints, whether noise barriers PNB1 or PNB4 could be constructed. As such, as stated within paragraph 1.13.19 of the Noise Addendum [REP1-019], the noise reduction afforded by these barriers was not included in the final assessment of likely significance as summarised within Table 1-40 (within Section 1.13 Assessment of Likely Significant Effects within the Noise Addendum [REP1-019]), thereby representing a worst-case assessment.</li> <li>3. Since the submission of the Noise Addendum [REP1-019] it has been confirmed that PNB1 would be constructed as part of the Scheme. The acoustic attenuation afforded by</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>PNB1 mitigates the significant adverse operational road traffic noise effect at Northgate Farm and a beneficial impact is predicted at this property in the short-term (non-significant). PNB1 is secured through the Outline CEMP [REP4-013 and REP4-014] (and as submitted at Deadline 5) (Table 3-1 row A-N4).</p> <p>4. Therefore, the only barrier which at this stage cannot be confirmed is PNB4, which is included as an enhancement measure for sensitive receptors within Felmoor Park and Bockenfield Holiday Park. At the preliminary design stage, it is considered that the existing highway verge would need to increase in width by 1.5m to create sufficient set back for the barrier. The existing, adjacent culvert would also need to be widened by the same 1.5m and a bespoke design for the barrier footings over the culvert devised. As this is an enhancement barrier (which is not required to mitigate significant adverse effects), the approach taken for this Scheme is that the barrier must be value for money (in terms of a comparison of the cost of the barrier against the monetised acoustic performance of the barrier). In this location, whilst the barrier could be constructed (with the verge and culvert alterations as set out above) the cost of these works is not yet known. Therefore, further investigation is required at the detailed design stage in order to determine whether this barrier can be constructed, whilst achieving the value for money criteria. This is committed to in row A-N5 of Table 3-2 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) which states:</p> <p><i>“A 3 m high reflective noise barrier will be provided in the location of the Felmoor Park and Bockenfield Holiday Park (PNB4). Although further investigation is required to determine whether the barrier can be built, it will be provided if it can be built meeting the value for money criteria.”</i></p> <p>5. As the barrier is not required to mitigate significant adverse effects, and if constructed may lead to significant beneficial operational road traffic noise effects (as stated in paragraph 1.13.18 of the Noise Addendum [REP1-019]), construction of the barrier would only lead to a betterment in terms of the reported operational noise impacts. If the barrier is not constructed the Scheme wide design measures ensure that noise levels have been reduced as far as reasonably practicable.</p> <p>6. The Applicant's Response to ExA's First Written Questions [REP1-032] discussed, in the response to Question NV.1.3, a number of alternative and additional operational noise mitigation measures which were considered. For the reasons described in that response, the options considered were ultimately deemed not to be appropriate and have therefore not been included.</p>
Part B			
		There are no additional questions relating to Noise and Vibration for Part B at this point in the Examination.	1. Noted. No response required.

Table 1-10 - Population and Human Health

Ref. No.	Question to:	Question	Applicant's Response
PHH.2.1	Applicant	<p>Paragraphs 12.10.59 of Part A [APP-054] and 12.10.39 of Part B [APP-055] state that the Proposed Development is estimated to generate employment opportunities for approximately 354 workers per year (Part A) and 226 workers per year (Part B), based on estimated total construction costs of £173million over 30 months (Part A) and £81 million over 22 months (Part B).</p> <p>The Applicant is requested to set out how estimated employment opportunities were calculated.</p>	<ol style="list-style-type: none"> <li>As detailed in paragraphs 12.4.48 to 12.4.50 of Population and Human Health Part A [APP-054] and paragraphs 12.4.42 to 12.4.45 of Population and Human Health Part B [APP-055], the anticipated number of direct jobs generated during construction is based on an evaluation of the total construction cost against the average gross output per construction worker and length of construction period.</li> <li>Leakage, displacement, and multiplier effects were then taken into account to determine the indirect and induced employment numbers in accordance with English Partnerships Guidance. As detailed in the English Partnerships Guidance, leakage effects are the <i>"proportion of outputs that benefit those outside of the intervention's target area or group"</i>. Displacement measures the extent to which the benefits of a project are offset by reduction of output or employment elsewhere. Indirect effects cover the employment growth that will arise locally through manufacturing services and suppliers to the construction process. Induced effects cover the income of the construction workers and suppliers that will be spent locally, generating further employment (e.g. spend at hotels or cafes).</li> <li>In accordance with English Partnerships Guidance, a medium level of leakage has been applied because it is anticipated that a reasonably high proportion of the benefits would be retained within the target area. This is based on analysis carried out by the Office of National Statistics (June 2020) which indicated that 78% of construction workers in Northumberland travelled less than 20 km to work (excluding construction workers that mainly worked at home or had no fixed place of work). A low level of displacement has been applied due to the flexibility of the highways construction labour market, which is not a specialised construction market, meaning a low level of displacement effects is anticipated. If the construction labour market was specialised (e.g. nuclear) then the labour market would not be flexible. A multiplier of 1.5 has been applied on the basis that multiplier effects are considered to be 'medium' as there are anticipated to be 'average linkages' associated with Part A and Part B.</li> <li>Office of National Statistics – Distance Travelled to Work Dataset:  <a href="https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/distancetravelledtowork">https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/distancetravelledtowork</a></li> </ol>
PHH.2.2	Applicant	<p>Human health receptors are assigned a sensitivity of 'medium' (paragraphs 12.7.85 [APP-054] &amp; [APP-055]).</p> <p>Applying Table 12-11 (Part A)[APP-054]/ Table 12-12 (Part B)[APP-055], can the Applicant explain why the sensitivity was not 'high' given the Proposed Development is in an area which experiences an inequality in health and has some areas of deprivation?</p>	<ol style="list-style-type: none"> <li>As detailed in Table 12-36 of Population and Human Health Part A [APP-054], the Scheme crosses three Lower Super Output Areas (LSOAs). Two of which are in the more 'affluent' deciles (20% and 40% least deprived). Although there are areas of deprivation, the general area is more affluent. In addition, there are no Air Quality Management Areas (AQMA's) within 200m of the Affected Road Network (ARN) and no exceedances in the annual mean objectives at any air quality monitoring site which did not meet the 'high' sensitivity criteria. The area surrounding the Scheme is sparsely populated, therefore walking, cycling, horse riding (WCH) routes (including PRoWs) had a very low usage and were used for recreational purposes as opposed to commuting route. Therefore, a sensitivity of medium was considered by the Applicant to be appropriate.</li> <li>The analysis for Population and Human Health Part B [APP-055] is very similar, although it is worth noting that Part B is slightly more deprived. However, this factor was not deemed significant enough to upgrade the sensitivity to 'high' when all other factors were considered.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
PHH.2.3	Applicant	Appendix PHH.3 submitted at Deadline 1 [REP1-046], Table 1-2 "Residential Properties located within 500m of the Order Limits (Part A)" lists a number of properties that were missing from the original application (Tables 12-25 and 12-26 of [APP-054]): R116, R39, R19, R18, R10, R11, R12, R13, R14, R15, R16, R17, R22, R23, R24, R25, R26.  As these are also absent from Table 12-39 [APP-054] can the Applicant confirm whether these properties were included in the original assessment?	<ol style="list-style-type: none"> <li>These properties were not specifically outlined within the assessment, but are located in clusters of properties considered within the assessment. Details of the locations of these properties and the likely effects on these are submitted in Appendix D, but show that no significant effects are anticipated.</li> </ol>
PHH.2.4	Applicant	NCC [REP2-025], further to their initial comments which the Applicant has responded to (Applicant's response to 1.1.31 in [REP1-064]) continues to state that the impacts of the scheme on Population and Human Health have not been fully assessed. This is based on the view that the impact of the Proposed Development on the amenity and the quality of the user experience of the PRoW network and local roads should have been included as a separate theme within the ES.  What has the Applicant done to address this issue?	<ol style="list-style-type: none"> <li>The Applicant has assessed within Chapter 12: Population and Human Health Part A [APP-054] and Part B [APP-055] the impact on amenity of users of PRoW and WCH facilities within 500m of the Scheme, and the impact on Views from the Road for road users within the defined Study Areas for both Part A and B, in accordance with the superseded DMRB guidance (neither of these elements are a requirement of Population and Human Health assessment according to the updated DMRB guidance).</li> <li>In addition, Chapter 7: Landscape and Visual Part A [APP-044] and Part B [APP-045] consider the visual effects on PRoW within 1km of the Scheme.</li> <li>Therefore, the Applicant considers that the impacts on amenity and the quality of the user experience of the PRoW network and local roads is appropriately and sufficiently considered within the ES under these sections, in alignment with guidance, and does not agree that this has not been fully assessed. Additionally, DMRB Interim Advice Note 125 states that DMRB Part 6: Land Use, Part 8: Pedestrians, Cyclists, Equestrians and Community Effects, and Part 9: Vehicle Travellers are to be combined into one assessment of People and Communities. The assessment for Population and Human Health incorporates these elements of the superseded guidance and presents them in one chapter with the required elements of the updated guidance.</li> <li>The Applicant has contacted Northumberland County Council in order to arrange a meeting to further discuss the approach used for the assessment.</li> </ol>
<b>Part A</b>			
PHH.2.5	Applicant	Paragraph 12.4.38 of Chapter 12 of the ES [APP-054] states that it is not considered that there would be a significant change in the level of existing severance as both WCH and vehicles would be able to access the same places as they currently do as the portion of the A1 which is not being widened would still be accessible. Nevertheless, the access route would change which could then impact accessibility.  How has this factor been taken into account?	<ol style="list-style-type: none"> <li>The referenced paragraph is in relation to relief from severance, which was scoped out of the assessment in Chapter 12 Population and Human Health Part A [APP-054]. Relief from severance is relevant only to WCH routes crossing roads with an existing AADT flow of more than 8,000 vehicles (as stated in DMRB, Volume 11, Section 3, Part 8), and is a quantitative assessment.</li> <li>The assessment of new severance recognises increases in length, where applicable, where closures and diversions of PRoW and other WCH routes would occur due to implementation of the Scheme. Where there are to be changes in or new severance to other routes for WCH, including those used to access community facilities or links to crossing points of the A1, these are assessed under the heading of Community Severance in Chapter 12 Population and Human Health Part A [APP-054].</li> </ol>
PHH.2.6	Applicant	Paragraph 12.7.21 of the ES [APP-054] lists community facilities within Morpeth. The list does not appear to include Fairmoor Cemetery.	<ol style="list-style-type: none"> <li>Paragraph 12.7.21 of Chapter 12: Population and Human Health Part A [APP-054] lists Fairmoor Cemetery as a community facility in Morpeth, under point b.</li> </ol>



Ref. No.	Question to:	Question	Applicant's Response
		Could the Applicant state how access to this community facility has been taken into consideration as part of the effects on communities?	2. This is then highlighted on Figure 12.2: Commercial and Community Receptors Part A [REP1-046] (as Item A) and assessed within paragraphs 12.8.34 and 12.10.38 of Chapter 12: Population and Human Health Part A [APP-054] under community facilities. The effect on visitors to the Cemetery is stated as temporary slight adverse during construction, and not significant.
PHH.2.7	Applicant	<p>Table 12-23 of the ES [APP-054] includes a series of PRow that provide access to public transport and other social and community facilities, such as schools.</p> <p>Can the Applicant confirm how continued access to these social and community facilities would be secured during both the construction and operational phases?</p>	<p>1. As detailed in the outline Construction Traffic Management Plan (CTMP) [REP3-015 and 016] the following measures will be implemented during construction to enable continued access to the PRow network and relevant community facilities:</p> <ul style="list-style-type: none"> <li>• Qualified personnel (banksmen) will be in place at key locations when necessary during the construction of the Scheme. These are likely to be required in place at Rendezvous Points for key deliveries or at PRow and plant crossing points during busy periods. Qualified personnel will be provided at other locations as required.</li> <li>• The main contractor will develop a PRow Management Plan, secured through S-PH7 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5). The PRow Management Plan will highlight where potential PRow closures and diversions are required, and the extent of any reinstatement works required. Some of the PRow will be permanently stopped up whilst others are planned to be diverted onto new permanent alignments. It will be necessary to temporarily close some PRow during construction and these closures will be communicated in an appropriate manner with alternatives identified.</li> <li>• Further PRow specific measures are outlined within Table 7 of the CTMP [REP3-015 and -016].</li> </ul> <p>2. As detailed in 12.9.6 and 12.9.7 of Chapter 12: Population and Human Health Part A [APP-054], existing PRow and WCH routes would be retained where possible, and where they are crossed by the route, an alternative proper means of access would be provided to prevent severance. This is set out in the CTMP (see paragraph 5.10) [REP3-015 and 016] and clauses S-PH6 and PH7 of the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5) which are secured through Requirement 11 of the draft DCO [REP4-004 and 005].</p> <p>3. With specific reference to Tritlington C of E First School, it is located adjacent to the section of the A1 which is to be de-trunked. There is a footway on the southbound carriageway which provides pedestrian link to the school, which currently is across the A1 from Footpath 423/001 (which provides a western link to Fenrother over fields). The Scheme will retain the footway on the southbound carriageway of the de-trunked A1, and diversions to 423/001 are provided which tie in with the footway which will go over Fenrother Junction, following implementation of the Scheme.</p>
PHH.2.8	Applicant	<p>Table 12-29 of the ES (Agricultural Land Holdings within the Order Limits) [APP-054] includes eight non-represented agricultural land holdings.</p> <p>How has the sensitivity of these been assessed and what efforts have been made by the Applicant to ascertain their sensitivity?</p>	1. Where no responses were received to the agricultural land holding questionnaire, sensitivity of these land holdings was accorded in line with the criteria in Table 12-10 of , Chapter 12 Population and Human Health Part A [APP-054], using information available to the Applicant, as stated in paragraph 3.1.2 of Appendix 12.1 Part A [APP-266]. This included aerial photography, knowledge of the area and other land holdings within the Study Area, land ownership plans produced by the Applicant (informed by Land Registry data), in addition to professional judgement.

Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>2. A reasonable worst-case approach has been taken when assigning sensitivity criteria to land holdings within the assessment.</li> </ol>
PHH.2.9	Applicant	<p>The PHE health profile for Northumberland indicates that the health of the Northumberland population is slightly worse than the England average, including a higher number of fatalities or instances of being seriously injured on Roads in Northumberland (including the A1 and local road network).</p> <p>Considering that the Proposed Development is predicted to increase overall number of vehicles on the road, how has the higher number of fatalities or instances of being seriously injured in the area been taken into consideration? Also, considering that a number of diversions are proposed during the construction phase and that driver stress will be higher, how have proposals been adapted to take into consideration the higher number of collision risks?</p>	<ol style="list-style-type: none"> <li>1. A detailed analysis of the forecast benefits associated with road traffic accidents and casualties was undertaken using DfT COBALT software, as described in section 4.10 of the Case for the Scheme [APP-344].</li> <li>2. COBALT is the industry standard software for calculating accident benefits of a Scheme, by comparing the number of accidents with and without the Scheme over the 60 year appraisal period.</li> <li>3. In order to produce the most accurate assessment, accident rates for the existing network were calculated within COBALT using observed accident data obtained from Tyne and Wear Road and Traffic Data Unit.</li> <li>4. The Scheme is forecast to re-assign traffic from parallel routes including the A697 and the de-trunked A1 onto the new dual carriageway, which will have a lower accident rate than the existing routes. Overall, COBALT forecasts the Scheme will save 414 accidents and 708 casualties over the 60-year appraisal period.</li> <li>5. No quantified analysis of changes in accident rates during construction have been undertaken. The industry standard software COBALT does not enable the analysis of accidents during temporary construction works and therefore it is not common practice to undertake such an analysis.</li> <li>6. Section 4.10 of the Case for the Scheme [APP-344] includes a review of personal injury accidents in the vicinity of the Scheme obtained from DfT STATS 19 data, and notes that clusters of accidents have occurred around existing at grade junctions, where turning vehicles have conflicted with oncoming traffic or drivers have failed to stop when approaching slower moving or queueing traffic. There are also several accidents relating to vehicles entering the opposite carriageway colliding with oncoming vehicles.</li> <li>7. The traffic management during construction will be carefully designed to minimise the risk of accidents (and minimise increases in driver stress) as stated in section 2.6 of the Construction Traffic Management Plan [REP3-015 and 016] (and 12.9.10 of Chapter 12 Population and Human Health of the ES Part A [APP-054]), including the introduction of lower speed limits, fixed and variable message signage and a double white line with an associated Temporary Traffic Regulation Order (TTRO) for no overtaking. Taking into consideration the location and type of existing personal injury accidents, the Applicant considers that the proposed traffic management measures will assist in reducing the rate and severity of accidents.</li> <li>8. Existing highway issues and constraints for the Scheme are detailed in Table 3 (Part A) and Table 4 (Part B) of the outline CTMP [REP3-015 and 016]. The CTMP tables set out the issues, constraints and mitigation measures during construction.</li> </ol>
PHH.2.10	Applicant	<p>Paragraph 12.7.88 of the ES [APP-054] recognises that population trends over the next 25 years would see an increase in the older age population. Paragraph 12.7.89 states that older people are more likely to rely on vehicle transport (particularly bus services).</p> <p>Considering the existing provision of bus stops along Part A and the proposed removal of bus stops as described in paragraph 12.8.13, how</p>	<ol style="list-style-type: none"> <li>1. The Applicant acknowledges that the trend over the next 25 years will see an increase in the older population, who are more likely to rely on public transport. However, this is a general trend in the population of the Northumberland, and not specific to residents within the Study Area.</li> <li>2. In their current location, the Applicant does not consider that the bus stop locations would well serve older and elderly users, as they are located in sparsely occupied locations, with few nearby residential properties (meaning walking distances are likely to be longer than</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
		has the Proposed Development taken into consideration the needs of the increasing older age population?	<p>those with mobility issues are comfortable with), no bus shelters or seating areas for waiting, and no street lighting. Additionally, the footway adjacent to the carriageway is located on the southbound carriageway for the majority of the length of the Scheme. Therefore, where accessing northbound bus services, pedestrians currently have to cross the A1 where there are no formal crossing points to reach the bus stops.</p> <p>3. The Scheme has been designed based on traffic projections and also, in the case of the bus routes and bus stop locations, informed by usage levels and consultation with the bus service operator (Arriva), with revised bus stop locations agreed with Arriva. Bus usage on the relevant routes has been noted as low and relocation and provision of bus stops as part of the Scheme is considered by the Applicant to be proportionate. As stated in paragraph 12.9.13 of Chapter 12: Population and Human Health Part A [APP-054], temporary bus stop locations will be provided during construction, and the bus service will continue to operate through construction and operation on a diverted route, and will therefore continue to provide access for users of public transport (including older users). In order to meet the objectives of the Scheme, bus stops along the A1 will be removed, but the location and number of relocations of bus stops is considered to be proportionate to the levels of usage, whilst providing safe provision for bus routes and benefits to users. With the Scheme in place bus stops will be located on lower classification roads (including the de-trunked A1), with less traffic, making it easier for vehicle drop-offs at bus stops and crossing the road (in the case of the de-trunked A1). In addition, The Equalities Impact Assessment [REP2-007] recommended the following action for consideration during detailed design:</p> <p><i>“Designers to continue exploring opportunities to make routes to alternative bus stops suitable for a range of users e.g. footpath surfacing, crossing points, rest areas/seating, dropped kerbs, signage.”</i></p> <p>4. The operator of the bus service does not record details of users of the services, other than numbers of users. It was noted within the Equalities Impact Assessment [REP2-007] that, due to the lack of information relating to the characteristics of the bus stop users at Warreners House, Hebron Road End and Espley Road End bus stops, it cannot be determined whether one or more of the protected characteristic groups will be disproportionately impacted as a result of the bus stop removals.</p>
PHH.2.11	Applicant	<p>Table 12-38 of the ES [APP-054] provides a summary of potential impacts (without mitigation, but with consideration of embedded mitigation, for example, permanent PRow diversions) on PRowS within the Study Area. For PRow 423/001, Part A would sever this route with no provision for WCHs travelling west, with users being diverted north to Fenrother Junction.</p> <p>The Applicant is asked to provide further information regarding how safe and welcoming this route would be to WCHs?</p>	<p>1. Footpath 423/001 is severed by the Scheme, and as a result, there are two sections of footpath which remain either side of the A1. The diversion routes of these footpaths have looked to retain as much of the original footpath as possible, whilst linking in with the new elements of the Scheme (in this case Fenrother Junction).</p> <p>2. East of the Scheme, the footpath will join with the de-trunked A1 to the east, across from Tritlington C of E First School. It will be stopped up just short of the Scheme and diverted north to join with the footway over Fenrother Junction. There is a marginal difference for pedestrians in the length of the off-road PRow link to Fenrother Junction, and the footway and Fenrother Lane (East).</p> <p>3. West of the Scheme, the existing footpath will be stopped up short of the Scheme, and diverted north and then west to join with Fenrother Lane, providing a link to the footway over Fenrother Junction.</p>



Ref. No.	Question to:	Question	Applicant's Response
			<ol style="list-style-type: none"> <li>The retained and diverted sections of the PRoW will be across arable land, and of the same appearance as prior to implementation of the Scheme, with no change in the type of surfacing or additional lighting provided which would impact on the perception of safety for users. Additionally, the de-trunked A1 will have fewer vehicles travelling on it, and therefore joining the PRoW at the eastern end is likely to be perceived as safer. As stated in paragraph 12.8.19 and 12.8.20 of Chapter 12 Population and Human Health Part A [APP-054], users of PRoW and other routes within the 500 m Study Area could experience reduction of amenity due to noise and air quality effects, and visual intrusion from construction works during the construction period, particularly for any that pass within 100 m of Part A.</li> <li>Discussions with NCC regarding amendments to the PRoW network have not resulted in any comments or objections to these specific diversions.</li> </ol>
PHH.2.12	Applicant	<p>Paragraph 12.8.19 of the ES [APP-054] states that users of PRoWs and other routes within the 500m Study Area could experience a reduction of amenity due to noise and air quality effects during both the construction and the operation periods.</p> <p>How has this potential reduction of amenity been taken into consideration as part of the Proposed Development and how has it been mitigated against?</p>	<ol style="list-style-type: none"> <li>As stated in paragraph 12.10.27 of Chapter 12: Population and Human Health Part A [APP-054], it is anticipated that the magnitude of change of amenity for users of PRoW following the implementation of mitigation measures (as outlined below, regarding the Landscape Mitigation Masterplan Part A [REP4-010] and Part B [APP-144]) during operation is minor to negligible (depending on proximity to Part A, users within 100m of works are likely to experience minor adverse impacts and impacts further afield would likely be negligible). Therefore, there is likely to be a direct, permanent, slight adverse effect for WCH users during operation (not significant) as a worst case.</li> <li>During construction, best practice construction methods, as outlined within the Outline CEMP [REP4-013 and 014] (and as updated at Deadline 5), will minimise as far as practically possible impacts on WCH from construction works, construction plant and visual intrusion. However, there is a limit as to how much impacts can be mitigated with the presence of construction works. The assessment accounts for the reduced baseline amenity when considering PRoW proximity to the existing A1, and this is reflected in the sensitivity of PRoW within the study area (as outlined within Table 12-23 of Chapter 12: Population and Human Health Part A [APP-054]).</li> <li>Landscape Mitigation Masterplan Part A [REP4-010] and Figure 7.10 Landscape Mitigation Plan Part B [APP-144] detail where landscape planting and screening has been incorporated as part of the Scheme. A detailed Landscaping Scheme will be prepared by the Applicant and submitted to the Secretary of State for approval under requirement 5 of the dDCO [REP4-004 and 005].</li> </ol>
<b>Part B</b>			
PHH.2.13	Applicant	<p>Table 1-5 "Residential Properties Located within 500m of Main Compound (Part B)" of The Applicant's Response to WQ PHH.1.10 and 18 [REP1-046] does not include property Ref. 47 which appears to border the study area of the Main Compound on revised Figure 12.3 [REP1-046].</p> <p>The Applicant is requested to provide information concerning this property and its distance from the Main Compound.</p>	<ol style="list-style-type: none"> <li>As identified in Appendix 7.4 Landscape and Visual Sensitive Receptors Part A [APP-289], the properties identified by Ref. 47 are part of a collection of eight properties at Hemelspeth, and are more than 500m from the Scheme and Main Compound, and outside the Population and Human Health study area (access is provided from both the south and north from Felton and therefore will be maintained through construction).</li> </ol>



**Table 1-11 - Traffic and Transport**

Ref. No.	Question to:	Question	Applicant's Response
TT.2.1	ApplicantNCC	<p>At D1 the Applicant submitted a revised version of the Rights of Way and Access Plans[REP1-003]. The key indicates that the revision reflects amendments to Rights of WayRefs and details. This was further updated at D2 [REP2-003] with the description amended to 'Examination Deadline 02 Update'.</p> <p>The Applicant is asked to explain the source of these updates? Do they incorporatechanges proposed by NCC? Can NCC confirm the accuracy of the revised plans?</p>	<ol style="list-style-type: none"> <li>The updates made to the Rights of Way and Access Plans submitted at Deadline 1 [REP1-003] and Deadline 2 [REP2-003] are related to the changes proposed by NCC, specifically for Part B.</li> <li>Changes made at Deadline 01 [REP1-003] were: <ul style="list-style-type: none"> <li>Sheet 1: New reference label 1/h included. Section of bridleway to be removed included. Changes to the Key.</li> <li>Sheet 5 and 6: PRoW label amended.</li> <li>Sheet 9 and 13: "PRoW to be stopped up" across the A1 removed.</li> <li>Sheet 15: Label PA 15/5 moved to the start of the PMA.</li> </ul> </li> <li>These updates are all incorporated in the Deadline 2 revision [REP2-003] which was also updated to address the following: <ul style="list-style-type: none"> <li>Sheet 12: Changes to labels related to Byway 110/013.</li> <li>Sheet 14: New reference label 14/b included.</li> <li>Sheet 15 and 16: Roads north of Charlton Mires Junction change to PMA hatch.</li> </ul> </li> </ol>
TT.2.2	ApplicantNCC	<p>The Applicant's Response to D3 Submissions [REP4-024] states that the Applicant's Comments on Responses to Written Questions - Appendix A - Public Rights of Way Response [REP2-021] retains a small number of minor amendments to references whichwould be communicated in writing. The Applicant and NCC are asked to provide an update on addressing these outstanding matters.</p>	<ol style="list-style-type: none"> <li>Further to the Applicant's Response to Deadline 3 Submissions [REP4-024], the Applicant was awaiting final comments from NCC on the Applicant's Comments on Responses to Written Questions - Appendix A - Public Rights of Way Response [REP2-021] provided at Deadline 2.</li> <li>Further ongoing liaison with the NCC PRoW Officer has now confirmed that there were no substantive comments and that the submission is satisfactory for NCC's purposes.</li> </ol>
TT.2.3	NCC ApplicantNE	<p>The Applicant submitted a revised Construction Traffic Management Plan at D1 [REP1-025] [REP1-026].</p> <p>NCC is asked to confirm whether the document is acceptable in its current form. The Applicant is asked to confirm whether or not this is a draft document subject to approval through the DCO. NE is asked to comment on the advice regarding the use of the A1068 as a diversion route.</p>	<ol style="list-style-type: none"> <li>The Applicant confirms that the outline Construction Traffic Management Plan (outline CTMP) is a draft document [REP3-015 and 016]. A final construction traffic management plan (CTMP) will be submitted to the Secretary of State for approval to discharge requirement 11 of Schedule 2 to the dDCO [REP4-004 and 005], prior to the commencement of the works comprised in the Scheme. Requirement 11 provides that the final CTMP must be based on the outline CTMP.</li> </ol>
TT.2.4	NCC	<p>Appendix TT.3 Maintenance Boundaries is provided in response to ExQ1 TT.1.23.Is NCC content with the material provided in in Appendix TT.3?</p>	<ol style="list-style-type: none"> <li>N/A</li> </ol>
TT.2.5	Applicant	<p>Point 12 of NCC's Response to Action Points from Hearings [REP4-074] addresses thenature of stopping up and the resultant status/ ownership of the stopped-up highway among other highways/ PRoW matters.</p> <p>The Applicant is asked to respond to NCC's comments.</p>	<ol style="list-style-type: none"> <li>A meeting was held with NCC Officers on 02/03/2021, at which the Stopping Up and highway ownership was discussed. The elements previously annotated in the Proposed Highway Adoption &amp; Maintenance Responsibilities Plans [REP3-003] and the Maintenance Boundary Technical Note [REP1-049] are agreed with NCC.</li> <li>Further clarification on elements of soft estate in Part A are to be confirmed with NCC following which the plans and Technical Note for Part A will be updated and submitted at Deadline 6.</li> <li>The strategic road network currently includes the layby at West Lodge. The Applicant confirms that it is proposing a similar solution to that at Priests Bridge and will discuss this</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			<p>further with the NCC Officers. If an update to the Rights of Way and Access Plans [REP2-003] is required, this will be re-submitted at Deadline 6.</p> <p>4. It was confirmed that, as Local Highway Authority, NCC would require positive drainage on the new roads to be adopted. The Applicant is undertaking a review to the road alignments for both East Linkhall Road and Rock South Farm to consider the incorporation of a positive drainage network within the Order limits. An environmental assessment of any changes outside the Limits of Deviation described in the ES Chapter 2: The Scheme [APP-037] and the draft DCO [REP4-004 and 005] would be submitted at Deadline 6.</p> <p>5. A date for a follow up meeting with NCC Officers is planned for 09/04/2021.</p>
TT.2.6	Applicant	Point 36 of NCC's Response to Action Points from Hearings [REP4-074] summarises NCC's position on non-motorised transport. The Applicant is asked to respond.	<ol style="list-style-type: none"> <li>1. The Applicant confirms to the ExA that the Stage 1 Road Safety Audit (RSA) highlighted in 2018 the potential for increasing vehicle speeds on the de-trunked A1. An issue reported within a Stage 1 RSA does not automatically generate a requirement to change the Scheme design. The Applicant has confirmed to NCC that no works would be undertaken on the de-trunked section which would become local highway for which NCC will be responsible.</li> <li>2. The Applicant agrees that the forecast AADT flows on the section from Fenrother to Earsden indicate an 83% reduction compared with the 2020 figures and an 87% reduction compared with the 2019 figures. Vehicle speeds are influenced by many factors including speed limits, geometry, visibility, levels of traffic, street activity, frequency of junctions and PMAs, lining and signage, location of speed cameras and individual behaviour. The Applicant is not proposing to change the speed limit on the de-trunked section as part of the Scheme but notes that NCC may choose to do so and it could propose such a provision in the DCO if sought by NCC (although its position is that this is not needed).</li> <li>3. The Applicant acknowledges Local Transport Note (LTN) 1/20 Cycle Infrastructure Design guidance, which was published in July 2020 after the DCO application was submitted. Section 1.3 of LTN 1/20 titled Application states that the guidance should be applied "to all changes associated with highway improvements, new highway construction and new or improved cycle facilities."</li> <li>4. LTN 1/20 is appropriate for new local highway schemes or changes to local highway schemes and will be used in the detailed design of the footway provision being created on the new section of link road from West Moor Junction to Brockenfield Caravan Park. However, as no changes to the de-trunked section are required as part of the Scheme, the guidance does not apply for the hand over of an existing asset from the strategic road to local highway network. Once de-trunked, a future scheme on this section of the road would consider LTN 1/20 for new cycling provision.</li> <li>5. The Applicant does not agree that the Scheme creates a new North-South severance for non-motorised users and such works are not required to mitigate the impacts of the proposed Scheme. The severance is reported by NCC as a current issue on this part of the network.</li> <li>6. The Applicant has explained to NCC that if there is a desire to create a separate cycle track then that would be over and above the requirements of the project, so other funding routes would have to be explored. From the Applicant's perspective, the only funding option would be through Designated Funds, which the Applicant is currently pursuing. The</li> </ol>

Ref. No.	Question to:	Question	Applicant's Response
			delivery of any designated funds scheme sits outside of the Applicant's DCO application and such works are not required to mitigate the impacts of the proposed Scheme.

Table 1-12 - Water Environment

Ref. No.	Question to:	Question	Applicant's Response
WE.2.1	Applicant	<p>In its Deadline 4 submission [REP4-076] the EA stated that it would welcome clarity regarding why and how the Cotting Burn, tributary of the Easrdon Burn, unnamed ditch(north of Longdike Burn) and tributary of Thirsdon Burn have been reassigned as dry ditches as part of Annex A – Approach to the Assessment of Losses and Gains of Watercourses [REP2-010].</p> <p>The Applicant is asked to respond.</p>	<ol style="list-style-type: none"><li>1. All habitats were classified and mapped following standard Phase 1 habitat survey methodology (Joint Nature Conservation Committee (JNCC) Phase 1 Handbook) following a Phase 1 habitat survey. For the purpose of the habitat assessment of losses and gains, “watercourse” has been used to represent running water (habitat code G2) (as per paragraph 1.1.1, Annex A Approach to the Assessment of Losses and Gains of Watercourses [REP2-010]), which represents a Habitat of Principal Importance (HPI). Those habitats mapped as standing water (habitat code G1) or ditches (habitat code J2.6) are not included within the term “watercourse” within the biodiversity assessment. As per the definition for ditch (J2.6) of the JNCC Phase 1 Handbook, “<i>only ditches which appear to be dry for most of the year should be included in this category. Wet ditches are mapped as standing water (G1) or possibly swamp (F1)</i>”. The status of running water or ditches has also been verified during other surveys, such as aquatic and otter/water vole surveys.</li><li>2. Annex A Approach to the Assessment of Losses and Gains for Watercourses [REP2-010] provides an explanation for why Cotting Burn, tributary of the Earsdon Burn, unnamed ditch (north of Longdike Burn) and tributary of Thirsdon Burn were reassigned as dry ditches. This was undertaken to correct a transcription error within the Global Information System (GIS) software in the Phase 1 habitat data for Part A. The error had led to several existing dry channels/ditches being incorrectly mapped on Figure 9.1: Final Phase 1 Plan Part A [APP-105] as running water.</li><li>3. The below provides a summary of how these features are identified as dry ditches, rather than running water habitat:<ul style="list-style-type: none"><li>• Cotting Burn: the channel was recorded as dry with septic input during the aquatic macroinvertebrate surveys in May and October 2017, dry during a Phase 1 walkover survey in July 2018 and no flow with small stagnant pools during an assessment of trees in September 2018. Evidence collected during the various site assessments classifies the feature as a ditch.</li><li>• Tributary of Earsdon Burn: the channel was recorded as dry during the aquatic River Habitat Survey in August 2017 and a Phase 1 walkover survey in March 2018. A walkover survey in November 209 recorded a shallow flow of water within the channel, although this followed a period of wet weather. Evidence collected during the various site assessments determined the feature was only seasonally wet and remained dry for most of the year. In accordance with the JNCC Phase 1 handbook, the feature is classified as a ditch.</li><li>• Unnamed ditch (north of Longdike Burn): the features are located along the boundaries of arable fields and represent field drains. The features were not identified</li></ul></li></ol>



Ref. No.	Question to:	Question	Applicant's Response
			<p>as suitable habitat for survey during aquatic surveys in 2017 and otter/water vole surveys in 2016/17. The drains were also dry during a Phase 1 walkover survey in March 2018. Evidence collected during the various site assessments classifies the features as ditches.</p> <ul style="list-style-type: none"> <li>• Tributary of Thirston Burn: the channel was recorded as dry during a Phase 1 walkover survey in March 2018. The aquatic macroinvertebrate surveys in May and October 2017 recorded very little water with lots of terrestrial grasses in the channel. Evidence collected during the various site assessments determined the feature was only seasonally wet and remained dry for most of the year. In accordance with the JNCC Phase 1 handbook, the feature is classified as a ditch.</li> </ul> <p>4. The Water Framework Directive Assessment Part A [APP-255] and Water Framework Directive Assessment Part B [APP-312] assesses the potential impacts from the Scheme upon all watercourses and channel features (those which have permanent waterflow and those which are ephemeral, i.e. those which only flow during and immediately after rainfall events) which are crossed or impacted upon during the construction and operational phases. The Water Framework Directive Assessment Part A [APP-255] includes all the watercourses impacted by the Scheme (i.e. those defined by the biodiversity assessment (running water) as well as the other dry ditches and channels which do not have running water, but only flow during times of rainfall). The Applicant therefore considers that an appropriate assessment has been undertaken for all water features impacted upon the Scheme.</p>
WE.2.2	EA	Can the EA confirm whether they are satisfied with the pollution control measures proposed within the outline CEMP [REP4-013] in relation to the impact of the Proposed Development on watercourses?	<p>1. The Outline CEMP [REP4-013 and 014] has been updated as part of the Deadline 5 submission to address the Environment Agency's concerns over the wording of the temporary / construction phase surface water drainage strategy. This is provided in S-W1 of the Outline CEMP (and as submitted at Deadline 5).</p>
<b>Part A</b>			
WE.2.3	Applicant	<p>Paragraph 10.1.6.e. of the ES [APP-050] states that Part B contains detailed baseline information relating to existing drainage. Part A does not present the equivalent information as surveys of existing drainage will be undertaken at detailed design, although the information available is sufficient for the assessment.</p> <p>If sufficient information is available for the assessment, why has not the information been provided?</p>	<p>1. Section 3.3 of the Drainage Network Water Quality Assessment Part A [APP- 256] details the available information regarding the existing highway drainage obtained from the HADDMS online database. This information is sufficient and has been used to inform the HAWRAT cumulative assessment taking into account the proposed and existing drainage infrastructure.</p> <p>2. The Applicant notes that the Environment Agency have confirmed that they are content with this position and this is detailed in the SoCG [REP4-018d] .</p> <p>3. The second sentence of paragraph 10.1.6.e of Chapter 10: Road Drainage and the Water Environment Part A [APP-050] could be expressed more clearly by stating that although sufficient information has been obtained to undertake the assessment for the proposed dualling of the A1, the survey of the existing section of Part A which is to be de-trunked and handed over to NCC has not been undertaken. As there is to be no work undertaken on this section of the A1, there is no impact from the change in status and hence no need to assess it.</p>



Ref. No.	Question to:	Question	Applicant's Response
			4. The extent of any surveys to facilitate hand over will be discussed with NCC during detailed design.
WE.2.4	Applicant NCC	<p>The second bullet in Section 7 of Appendix 10.5 Drainage Strategy Report for Part A [APP-258] states that the maintenance of trunk and local drainage assets will be subject to a Memorandum of Understanding (MoU) between Highways England and NCC. Nevertheless, MoU referenced in the SoCG [REP4-016] only makes reference to details of the de-trunking aspects of Part A.</p> <p>Could the Applicant provide confirmation that such a MoU is being developed and agreed. How would it be secured through the DCO? NCC is also invited to comment.</p>	<p>1. The Memorandum of Understanding (MoU) between the Applicant and NCC referenced in the SoCG [REP4-016] only details the de-trunking aspects of Part A. The maintenance aspects of the NCC drainage assets are still part of ongoing discussions between the Applicant and NCC. Appendix 10.4: Drainage Strategy Report Part B [APP-314] [APP-314] will be revised to capture any changes to the strategy as part of these discussions. Once adoption principles are agreed both the Proposed Highway Adoption &amp; Maintenance Responsibilities Plans [REP3-003] and the Maintenance Boundary Technical Note [REP1-049] will record the maintenance aspects of the NCC drainage assets. Any outstanding issues will be captured in the SoCG [REP4-016]. The full details of the drainage system will require to be approved by the Secretary of State in line with Requirement 8 of the dDCO [REP4-004 and 005] which will be subject to consultation with NCC. These details will incorporate the material in the aforementioned plans and technical note and will also address any outstanding points in the SOCG.</p>
WE.2.5	EA	<p>Paragraph 10.4.13 of the ES [APP-050] states that following consultation with the EA it was agreed that detailed hydraulic modelling of the River Coquet would not be required, as the proposed southern pier would be aligned with the existing pier. Annex B – Flood Risk Assessment Addendum [REP1-067] states that the potential movement of the southern pier would take this structure further towards the river channel and potentially within the estimated 1 in 1000 years flood extent.</p> <p>Is the EA content with the information and advice provided in light of changes detailed in Annex B – Flood Risk Assessment Addendum?</p>	<p>1. The Applicant notes that the Environment Agency have confirmed that they are content with this position [REP4-076].</p>
WE.2.6	Applicant	<p>Table 10-9 of the ES [APP-050] provides a summary of the potential impacts associated with construction on the River Coquet based on the fact that the proposed construction activities would be located outside of the bankfull channel identified for the geomorphology assessment.</p> <p>Can the Applicant confirm that the potential movement of the southern pier as detailed within the Annex B – Flood Risk Assessment Addendum [REP1-067] would not alter this assessment?</p>	<p>1. The Applicant confirms to the ExA that those potential impacts on fluvial geomorphology during the construction phase, as stated in Table 10-9 of Chapter 10 Road Drainage and the Water Environment Part A [APP-050], are applicable to the proposed alternative Parameter 10 design where the piers are moved out of alignment.</p> <p>2. Furthermore, the Applicant has undertaken additional detailed geomorphological assessment using 2D hydraulic modelling to determine both the construction and operational impacts of the proposed viaduct on the River Coquet, as provided in the River Coquet Geomorphology Modelling Assessment [REP3-009]. The results of this analysis reveal only an infinitesimally small localised impact upon shear stress values at the 100 year plus 50% climate change scenario, which is limited to a few wetted cells in the vicinity of the proposed pier location. The model outputs for velocity, stream power and Froude reveal negligible differences between baseline, construction and operation.</p>
WE.2.7	Applicant	<p>Paragraph 10.8.15 of the ES [APP-050] states that Table 10-10 provides a summary of potential impacts on fluvial geomorphology of the River Coquet during the construction stage. Nevertheless, the heading of the above mentioned table refers to the operation stage,</p>	<p>1. The Applicant confirms to the ExA that there was an error in paragraph 10.8.15 of Chapter 10 Road Drainage and the Water Environment Part A [APP-050]. This section of the report relates to the operation stage. The final sentence in paragraph 10.8.15 should read, 'Table</p>

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		rather than the construction stage. Could the Applicant please clarify which stage does the table refer to?	10-10 below provides a summary of the potential impacts on fluvial geomorphology during the operation stage.'
WE.2.8	Applicant	Table 10-10 of the ES [APP-050] refers to the potential impacts on the fluvial geomorphology of River Coquet during the operation stage (please see WE.2.7 above). Can the Applicant confirm that the potential movement of the southern pier as detailed within the Annex B – Flood Risk Assessment Addendum [REP1-067] would not alter this assessment? In addition, can the Applicant provide further information on how the potential impact on erosion, which is dependent on the amount of bare earth exposed by vegetation clearance, has been assessed?	<ol style="list-style-type: none"> <li>1. The Applicant confirms to the ExA that those potential impacts on fluvial geomorphology during the operation phase, as stated in Table 10-10 of Chapter 10 Road Drainage and the Water Environment Part A of the ES [APP-050], are applicable to the proposed alternative Parameter 10 design where the piers are moved out of alignment.</li> <li>2. Furthermore, the Applicant has undertaken additional detailed geomorphological assessment using 2D hydraulic modelling to determine both the construction and operational impacts of the proposed viaduct on the River Coquet, as provided in the River Coquet Geomorphology Modelling Assessment [REP3-009]. Overall, the results reveal negligible change between baseline and proposed for a wide range of flood return periods, including extreme flood events.</li> <li>3. The ability of the River Coquet to erode its channel and banks was a key parameter assessed within the 2D hydraulic modelling, as provided in the River Coquet Geomorphology Modelling Assessment [REP3-009]. Here, the ability of the river to erode was assessed through a combination of changes in velocity, stream power and shear stress for a wide range of flood return periods between baseline, construction and operation. The potential impact of bare earth resulting from vegetation clearance during the construction phase was accounted for in the modelling by adjusting the roughness values built into the model. This was achieved by selecting lower Manning's n values, which are indicators of roughness, through the proposed vegetation clearance zone. This zone was identified and included within the model build using the Vegetation Clearance Plans [REP4-003]. The selection of Manning's n values to represent a smoother surface more prone to erosion was agreed in advance with the Environment Agency's Geomorphology Technical Specialist. The outcomes of the assessment reveal negligible change to the erosive power of the river due to vegetation clearance between baseline, construction and operation of the Scheme for each flood return period assessed.</li> </ol>
WE.2.9	Applicant	Paragraph 10.5.1 the ES [APP-050] states that, although it is unlikely that the design will change, further modelling used to inform the design of the watercourse crossings would be undertaken as the detailed design stage of Part A progresses. Should the further modelling result in changes in the design of watercourse crossings what would be the implications of such changes in EIA terms? How will the Applicant accommodate for changes in the modelling?	<ol style="list-style-type: none"> <li>1. The further modelling will be a refinement of the existing hydraulic models to confirm the final design. This will be undertaken to demonstrate the performance of the final design against the baseline and assessed scenarios. Whilst it is likely that the modelling will show minor changes in performance these, are not expected to be significant and will be discussed with the Environment Agency (for Main Rivers) and the Lead Local Flood Authority (for ordinary watercourses). In EIA terms, the design will be developed (and confirmed within the hydraulic model) to demonstrate that there is no change to the significance of effect and thus no impact in EIA terms. Requirement 3 of the dDCO [REP4-004 and 005] requires that any departure from the preliminary scheme design would require to be approved by the Secretary of State, following consultation with the relevant planning authority. Such a departure can only be authorised if it would not give rise to any materially new or materially different environmental effects in comparison with those reported in the ES.</li> </ol>

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WE.2.10	Applicant	<p>Paragraph 10.6.1 of the ES [APP-050] states that the study area has been defined taking into consideration, among other factors, the vegetation in the area.</p> <p>Considering the likely significant loss of trees and other vegetation as defined within theVegetation Clearance Plans [REP4-003], how has this been accommodated within the definition of the study area?</p>	<ol style="list-style-type: none"> <li>1. The vegetation clearance will be constrained within the Order limits, and therefore forms part of the study area.</li> <li>2. Additionally, the area within 0.5km from the Order limits has been incorporated within the Road Drainage and Water Environment study area, as defined within paragraph 10.6.1 of Chapter 10 Road Drainage and the Water Environment Part A [APP-050].</li> <li>3. The removal of the vegetation as defined within the Vegetation Clearance Plans [REP4-003] is not considered by the Applicant to have any material impact on the water environment or sediment removal potential, given that a temporary surface water drainage strategy would be implemented in accordance with the Outline CEMP [REP4-013 and 014] (S-W1), as submitted at Deadline 5, this would be suitably sized to accommodate any additional runoff from the areas where vegetation clearance has been undertaken.</li> <li>4. The Applicant considers that the impacts of the vegetation clearance have been suitably addressed within the assessment.</li> </ol>
WE.2.11	Applicant	<p>Table 10-8 of the ES [APP-050] identified Ponds and Bradley Brook and Back Burn as receptors of High Importance. Nevertheless, no specific measures to protect these environments appear to be are included within the outline CEMP.</p> <p>Can the Applicant confirm how this would be secured through the DCO?</p>	<ol style="list-style-type: none"> <li>1. The Bradley Brook and Back Burn have been included as receptors within Table 10-8 of Chapter 10: Road Drainage and the Water Environment Part A [APP-050] as these are identified as receptors within the WFD Assessment Part A [APP-255] as they are within the River Coquet catchment, and at the time of the assessment this river had a good overall status and is therefore given a high importance in the ES. However, the assessment demonstrates that there would be no impact on these two water features as they are not hydraulically connected to the River Coquet in the vicinity of the Scheme (they discharge into the River Coquet downstream of the Scheme) and therefore the Scheme cannot impact them, as such no specific measures are required to be included within the Outline CEMP [REP4-013 and 014] (submitted at Deadline 5).</li> <li>2. In relation to ponds, Chapter 10 Road Drainage and the Water Environment Part A [APP-050] identified five ponds, which were classed as High Importance due to the presence of great crested newts. The Applicant confirms that this statement should be four ponds recorded presence of great crested newts. These ponds are referenced as A11, A12, A19 and A21 and impacts associated with the Scheme are detailed within Chapter 9: Biodiversity Part A [APP-048]. Mitigation is captured within the Outline CEMP [REP4-013 and 014] (and updated at Deadline 5) as follows: <ul style="list-style-type: none"> <li>• Updated great crested newt surveys would be completed for the four great crested newt ponds and other waterbodies within 500m that are not separated by a barrier to dispersal (measure A-B18 [REP4-013 and 014])</li> <li>• A European Protected Species (EPS) licence(s) would be obtained for Natural England with regards to construction within proximity to A11, A12 and A19 (measure A-B22 [REP4-013 and 014]). The Applicant has prepared draft great crested newt licences for pond A11 and A12 (Appendix 9.25 Great Crested Newt Method Statement Burgham Park Part A [APP-251]) and pond A19 (Appendix 9.24 Great Crested Newt Method Statement River Coquet Part A [APP-251]), which have been reviewed by Natural England. Natural England have provided Letters of No Impediment for the two draft licences.</li> <li>• Given the distance between pond A21 and construction (approximately 450 m) and the low level of habitat loss anticipated, the likelihood of an offence relating to GCN is</li> </ul> </li> </ol>

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			considered highly unlikely. As such, works within 500 m of pond A21 will be undertaken under Precautionary Working Methods (PWM) (measure A-B23 [REP4-013 and 014]).
Part B			
WE.2.12	Applicant	Paragraph 10.11.2 of the ES [APP-051] states that no monitoring during operation isrequired. Could the Applicant explain the reasoning for this, particularly in relation to water quality and the possibility of contamination?	<ol style="list-style-type: none"><li>1. The Applicant is not proposing to undertake any monitoring during the operational phase of the Scheme as the surface water drainage would be designed in accordance with best practise (including the CIRIA SUDS Manual C753), this will ensure that sufficient measures would be included to manage water quality and the possibility for contamination.. The SuDS Manual and the DMRB are applicable across the road network and do not require operational phase monitoring for the quality of surface water across the entire network.</li></ol>



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