

# **A66 Northern Trans-Pennine Project**

## **4.5 Statement of Common Ground Durham County Council (Rev 4)**

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

**Planning Act 2008**

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

**Volume 4**

**16 May 2023**

Infrastructure Planning

Planning Act 2008

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

A66 Northern Trans-Pennine Project  
Development Consent Order 202X

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**4.5 STATEMENT OF COMMON GROUND WITH  
DURHAM COUNTY COUNCIL**

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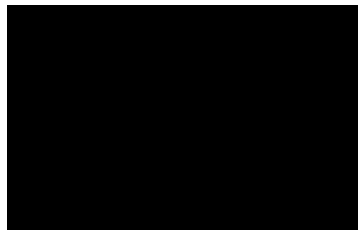
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## STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) National Highways Limited and (2) Durham County Council

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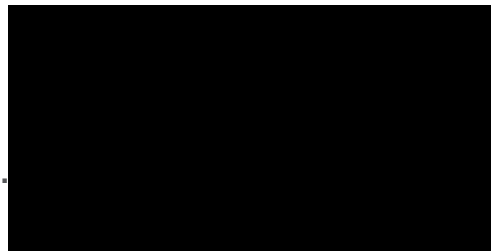


Monica Corso-Griffiths  
Head of Design & DCO

On behalf of National

Highways Date: 16 May 2023

Signed.....



Stephen R  
Planning Development Manager

On behalf of Durham County

Council Date: 16 May 2023

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## **1 Introduction**

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

1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed A66 Northern Trans-Pennine project ("the Application") made by National Highways Limited ("National Highways") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").

1.1.1 This SoCG seeks to summarise and explain the respective parties' positions on issues but does not seek to replicate in full information which is available elsewhere within the Application documents. All Application documents are available on the Planning Inspectorate website.

1.1.2 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.

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

1.2.1 This SoCG has been prepared by National Highways as the Applicant. It has been shared with Durham County Council for comment prior to the submission of the DCO, at DCO submission and in advance of Deadline 8. It has been agreed with Durham County Council for submission at Deadline 8.

1.1.2 The Applicant has set out the detail of the issues raised by Durham County Council to date and each of the SoCG parties' respective positions. This is intended to assist the Examining Authority in understanding where discussions have reached to date. The Applicant intends to narrow the issues and level of detail in this SoCG as the examination progresses and further matters are agreed.

1.2.2 National Highways (formerly Highways England) became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State.

1.2.3 Durham County Council (DCC) will be responsible for the new and improved local highway network and are the Local Planning Authority for Bowes Bypass and Cross Lanes to Rokeby schemes of the A66 Northern Trans-Pennine project.

### **1.3 Terminology**

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

- "Agreed" indicates area(s) of agreement from the Applicant's perspective;

- “Not agreed” indicates a final position for area(s) of disagreement from the Applicant’s perspective, where the resolution of differing positions will not be possible, and parties agree on this point

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

## 2 Record of Engagement

2.1.1 A summary of the key meetings that has taken place between National Highways and DCC in relation to the Application is outlined in Table 2.1.

Table 2-1 Record of Engagement

| Date       | Form of correspondence | Key topics discussed and key outcomes   |
|------------|------------------------|---|
| 22.09.2020 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss A66 Project and ongoing future engagement. Meeting included discussions on future local plans for Durham County Council and principal contacts for both the NH/A66 IPT and the County Council.  |
| 14.10.2020 | Online Meeting         | Meeting between DCC and the A66 IPT to discuss the Project and ongoing actions. Meeting included discussions on general updates on the design of the scheme and environmental assessments.  |
| 14.12.2020 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss the project and ongoing actions. Meeting included discussions on PPA Agreement and future engagement with PINs. It was noted in the meeting that DCC did not intend to use a PPA.   |
| 14.01.2021 | Online Meeting         | Meeting between DCC and the A66 IPT to discuss the project and ongoing actions. Meeting included discussions on structures, culverts, PRow and WCH.   |
| 21.01.2021 | Online Meeting         | Meeting between DCC and the A66 IPT to discuss ongoing actions and Statement of Common Consultation. Meeting included discussions on which newspapers the Project Team were intending to advertise the consultation. It was noted in the meeting that the Teesdale Mercury and Northern Echo are used by DCC.   |
| 09.02.2021 | Online Meeting         | Discussions with DCC as part of the Heritage Technical Working Group (TWG) (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting includes discussions on the Evidence Plan, project overview, update on report for geophysics, design development and archaeological trenching. |
| 11.02.2021 | Online Meeting         | Regular meeting between DCC and the A66 IPT to discuss the project and ongoing actions. Meeting included discussions around the design updates to Cross Lanes to Rokeby section.  |
| 02.03.2021 | Online Meeting         | Meeting of the Water TWG with DCC in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on works to be completed, watercourse Crossings and key SW receptors overview.  |
| 02.03.2021 | Online Meeting         | Meeting of the Water TWG with DCC in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on works to be completed and key GW receptors overview.   |
| 12.03.2021 | Online Meeting         | Discussions with DCC as part of the Heritage TWG (Matters discussed in the Technical Working Groups are included within   |

| Date       | Form of correspondence | Key topics discussed and key outcomes   |
|------------|------------------------|---|
|            |                        | ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting includes discussions on the research agenda, designated funds opportunities, discussion of developing design at Brougham and archaeological trenching.   |
| 18.03.2021 | Online Meeting         | Meeting of the Habitats Regulations Assessment TWG with DCC in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussion on site and proximity to schemes, Biodiversity Survey Strategy and HRA Baseline, Baseline Surveys Strategy and introduction to SAC fluvial geomorphology.  |
| 25.03.2021 | Online Meeting         | Regular meeting between DCC and Project Team to discuss the project and ongoing actions. Meeting included discussions on programme and landscape.   |
| 26.04.2021 | Online Meeting         | Meeting between DCC and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on Zone of Theoretical Visibility (ZTV), definition of North Pennine Area of Outstanding Natural Beauty (AONB) setting, special qualities of the Greta Bridge and Bowes Conservation Areas.   |
| 29.04.2021 | Online Meeting         | Meeting between DCC and the IPT at the regular Ecological Impact Assessment TWG. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on Badger Bait Marking, Otter Halt Monitoring, MoRPH, and Air Quality and Affected Road Network (ARN).  |
| 13.05.2021 | Online Meeting         | Regular meeting between DCC and the A66 IPT to discuss the project and ongoing actions. Meeting included discussions on the DCO process and additional engagement. It was noted in the meeting that there had been local changes but no overall changes to Barnard Castle seats.  |
| 24.05.2021 | Online Meeting         | Meeting between DCC and the IPT to at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 junction 40 Penrith, Kemplay Bank Roundabout, Penrith to Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby, Stephen Bank to Carkin Moor and options appraisal. |
| 08.06.2021 | Online Meeting         | Discussions with DCC as part of the Heritage TWG (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting discussions include research framework, option appraisal, Evidence and Survey Strategy and geoarchaeological modelling.  |
| 15.06.2021 | Online Meeting         | Meeting of the Water TWG with DCC in attendance. (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on progress, works to be completed and design options.  |



| Date       | Form of correspondence | Key topics discussed and key outcomes  |
|------------|------------------------|--|
| 28.06.2021 | Online Meeting         | Meeting between DCC and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 junction 40 Penrith, Kemplay Bank Roundabout, Penrith to Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby and Stephen Bank to Carkin Moor.                |
| 16.08.2021 | Online Meeting         | Meeting between DCC and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on the M6 junction 40 Penrith, Kemplay Bank Roundabout, Penrith to Temple Sowerby (east and west), Temple Sowerby to Appleby, Appleby to Brough, Bowes Bypass, Cross Lanes to Rokeby, Stephen Bank to Carkin Moor and Scotch Corner. |
| 18.08.2021 | Online Meeting         | Discussions with DCC as part of the Heritage TWG (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting includes discussions on key PEI Report findings and a scheme-by-scheme review.  |
| 02.11.2021 | Online Meeting         | Discussions with DCC as part of the Heritage TWG (Matters discussed in the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting includes discussions on feedback to statutory consultation, updates on research framework, geoarchaeological modelling and surveys.   |
| 13.12.2021 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss the revised traffic modelling results related to the Durham options. Meeting included discussions on the high-level impact of the different options. It was noted in the meeting that there was an error to the original modelling that had been corrected.  |
| 17.12.2021 | Online Meeting         | Walking Cycling and Horse-riding Group meeting between DCC, NYCC, National Highways and the A66 IPT to discuss scheme and actions related to active travel. Meeting included discussions east-west connectivity, cycling and designated funds. It was also noted in the meeting by DCC that they had been approached by Cumbria CC for a joint east-west cycling infrastructure although DCC noted they did not see the need for it.                                     |
| 12.01.2022 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss Traffic Modelling following the provision of updated data. Meeting included discussions on the impact the different options have on traffic and on traffic signal specifications.  |
| 14.01.2022 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss the assessments been undertaken for the forthcoming DCO specifically focusing on Population and Human Health. Meeting included discussions around Equalities Impacts Assessment, Population Assessment and Human Health Assessment.  |
| 18.01.2022 | Online Meeting         | Discussions with DCC as part of the Heritage TWG (Matters discussed in the Technical Working Groups are included within  |

| Date       | Form of correspondence | Key topics discussed and key outcomes  |
|------------|------------------------|--|
|            |                        | ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting includes discussion on geoarchaeological modelling exercise, survey updates and design updates.   |
| 20.01.2022 | Online Meeting         | Meeting between DCC and the IPT at the regular Landscape TWG (Matters discussed at the Technical Working Groups are included within ES Appendix 1.1: Evidence Plan (Application Document Number 3.4)). Meeting included discussions on LVIA update and a scheme update.  |
| 26.01.2022 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss the proposed operational technology and operation structures being installed or retained as part of the scheme.  |
| 27.01.2022 | Online Meeting         | Meeting between DCC, National Highways and the A66 IPT to discuss the proposed ecological and environmental mitigation proposed as part of the scheme as well as the overall project design principles report. Meeting included an environmental mitigation walkthrough and discussions of the approach to Project Design Report.  |
| 03.02.2022 | Online Meeting         | Regular meeting between DCC, National Highways and the A66 IPT to discuss the project and ongoing actions. Meeting included discussions on the formal response to DCC consultation letter and Hulands Quarry Access.   |
| 09.02.2022 | Online Meeting         | Meeting between DCC and the A66 IPT to discuss the Materials and Waste Assessment methodology which forms part of the Environmental Statement. Meeting included discussions on resource banking and sterilisation and active sites for waste disposal. It was noted in the meeting that there are also other waste disposal sites within the County, although it was advised by the A66 IPT that those closer to the A66 would be preferred. |
| 17.03.2022 | Online Meeting         | Regular meeting between DCC and A66 IPT to discuss the project and ongoing actions. Meeting included discussions on Draft EMP, SoCG and design updates.  |
| 24.03.2022 | Online Meeting         | Meeting between DCC and the A66 IPT to discuss the approach to Highways and Drainage Design. Meeting included discussions on project design updates, highways adoption, drainage and Tutta Beck.   |
| 06.04.2022 | Online Meeting         | Review and Comment meeting between DCC and the A66 IPT. The Legislation and Policy Compliance Statement were presented for discussion and for comments from DCC, prior to issue as part of the DCO.  |
| 06.04.2022 | Online Meeting         | Review and Comment meeting between DCC and the A66 IPT. The walking, cycling and horse riding proposals for the Scheme were presented for discussion and for comments from DCC, prior to issue as part of the DCO.   |
| 06.04.2022 | Online Meeting         | Review and Comment meeting between DCC and the A66 IPT. The Project Design Principles Report and the Tree Preservation Order and Important Hedgerow Plans were presented for discussion and for comments from DCC, prior to issue as part of the DCO.  |
| 06.04.2022 | Online Meeting         | Review and Comment meeting between DCC and the A66 IPT. The General Arrangement Drawings, Works Plans, Rights of   |

| Date       | Form of correspondence | Key topics discussed and key outcomes  |
|------------|------------------------|--|
|            |                        | Way and Access Plans, Classification of Roads Plans, De-Trunking Plans, Traffic Regulation Measures (Clearways and Prohibitions) Plans, and Traffic Regulation Measures (Speed Limits) Plans were presented for discussion and for comments from DCC, prior to issue as part of the DCO. |
| 17.05.2022 | In Person Meeting      | Meeting between DCC, National Highways and the A66 IPT to discuss the draft General Arrangement Plans and concerns regarding construction traffic and diversionary traffic routing.  |
| 23.06.2022 | Online Meeting         | Joint meeting between CCC, NYCC, DCC, EDC, RDC, Project Team and National Highways to discuss all Authority matters. Meeting included discussions on enabling works and TCPA applications.   |
| 25.07.2022 | Online Meeting         | Meeting to discuss and agree approach to SoCG Topics between July and August 2022.   |
| 08.08.2022 | Online Meeting         | Two Weekly SoCG Meeting focusing on Heritage and the positions of NH and DCC on Rokeby Junction  |
| 05.09.2022 | Online Meeting         | Two Weekly SoCG meeting and check in.  |
| 03.10.2022 | Online Meeting         | Two weekly SoCG Meeting discussing SoCG content.   |
| 17.10.2022 | Online Meeting         | Two weekly SoCG Meeting discussing relevant representation responses and SoCG content.   |
| 27.10.2022 | Online Meeting         | Joint meeting between CCC, NYCC, DCC, EDC, RDC, Project Team and National Highways to discuss all Authority matters. Meeting included a discussion and update on the DCO following Publication of the Examination Timetable, and an update on De-trunking and Stakeholder Engagement.    |
| 31.10.2022 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC discussing on the examination process and agreeing future meeting topics ahead of examination.   |
| 14.11.2022 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC discussing ongoing resolution of issues and agreeing future meeting topics ahead of examination.   |
| 24.11.2022 | Online Meeting         | Joint meeting between CCC, NYCC, DCC, EDC, RDC, Project Team and National Highways to discuss all Authority matters. Meeting included discussions on the freight study being undertaken by National Highways outside of the A66 NTP.   |
| 25.11.2022 | Online Meeting         | An Online All LA Meeting, including representatives from NYCC, to present the Environmental Management Plan and answer questions from attendees.   |
| 28.11.2022 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC discussing ongoing resolution of issues and agreeing future meeting topics ahead of examination.   |
| 12.11.2022 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC discussing ongoing resolution of issues and agreeing future meeting topics ahead of examination.   |
| 09.01.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC discussing future engagement session and the restructure of the SoCG prior to submission at deadline 3.  |

| Date       | Form of correspondence | Key topics discussed and key outcomes   |
|------------|------------------------|---|
| 06.02.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to discuss the proposed updates to the format of the SoCG and review current under discussion issues.   |
| 10.02.2023 | Online Meeting         | Meeting with DCC and their sub consultants to discuss and agree under discussion topics related to Air Quality and Traffic Impact.  |
| 23.02.2023 | Online Meeting         | Joint meeting between CCC, NYCC, DCC, EDC, RDC, Project Team and National Highways to discuss all Authority matters. Meeting specifically focused on the EMP and the changes made since examination following comments from Interested Parties. |
| 28.02.2023 | Online Meeting         | Meeting with DCC and their sub consultants to continue engagement on outstanding under discussion topics and agree actions to related to Air Quality and Traffic Impact.  |
| 06.03.2023 | Online Meeting         | Two-weekly SoCG Meeting with representatives from DCC to discuss the SoCGs ahead of submission at Deadline 5.   |
| 20.03.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to review current under discussion issues within the SoCG.  |
| 03.04.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to review current under discussion issues within the SoCG.  |
| 11.04.2023 | Online Meeting         | Joint meeting between DCC, NYC, Project Team and National Highways and National Highways delivery partners to discuss the process of and continued engagement into detailed design.   |
| 17.04.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to review current under discussion issues within the SoCG.  |
| 26.04.2023 | Online Meeting         | Meeting with DCC and their sub consultants to continue engagement on outstanding under discussion topics and agree actions to related to Air Quality and Traffic Impact.  |
| 01.05.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to review current under discussion issues within the SoCG.  |
| 05.05.2023 | Online Meeting         | Two Weekly SoCG Meeting with representatives from DCC to review current under discussion issues within the SoCG.  |
| 11.05.2023 | Online Meeting         | Meeting to discuss, finalise and move to signing the SoCG prior to Deadline 8.  |

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

### 3 Issues

- 3.1.1 Tables 3-1 and 3-2 provide a summary of the issues raised between the parties and the status.
- 3.1.2 Details of historical positions no longer relevant (as the issues are addressed in the DCO documents or representations during examination) are provided in the Deadline 5 SoCG and not repeated in this document.

Table 3-1: Record of Issues – Agreed Issues

| Issue  | Document References (if relevant)                                    | Durham County Council Position   | National Highways Position   | Status |
|--|--|--|--|--------|
| 3-1.1 Access & Rights of Way – footpath No. 5.6 Rokeby | Appendix 1 of DCC’s Statutory Consultation response dated 05.11.2021 | DCC consider that footpath (No. 5.6 Rokeby) is popular and important and connects Teesdale Way with Brignall and the River Greta would require large diversions (under both the black and blue options). DCC state that a grade-separated crossing of the new dualled section, on or in the near vicinity of the current footpath alignment, is the preferred solution.<br><br>Officers are concerned that the prospect of the lengthy diversions currently proposed would tempt some people to try and take a more direct route across the dualled A66. | We understand your comments in relation to Public Footpath No. 5.6 Rokeby. The proposed Rokeby junction brings together several PRoWs in the area for onward journeys, and further, provides a safe crossing point, which does not currently exist.  | Agreed |
| 3-1.2 Environmental Impacts – Minerals                 | Appendix 1 of DCC’s Statutory Consultation response dated 05.11.2021 | The proposed alignment of the dualling of the A66 and proposed junction improvements in County Durham in part overlie Mineral Safeguarding Areas as identified in the County Durham Plan (Adopted October 2020) as defined on the County Durham Plan Policies Map. Impacts on safeguarded mineral resources will need to be considered. Whenever possible the A66 upgrading should seek to minimise sterilisation of   | We welcome the engagement with DCC regarding the Minerals Safeguarding Areas and the ongoing works being undertaken to understand the impacts of emerging minerals policies.<br><br>The impact of the project on the minerals sites are detailed within Chapter 11 (Minerals and Waste) of Volume 1 of the ES (Application | Agreed |

| Issue  | Document References (if relevant)   | Durham County Council Position  | National Highways Position   | Status |
|--|---|---|--|--------|
|  |   | <p>economically important mineral resources where this can be avoided.</p> <p>DCC held a call for new minerals and waste sites in early 2021. Impacts on mineral operator proposed allocations for new mineral working will need to be considered, specifically the proposed Boldron Cross Lanes site which lies on land to the west and east of the B6277.</p> <p>The A66 Northern Trans-Pennine Project will have significant mineral and waste management requirements. Sufficient detail should be included in the ES to assist the Council in understanding the impact of the A66 Northern Trans-Pennine Project on material resources and waste management.</p> | <p>Document Reference 3.2, APP-054).</p>   |        |
| 3-1.3 Environmental Impacts - Climate                    | Jacobs Impact Report – Appendix 2 of DCC’s Statutory Consultation response dated 05.11.2021 | No likely significant effects anticipated.  | Thank you for confirming this.   | Agreed |
| 3-1.4 Technology and Operations - VMS Signage Connection | A66 . DCC: Technology and Operations Meeting (26.01.2022)                                   | Currently DCC have a link / connection to the VMS signs on the A1(M) so that any issues can be known and managed on the DCC network. Is it possible for a similar link connection be provided for the new VMS signs on the A66.   | This will be developed as part of the detailed design post DCO and the request has been passed to the operations lead to consider as part of the design. | Agreed |
| 3-1.5 Woodland Planting                                  | A66. DCC Approach to Project Design Principles (27.01.2022)                                 | The replacement planting of woodland removed as part of the Bowes Bypass Scheme can be replaced within the Cross Lanes to Rokeby Scheme.  | We are grateful for confirming this opportunity.   | Agreed |

| Issue  | Document References (if relevant)  | Durham County Council Position  | National Highways Position  | Status   |
|--|--|---|---|--|
| 3-1.6 Hulands Quarry Access  | DCC Regular Meeting (03.02.2022) also in DCC's response to SUPPLEMENTARY CONSULTATION – 28 January 2022 to 27 February 2022<br>Hulands Quarry access arrangements<br>Bowes Cross Farm accommodation works dated 18 February 2022 | Concerns were raised regarding the access requirements for Hulands Quarry and the interactions between their approved scheme and National Highway's proposed amendments.  | The access improvements for the Hulands Quarry will be included as part of the red line boundary for the DCO and discussions are progressing with the quarry owners.  | Agreed Any planning implications for the extant Hulands Quarry permission can be considered separately |
| 3-1.7 The additional east-west cycle track/footway, providing a continuous connection between Cross Lanes and Greta Bridge | SUPPLEMENTARY CONSULTATION<br>Walking, cycling and horse-riding provision, Landform and Compounds (Dated 18.03.22)   | The additional east-west cycle track/footway, providing a continuous connection between Cross Lanes and Greta Bridge, is welcomed as it enhances the overall network. Officers are unsure how much demand there really is for a route following the A66 at this location, and although it does help to link various north-south public rights of way, it does not address the more fundamental issue of the very limited safe crossing points that will be available, and the distances walkers in particular will have to travel to reach those crossing points. There is no objection to the additional 250m of shared-use path parallel to the A66 in County Durham. | Whilst we appreciate that the Rokeby junction would require walkers to divert via the junction to cross the new dualled A66, adding a distance of approximately 700m to their journey, the proposals are designed to provide a safe crossing point for walkers, with the intention of connecting Public Rights of Ways (PRoWs) together, which are currently severed. | Agreed   |
| 3-1.8 The additional east-west cycle   | SUPPLEMENTARY CONSULTATION<br>Walking, cycling and horse-riding provision,   | In terms of archaeology, it is noted that a programme of assessment, evaluation and reporting is underway in accordance with nationally recognised best practice.   | Thank you for confirming that the programme for assessment is being undertaken in accordance with national recognised best practice.  | Agreed   |

| Issue                                   | Document References (if relevant)  | Durham County Council Position   | National Highways Position   | Status   |
|---|--|--|--|--|
| track/footway - Archaeology             | Landform and Compounds (Dated 18.03.22)  |  |  |  |
| 3-1.9 Inclusion of relevant legislation | Legislation and Policy Compliance Statement review session (06.04.2022)                  | Within Section 3.5 (Other legislation) there are no relevant legislation identified on Noise and Vibration. EHO suggest that Part III of the Control of Pollution Act 1974 remains pertinent in relation to the construction works, as does Part III of the Environmental Protection Act 1990 in relation to Statutory Nuisance. | Noted. This has been included within the Legislation and Policy Compliance Statement (Application Document Reference 3.9, APP-242) which was submitted with the DCO.                   | Agreed.  |
| 3-1.10 Hulands Quarry                   | Walking, Cycling and Horse-Riding Proposals review session (06.04.2022)                  | Hulands Quarry Public Exhibition took place on 22.03.22. During the course of the DCO the application may be submitted to DCC and potentially one to keep an eye on.   | We have consulted with Hulands Quarry and are aware of the proposed infrastructure. Expansion is generally proposed eastwards so the impact on the new infrastructure will be limited. | Agreed   |
| 3-1.11 AF04 Principal Inclusion         | Project Design Principles & Tree Preservation Order Document review session (06.04.2022) | Looking at the principles that applied to the scheme, AF04 was not defined in the document.  | This was incorrect and has been removed from the Project Design Principles Report (Application Document Reference 5.11, APP-302).  | Agreed   |
| 3-1.12 Bowes Bypass Road Classification | Design Drawing Review Session (06.04.2022)   | DCC raised no objection with the extension of the unclassified road at Low Road . The Street as part of the Schemes Road Classification.   | It is National Highways understanding that this issue is resolved and may be treated as agreed between the parties.  | Agreed - The parties agree that this is resolved subject to continued detailed design development and further engagement on the detailed design throughout the DCO process |



| Issue  | Document References (if relevant)          | Durham County Council Position   | National Highways Position                   | Status   |
|--|--|--|--|--|
| 3-1.13 Cross Lanes to Rokeby Road Classification               | Design Drawing Review Session (06.04.2022) | DCC raised no objection with the extension of the B6277 or the extension of the C165.  | Thank you for confirming this is acceptable. | Agreed - The parties agree that this is resolved subject to continued detailed design development and further engagement on the detailed design throughout the DCO process |
| 3-1.14 Cross Lanes to Rokeby De-trunking extent and principles | Design Drawing Review Session (06.04.2022) | DCC Raised no concerns with the principle and extent of de-trunking of the A66 as part of the Cross Lanes to Rokeby Section. | Thank you for confirming this is acceptable. | Agreed - The parties agree that this is resolved subject to continued detailed design development and further engagement on the detailed design throughout the DCO process |
| 3-1.15 Bowes Bypass Speed Limits                               | Design Drawing Review Session (06.04.2022) | DCC Raised no concerns with the proposed speed limit changes as part of the Bowes Bypass Scheme.                             | Thank you for confirming this is acceptable. | Agreed - The parties agree that this is resolved subject to continued detailed design development and further engagement on the detailed design throughout the DCO process |
| 3-1.16 Bowes Bypass Public Rights of Way Access Pan            | Design Drawing Review Session (06.04.2022) | DCC Raised no concerns with Public Rights of Way Access Pan Regulation 5(2)(k) Drawings.                                     | Thank you for confirming this is acceptable. | Agreed   |

| Issue  | Document References (if relevant)          | Durham County Council Position  | National Highways Position   | Status |
|--|--|---|--|--------|
| Regulation 5(2)(k) Drawings  |  |   |  |        |
| 3-1.17 Cross Lanes to Rokeby Public Rights of Way Access Pan Regulation 5(2)(k) Drawings | Design Drawing Review Session (06.04.2022) | DCC Raised no concerns with Public Rights of Way Access Pan Regulation 5(2)(k) Drawings.  | Thank you for confirming this is acceptable.   | Agreed |
| 3-1.18 Nutrient Impacts on protect sites advise from Natural England                     | Email from C Teasdale on 21.04.22          | On 16 March 2022 Natural England sent a letter to a number of local planning authorities, including Durham County Council, which provided new advice for LPA's in relation to development proposals with the potential to affect water quality resulting in adverse 'nutrient impacts' on protected habitat sites. The A66 project is not a form of development they are generally concerned with, but might be in terms of the likely extent of welfare facilities that will be required and their subsequent disposal when full. This is a matter that you may or may not have considered but it is appropriate that you are made aware of the issue. | <p>Natural England has confirmed via email (28.11.2022) that:</p> <p><i>Natural England's nutrient neutrality advice applies to all types of development that would result in a net increase in population served by a wastewater system, including new homes and student accommodation. The River Eden SAC catchment is currently failing it's Phosphorous targets.</i></p> <p><i>We would not expect a highways scheme to fall under the nutrient neutrality criteria as we would expect that the workforce either do not reside on site or are likely to be drawn from the local catchment, we would expect any surface water drainage to be treated through the usual EMP and CEMP criteria</i></p> <p>We can confirm there is no outstanding issues between DCC and National Highways in relation to nutrient neutrality.</p> | Agreed |

| Issue   | Document References (if relevant) | Durham County Council Position  | National Highways Position   | Status   |
|---|-----------------------------------|---|--|--|
| 3-1.19 East Bowes Accommodation Overbridge Maintenance  | Design Drawing Review Session     | East Bowes Accommodation overbridge will have a big maintenance requirement.  | We will retain the responsibility of the maintenance of the structure of the bridge. The surfacing would be the responsibility of DCC.   | Agreed subject to asset identification. Details on approached etc need to be agreed.                               |
| 3-1.20 De-trunking and return of DCC Assets             | Design Drawing Review Session     | When will DCC be able to see the extent of the Detrunking.  | We are committed to ensuring de-trunked sections are acceptable in terms of their standard to Local Authorities. De-trunking schedules are included within the DCO application, see document TR010062/APP/5.21, APP-562.   | Agreed subject to detailed design, commuted sums and confirmation of assets to be transferred and their condition. |
| 3-1.21 HGV Realignment at Cross Lanes Priority Junction | Design Drawing Review Session     | Are we confident that the two priority junctions at Bowes Bypass can turn out of the diverge and not obstruct the carriageway.  | We have auto-tracked this layout as part of our design process. We have also undertaken a Road Safety Audit as reported in Section 9 of the Transport Assessment (Application Document Reference 3.7, APP-236) to ensure an independent audit of our design proposal and incorporated feedback from this process into our design. National Highways are therefore confident regards this matter and consider that this point is now agreed, following the Design Drawing Review Session and the evidence provided in the DCO application as cited. | Agreed   |
| 3-1.22 Responsibility for Maintenance                   | Design Drawing Review Session     | Who will be responsible for the proposed private accesses?<br>Issues raised at ISH3 on 02/02/2023 about shared public use with private means of access is not of concern as | This has not been determined yet. In most cases these are shared routes so an agreement will need to be determined between National  | Agreed - The parties agree that this is resolved subject to continued detailed design development                  |

| Issue              | Document References (if relevant)   | Durham County Council Position   | National Highways Position  | Status  |
|--------------------|---|--|---|---|
|                    |   | <p>there are many public footpaths and bridleways which share farm access tracks – generally vehicle numbers are low and all parties are aware of the shared use. Of more concern is the question of future maintenance; if they are to become public bridleways then our ongoing maintenance responsibility is to a standard suitable for that level of public use, not to a standard for the private vehicular use. In most cases that works fine in practice, but there are concerns that the Applicant may construct very high standard vehicular access which landowners would expect DCC to maintain in the future. The ongoing responsibilities need to be clearly communicated to all parties.</p> | <p>Highways, DCC and the landowners.<br/>Surfacing details will be developed as part of the detailed design as individual Private Means of Access, rights of way, bridleways and cycleways will have differing requirements. Further engagement will continue with the Delivery Integration Partners on the detailed design.</p>  | <p>and further engagement on the detailed design throughout the DCO process</p>   |
| 3-1.23 De-trunking | <p>Durham County Council – Relevant Representations – RR-073 – 30 August 2022<br/>DCC Response at Deadline 4 (Rep4-025)</p> | <p>Under which legislation does National Highways propose to carry out ancillary highway works to the Local Highway Authority’s (LHA) network? This is important for DCC as both highway and permit Authority as to how it addresses the construction of the works.<br/>Has a Side Road Order been produced by National Highways? This would be needed to address, stopping / diversion / change in status / de-trunking / reclassification of highways impacted by the scheme. This Order is very important as it will determine what (and what not) the council inherits for the scheme.</p>   | <p>The Development Consent Order will provide the necessary approvals, under the PA 2008. For further detail on the Applicant’s position please see the Deadline 5 SoCG.<br/>National Highways accepts that, at handover, some assets will be at or nearing the end of their serviceable life and it may be appropriate that a commuted sum is provided to allow the Local Authority to fund renewal works at the optimal time for an intervention and not before. Assets, at handover, with more than half of their residual life remaining are expected to be inspected by the relevant Local Highway Authority</p> | <p>Agreed in principle in relation to the de-trunking process and establishing condition of the assets and opportunities for NE to agree remedial repairs and a commuted sum. The detail of maintenance periods will continue to be developed as part of the de-trunking agreement.</p> |

| Issue               | Document References (if relevant)  | Durham County Council Position  | National Highways Position  | Status  |
|---------------------|--|---|---|---|
|                     |  | <p>At Deadline 4, DCC also stated: DCC has agreed in principle detrunking arrangements. Further discussions are required as to the asset condition, location of drainage, signing, street lighting, and other infrastructure that DCC will be managing. A commuted sum will need to be agreed for those assets part of the detrunking arrangement in particular carriageways, footways and drainage assets.</p> <p>Durham County Council (DCC) request a 12-month maintenance period for those highway assets that are proposed to be handed over as part of the project. Street sweeping, gully cleaning, winter routes will need to be confirmed if part of the maintenance agreement. For all works that DCC will be maintaining post-project completion, a copy of as-built drawings will be required. Any pumps that may be installed as part of any drainage/SUDS works will need to be detailed with any warranty, maintenance etc</p> | <p>and renewal works planned and funded through the uplifted central Government grant.</p> <p>The Local Highway Authority will be responsible for maintenance from the handover date.</p> <p>National Highways note the request for details of items which are within either defects liability or warranty periods to be identified on handover.</p> <p>National Highways and the Local Highway Authorities continue to work together to reach an agreed position on matters of principle and detail.</p> |   |
| 3-1.24 Safety Audit | Durham County Council – Relevant Representations – RR-073 – 30 August 2022 | As part of the preliminary design process and before land take is determined a Stage 1 Road Safety Audit should have been carried out which would include works on the LHN. Has this been seen by DCC Highways.   | A Stage 1 Road Safety Audit (RSA) has been carried out. Both the RSA report and Designers Response Report for the Bowes Bypass scheme and the Cross Lanes to Rokeby scheme has been shared with Durham County Council on the 8 November 2022. Any comments will be reviewed and discussed   | Agreed - The parties agree that this is resolved subject to continued detailed design development and further engagement on the detailed design throughout the DCO process. |

| Issue   | Document References (if relevant)  | Durham County Council Position   | National Highways Position   | Status   |
|---|--|--|--|--|
|   |  |  | through our ongoing engagement and scheduled meetings.   |  |
| 3-1.25 Departures                                       | Durham County Council – Relevant Representations – RR-073 – 30 August 2022 | It is understood that there would be a number of departures and relaxations from standard on some of the works proposed to become part of the LRN. DCC as Local Highway Authority would need to see these, and the rationale behind them before they could be agreed too. When would these be available for comment? | Local Authority Departures from Standard application forms for the Bowes Bypass and Cross Lanes to Rokeby Schemes have been drafted with the relevant rationale and this has been shared with Durham County Council on 27 October 2022 and discussed at meetings on 31 October 2022 and 14 November 2022. We expect the Council will provide a Determination on the Departures from Standard sought. Liaison will continue through our scheduled meetings and the discussions and formal determination document will be recorded in this SoCG. | Agreed subject to continued dialogue during detailed design and agreement on a formal determination document |
| 3-1.26 Geology and Soils                                | Durham County Council – Relevant Representations – RR-073 – 30 August 2022 | The findings of the initial Phase 1 ground investigations and the proposal to carry out further ground investigation (Phase 2) prior to construction to further assess risks to human health/sensitive receptors are considered to be satisfactory.  | It is considered that the measures contained within the Environmental Management Plan (Document Reference 2.7, REP3-004) are consistent with the requested wording and this matter is agreed.  | Agreed   |
| 3-1.27 Inclusion of relevant legislation: Defra Metrics | Legislation and Policy Compliance Statement review session                 | Defra Metric 2.0 is referenced, and should this be revised to Defra metric 3.0?  | The design has been informed by the principles of habitat replacement (i.e. replacement rations) set out in Defra Biodiversity Metric 3.0. Impacts and proposed mitigation are detailed within Chapter 6 (Biodiversity) of the ES (Application Document Reference  | Agreed in relation to the use of the metric. Further discussion is recorded in table 3-2.                    |

| Issue                                | Document References (if relevant) | Durham County Council Position  | National Highways Position   | Status  |
|--------------------------------------|-----------------------------------|---|--|---|
|                                      |                                   |   | 3.2, APP-049) and underpinned by detailed assessments within separate appendices (Appendix 6) Located within Volume 3 of the ES (Document Reference 3.4 , APP-154 to APP-175).   |   |
| 3-1.28 Environmental management Plan | Environmental Management Plan     | DCC continues to have concerns regarding the EMP process. The EMP process should not disadvantage DCC or other Councils in any way and their input to and influence over the matters contained within each iteration of the EMP should be no less than would have been the case had the approvals followed the normal DCO requirements process. The amendment to Article 53 and continued engagement with the Applicant is welcomed, but concerns remain about the EMP process which are shared by the other Councils. The Applicant's proposal to include a mechanism for notification to the Secretary of State (SoS), when it proposes to determine a change to the 2nd iteration EMP, is welcomed giving the SoS the opportunity to 'call -in' the decision. To enable DCC's views to be taken into account by the SoS in deciding whether to exercise call - in powers, it is requested that the article should also include a provision requiring the Applicant to notify DCC and other interested parties be informed at the same time as the notification to the SoS. | A session was held with the Local Authorities on 23 February to outline the approach to the EMP. This included outlining the consultation requirements within the EMP for National Highways to consult with the Local Authorities. Further detail was also provided in terms of the SoS call-in process. The issue of the Secretary of State 'referral' process under article 53 was discussed at Issue Specific Hearing 3. In light of those discussions, and the submissions made by DCC and (and other interested parties), National Highways has amended the draft DCO (a revised version of which has been submitted alongside this SoCG at Deadline 5) to provide the Secretary of State with the ability to extend the 14 day 'call in' period in article 53. This is also confirmed in National Highways' Issue Specific Hearing 3 (ISH3) Post Hearing Submissions (including written submissions of oral case) (doc. ref 7.30). It is also worth noting the oral submissions made by National | Agreed subject to continued engagement with DCC. Whilst DCC raise no objection to the EMP DCC would wish to note concerns remain regarding timescales and to ensure DCC are appropriately consulted on future EMP iterations. |

| Issue              | Document References (if relevant)  | Durham County Council Position   | National Highways Position  | Status   |
|--------------------|--|--|---|--|
|                    |  |  | <p>Highways at Issue Specific Hearing 3, where it was confirmed that the Secretary of State (in deciding whether or not to make the DCO) can also amend the 14 day time period if they see fit.</p> <p>As also stated in the post-hearing submission made by National Highways in respect of Issue Specific Hearing 3, Paragraph 1.4.34 of the first iteration EMP requires National Highways to provide consultees with a copy of any submission made to the Secretary of State. National Highways will reflect on this wording further with a view to establishing whether any amendments are required to make it clear that this extends to submissions to the Secretary of State relating to proposed amendments to the second iteration EMP (including any 'referrals'). Any required revisions to the first iteration EMP will be reflected in the next draft submitted into the examination.</p> |  |
| 3-1.29 Air Quality | Durham County Council – Relevant Representations – RR-073 – 30 August 2022 Relevant RepresentationsRR-073.28 | There are nine human health sensitive receptors assessed in DCC (HSR 57 to HSR 65) for the operational phase. There are no predicted exceedances at human health receptors of any pollutant reported in the chapter, and so no new exceedances as a result of the scheme | National Highways Subsequent to these meetings, where required, short technical notes have been issued to DCC and their Consultants on these specific items.  | Agreed. DCC and their consultants have proposed some amends to the EMP to resolve concerns on monitoring which have been |



| Issue | Document References (if relevant) | Durham County Council Position  | National Highways Position   | Status   |
|-------|-----------------------------------|---|--|--|
|       |                                   | <p>would be expected within DCC. Results are confirmed to not be presented on a scheme by scheme basis and that the discussion for region 1 in Chapter 5 Air Quality is presents the impact of the overall scheme on the A66 region including the section of the scheme within DCC. The largest human health impact as a result of the scheme is reported to be +0.9 ug/m3, within the DCC boundary at Highly Sensitive Receptor 60 within the Cross Lanes to Rokeby section adjacent to the A66, south of Barnard Castle, to the east of the B6277 junction with the A66. At this location, concentrations are predicted to increase from 9 ug/m3 in DM 2029 to 9.9 ug/m3 in the DS scenario, where an increase of 3,603 AADT is predicted for the A66. It is not clear whether this receptor is the same receptor which was reported in the PEIR to have an increase of +4.0 ug/m3 in annual mean NO2 at a residential property adjacent to the A66 at Cross Lanes, however the predicted impacts would appear to have dropped significantly in DCC compared to the PEIR stage.</p> | <p>The summation of the current position on Air Quality is provided within Appendix A identifying most items raised by DCC and their Consultant have now reached understanding and agreement. A further meeting was held on 26.04.23 to resolve matters. DCC and their consultants have proposed some amends to the EMP to resolve concerns on monitoring.</p> | <p>incorporated into the updated EMP. These amends have been shared with DCC who have confirmed they resolve concerns.</p> |

Table 3-2: Record of Issues – Not Agreed Issues

| Issue   | Document References (if relevant)                                      | Durham County Council Position  | National Highways Position   |
|---|--|---|--|
| 3-2.1 Biodiversity Net Gain                         | Legislation and Policy Compliance Statement review session             | <p>It is noted that there was an amendment to the Environment Bill in 2021 that extended the scope of BNG to include applications in respect of nationally significant infrastructure projects (NSIPs).</p> <p>NPSNN accordence table states the following:</p> <p>3.3 “On this basis, the Project has aligned with the principles of the NPPF in seeking to avoid and mitigate environmental and social impacts.”</p> <p>There is no mention of biodiversity net gains in reference to NPPF.</p> | <p>Pending the introduction of secondary regulations (which have recently been consulted upon by Government), a Biodiversity net gain assessment is not currently a requirement for Nationally Significant Infrastructure Projects therefore is not included as part of the Application documents.</p> <p>The Applicant has also had regard to paragraph 5.33 of the National Networks National Policy Statement which advises that “Development proposals potentially provide many opportunities for building in beneficial biodiversity or geological features as part of good design. When considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities in and around developments.”. The Applicant has accordingly sought opportunities to maximise biodiversity enhancements as part of its mitigation where possible. For example, by providing habitat linkages to increase connectivity to areas of semi-natural habitats within the wider area and therefore enhancing and tying into existing green infrastructure networks. Whilst Biodiversity Net Gain (BNG) is not currently a statutory requirement that is in force for Nationally Significant Infrastructure Projects, one of the Project objectives is to seek to achieve no net loss as a minimum and looks to deliver net gains where such opportunities exist. The BNG Metric was therefore used as a tool alongside the development of the environmental mitigation design to understand the situation against the Project’s objective of achieving no net loss and to seek opportunities to maximise net gains.</p> |
| 3-2.2 Diversionary Impacts and Construction traffic | Meeting with DCC – 17.05.22<br>Deadline 4 Response from DCC (REP4-025) | <p>Durham will not accept construction traffic or diversionary traffic via Barnard Castle.</p> <p>At Deadline 4, DCC also stated: DCC will need to see a detailed diversion plan to establish suitability and to determine whether this will have an impact on the surrounding networks from a traffic, noise, dust/pollution perspective. Discussions will be required with Darlington Borough Council to confirm acceptance of the</p>  | <p>The construction and diversionary routes will be developed as part of the Environmental Management Plan (EMP), should the DCO be made. This document will be subject to consultation with DCC and the other host authorities. We note DCC’s position on this matter and will work with DCC to ensure suitable construction routes are identified.</p> <p>We would also note that the EMP (Application Document Reference 2.7 (Rev 2), REP3-004) confirms that no part of the project can start until a Construction Traffic Management Plan (CTMP) is developed which will include (amongst other requirements) the following:</p> <p>Details of proposed traffic management measures, including phasing plans, route restrictions and speed limits.</p>  |

| Issue  | Document References (if relevant)  | Durham County Council Position   | National Highways Position   |
|--|------------------------------------|--|--|
|  |                                    | <p>routes if, as suggested, part of the diversion route passes through their borough.</p> <p>Not agreed, meeting on 28 April 2023 between DCC and WSP, there are concerns and a report is to be produced.</p>  | <p>Details of planned carriageway and local road closures, including proposed stakeholder and community engagement protocols in advance of closures.</p> <p>Details of proposed diversion routes, durations of use and proposals for encouraging compliance with designated diversion routes (with consideration for potential noise impacts).</p> <p>The CTMP will include, amongst other commitments, the following commitment for diversion routes to be discussed with the Local Highway Authority in advanced of required closures. National Highways consider that this matter is agreed in so far as possible at this stage and with commitment to the further engagement as cited above.</p> <p>It is understood that these matters including rat running and diversions are the subject of dialogue between the authorities and National Highways Delivery Integration Partners (DIPs).</p> |
| <p>3-2.3<br/>                     Cultural Heritage Impacts: Cross Lanes to Rokeby and Rokeby Junction</p> | <p>Email from DCC – 15.05.2023</p> | <p>DCC would reiterate that it does not object to the proposed junction at Rokeby; however, given the lesser impact of the “Blue” route, referred to in the Statutory Consultation, in relation to increased traffic on the B6277 The Sills, the strong preference of the Council remains for the “Blue” route. The reasons for this are set out in Appendix 1 of the Council’s Relevant Representation to PNS dated 31 August 2022 (Application Document RR-073) and in subsequent documents submitted to the ExA by the Council.</p> <p>In terms of cultural heritage in respect of the “Blue” route, the balance of harm derived from the “Black” or “Blue” route is nuanced and, as such, whilst</p> | <p>The Applicant refers to Appendix B of Document Reference REP5-006 (Deadline 5 Submission – 4.5 Statement of Common Ground Durham County Council (Rev 3)) where this matter was identified as agreed to be no longer relevant.</p> <p>The Applicant retains the view that that the proposed route will not introduce a major physical change to the Register Park and Garden (RPG) and it will minimise the impacts on the settings of the associated assets (St Mary’s Church, the school house and the Old Rectory) and avoids further severance of a part of the RPG.</p> <p>The Applicant notes the DCC PADSS submission made at Deadline 7 (REP7-175) and the request of DCC of 15th May 2023, this has been moved to Not Agreed.</p>   |

| Issue | Document References (if relevant) | Durham County Council Position  | National Highways Position |
|-------|-----------------------------------|---|----------------------------|
|       |                                   | the “Blue” route remains the preference for the reasons set out in Appendix 1 of the Council’s Relevant Representation to PNS dated 31 August 2022 (Application Document RR-073) and in subsequent documents submitted to the ExA by the Council. |                            |

## Appendices



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## Appendix A Air Quality Detailed Issues Under Discussion

This appendix provides the detailed air quality comments raised by DCC (and their consultants AECOM) and identifies that all matters have been resolved through dialogue during examination.

|                 | DCC response 31.08.2022  | Applicant response 16.11.2022   | DCC response 24.11.2022   | Applicant response 15.01.2023  | DCC response 20.01.2023   | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23   | Update from 26.04.23   |  |
|-----------------|--|---|---|--|---|--|---|--|--|--|
| <b>Baseline</b> |  |   |   |  |   |  |   |  |  |  |
| 3               | Four months of NO2 monitoring was undertaken for the Scheme between November 2021 to February 2022 at 16 NO2 locations in triplicate; four of these locations were in DCC (AQM 5, 6, 7 and 8). DCC were not consulted on the locations or given the opportunity to provide insightful, local feedback on the locations where monitoring would be useful. Based on the level of impact indicated by document 3.7 Transport Assessment in both construction and operational phases, it would have been useful to monitor at a sensitive receptor location along the A67 in Barnard Castle, near the river bridge, where a number of dwellings are located at locations nearby the road edge. | The NO2 monitoring locations were informed by the findings of the Preliminary Environmental Information Report (PEIR) and were undertaken at locations where the preliminary assessment identified the likelihood of significant effects. The comments provided, relating to monitoring locations in Barnard Castle, are noted. | We have outstanding concern of potential air quality impact at sensitive receptors in Barnard Castle due to lack of project monitoring data. Monitoring data in Barnard Castle would be helpful to understand the air quality impact risk and assist inform key method points the assessment has taken. | Traffic data for the construction and operational assessment were screened against the thresholds outlined in DMRB LA 105. Changes in construction traffic were not exceeding these thresholds in the Barnard Castle area and therefore a detailed assessment of construction traffic was screened out of the assessment.<br><br>As set out within the Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (Document Reference 7.2, REP1-006) National Highways has committed to providing complementary environmental considerations to further ratify the findings of the Environmental Statement in specific regards to the Sills (Barnard Castle). The outline scope of this local level consideration is as follows:<br><br><ul style="list-style-type: none"> <li>• More granular / environment assessment of the impact of increased traffic on the Sills (including the consideration of Air Quality).</li> <li>• Institute of Environmental Assessment and Management ("IEMA") subjective assessment of being a pedestrian/pedestrian experience and consideration of noise in the same context National Highways will submit the local level consideration and report to the examination for Deadline 3.</li> </ul> | The current scope of further air quality assessment at The Sills in Barnard Castle within Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (Document Reference 7.2, REP1-006) is considered unclear. Further discussion is requested between DCC and the Applicant to simplify communications at this point. This further work is considered to be intrinsically linked to method choices and assumptions made in the air quality assessment. | AECOM noted issue is more from a construction phase point rather than operation / north of County Bridge on A67 – see points below in terms of construction  |   | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval.<br><br>AECOM and DCC will undertake a parallel review of the EMP and CTMP |  | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |
| 5               | Data from the NO2 monitoring survey was noted to be annualised to 2019, the model base year, for AQM1 to AQM14, however not for AQM15 and 16; neither of these locations are in DCC. AQM 5 is adjacent to the existing A66, AQM 6 is more than 250m from the A66 at Rokeby, AQM 7 is adjacent to the B6277, and  | Reviewer statement, no response required  | Applicant is requested to please respond to this point. The initial comment was intended to highlight that the adjustments had decreased concentrations. These monitors have been relied on for verification, and so  | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards. – as set out in Chapter 5 of the Environment Statement (ES)  | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted  | Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH confirmed we would provide.<br><br>AA confirmed that small number of | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the  | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |  |



|   | DCC response 31.08.2022   | Applicant response 16.11.2022  | DCC response 24.11.2022  | Applicant response 15.01.2023  | DCC response 20.01.2023   | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments   | Update from DCC 06.04.23  | Update from 26.04.23 |
|---|---|--|--|--|---|--|--|---|----------------------|
|   | AQM 8 is to the south of the B6277 Lartington Lane. The backcasted adjusted annual mean NO2 monitoring results for monitors in DCC ranges from 2.6 µg/m3 to 10.2 µg/m3 and therefore below the annual mean objective of 40 µg/m3. The highest concentrations were recorded at AQM 5, adjacent to the existing A66; the unadjusted concentration is noted to be 16.3 µg/m3, showing that the adjustment has reduced the concentrations at this location by almost 40%. |  | robustness of these adjustments is important to impact significance.   | Having considered the comment, the points made regarding the model set up or adjustment of results would not alter the assessment of no likely significant effects on air quality as there would be negligible risk of exceeding the air quality objectives.   | pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. | locations due to availability of sites – hence data was supplemented at late stage. AECOM expressed concern on Human Health north of County Bridge – needs to be considered in reviewing verification. | the technical note.  | operational study area. However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase. |                      |
| 6 | There is no discussion of appropriateness of the method to adjust monitoring results in light of the Covid-19 pandemic and the changing traffic patterns associated with government lockdowns and post-lockdown trends. This should be provided.  | The baseline monitoring survey and data annualisation were carried out in line with the guidance in LAQM TG16. Supplementary guidance published by Defra in April 2021 for use in reporting 2020 data, which were affected by the activity restrictions associated with Covid-19 lockdown measures, indicates that the diffusion tube sampling and data annualisation methodology in LAQM TG16 remain valid. No further guidance has been issued for 2021/22 data; consequently, the approach is considered appropriate. | A recognition of the current uncertainties following the Covid-19 pandemic would be considered best practice in this situation and a cautious approach to any future prediction would be sensible. | The impact of covid on traffic data collection and on traffic modelling was noted in the Combined Modelling and Appraisal Report (Document Reference 3.8, APP-237) in sections 3.1, 3.2 and 3.3. Chapter 5 of the document describes how the traffic forecasting has been undertaken in line with TAG Unit M4 Forecasting and Uncertainty. Covid 19 is not mentioned specifically in TAG Unit M4 as such the reporting around the transport forecasts is considered appropriate. | The points within the Combined Modelling and Appraisal Report on the impact of Covid on traffic data are noted. However the lack of discussion in the Air Quality Chapter on how this relates to air quality, and the method choices behind air quality monitoring periods may have been informed by Covid, is highlighted. This is however considered a lesser concern than the other points raised in the review process.   | AECOM consider that this issue is now addressed and can be considered closed   | NA   |   |                      |
| 8 | NH3 Scheme specific monitoring was additionally undertaken during the same period at 13 of the 16 locations of NO2 monitoring. The same four locations are within DCC (AQM 5 to 8). The NH3 monitoring results for the monitors in DCC ranges from 1.6 µg/m3 to 3.3   | Roadside NH3 measurements in the UK are limited although national predictions of mid-year (3-year average) averaged background NH3 concentrations, taken from the Concentration Based Estimates of Deposition (CBED) model, are available on a 1km x 1km   | The risk remains that ammonia concentrations relied on may be lower than actual.   | A call was held between National Highways and Natural England on Thursday 8th December. A summary of the ammonia assessment will be set out in the Natural England Statement of Common Ground (SoCG).  | The document does not yet appear to be available. It is understood that this will be considered further.  | Technical Note will be issued to DCC/AECOM   | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in | Ammonia (NH <sub>3</sub> ) note shared has been reviewed and is now considered resolved.  |                      |

|    | DCC response 31.08.2022   | Applicant response 16.11.2022   | DCC response 24.11.2022  | Applicant response 15.01.2023  | DCC response 20.01.2023   | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23  | Update from 26.04.23   |
|----|---|---|--|--|---|--|---|---|--|
|    | µg/m3; again the concentration at AQM 5 was the highest. There is no provided discussion around representativeness of this data to the assessed base year of 2019.  | basis. To address this uncertainty, project specific monitoring was undertaken. Whilst no adjustment was made for concentrations to NH3 (or indeed recognized guidance to do this, particularly around the effects of Covid-19 pandemic), the data collected are considered to be representative to provide an insight to NH3 levels across the study area, which otherwise would have been absent from the assessment. |  |  |   |  | March to discuss the contents of the technical note. -  |   |  |
| 10 | Defra annual mean background pollutants concentrations have been used in the assessment for 2019 and future year 2029; in grid square contribution from major road sector emissions have been removed from the background NOx estimates. This is reasonable. A comparison between Defra modelled and local authority background NO2 monitoring data has been made; this showed that Defra backgrounds were slightly lower than local authority monitored data however there is no discussion on this other than the difference is small (1 µg/m3) and concentrations are below the objective, nor any consideration discussed of factoring the Defra predictions using the monitoring. Given the low levels of predicted model result concentrations, this will not likely materially affect the conclusions. | Reviewer statement, no response required.   | There are a number of methodological assumptions in the assessment that we consider not to represent a reasonable worst case. Therefore, it is not clear whether reasonable worst-case assumptions would materially affect the conclusions of the assessment.<br>An assessment taking into account a reasonable worst case here would have used the monitoring data to inform the background pollutant concentrations. | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards– as set out in Chapter 5 of the Environment Statement (ES) Monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes, which is a roadside site and therefore not representative of 'background' conditions.<br>Having considered the comment, the points made regarding the model set up or adjustment of results, we feel we have made reasonable worst-case assumptions that would not alter the assessment of no likely significant effects on air quality, as there would be negligible risk of exceeding the air quality objectives | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaken the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. | Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH confirmed we would provide.<br>AmeyArup confirmed that small number of locations due to availability of sites – hence data was supplemented at late stage. | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of the technical note. | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the operational study area. However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase. | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |

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|----|---|--|--|---|--|---|---|---|---|
| 11 | There was very little on verification provided in the PEIR. Baseline data from ten sites from local authorities and one National Highways monitor (total 11 sites) are presented in Table 1 of Appendix 5.3 Air Quality Baseline Monitoring; it is understood that seven of these 11 sites have been used to verify the roads model. It would be useful to provide discussion of whether the seven monitors have been used to verify both the construction and operational phase assessments, and the appropriateness of the chosen method to verify each model domain. | Model verification factors used in the assessment are reported in Table 4 of Appendix 5.4 Air Quality Assessment Results (Document Reference 3.4, APP- 153) and have been applied to the predicted road NOX concentrations, used in both the construction and operational phase assessments, as stated in section 5.4.1.8. Tables 2 and 3, also in Appendix 5.4 (Document Reference 3.4, APP-153), provide details of which sites were used to derive the verification factors for the urban (Table 2) and rural (Table 3) road links based on site typology in the construction and operational phase assessments, as stated in section 5.4.1.8. Tables 2 and 3, also in Appendix 5.4, provide details of which sites were used to derive the verification factors for the urban (Table 2) and rural (Table 3) road links based on site typology. | It is understood that the same adjustment factors have been used to adjust the construction phase and operational phase dispersion modelling results despite the model domains for each assessment differing. A discussion on the limitations of relying on the same method for both assessments should be provided given the stated different traffic data sets, and model domain extents. It is understood that the rural zone adjustment factor has been applied to the assessed receptors within DCC's jurisdiction. It is not considered a reasonable worst case to use an adjustment factor lower than 1 to adjust any dispersion model outputs and also rely on an RMSE of 12.6ug/m <sup>3</sup> . This is not considered a robust assessment and is recommended to be re-assessed. | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards– as set out in Chapter 5 of the Environment Statement (ES). Whilst the RMSE value is noted as being above the desired values in Defra TG(16 and 22), monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes. In-line with TG(16 and 22) the model parameters were reviewed multiple times as part of the model verification, to no avail. So as to include at least one site on the A66 in Richmond DC, the adjustments were made accordingly, Having considered the comment, the points made regarding the model set up or alternative adjustment of results would not alter the assessment of no likely significant effects on air quality as there would still be negligible risk of exceeding the air quality objectives in DCC. | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle. | Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH confirmed we would provide. AmeyArup confirmed that small number of locations due to availability of sites – hence data was supplemented at late stage. | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of the technical note. | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the operational study area. However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase. | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |
| 12 | <b>No DCC monitoring or National Highways monitoring within DCC boundaries has been used to verify the model outputs against measured data. It is further understood that none of the Scheme-specific monitoring has been used for verification. Discussion would be useful in this instance to present how representative the</b>  | 12 and 13. There are no DCC monitoring locations adjacent to the ARN (as noted by the Interested Party in comment (2) above which they acknowledge is not a material issue). Available data from a National Highways air quality monitoring station have been used for model verification. Several administrative areas are covered by the assessment  | A reasonable worst-case and robust assessment should be undertaken. It is not considered a reasonable worst case to use an adjustment factor lower than 1 to adjust any dispersion model outputs, given the ADMS software's tendency to underpredict.  | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards as set out in Chapter 5 of the Environment Statement (ES). Whilst the RMSE value is noted as being above the desired values in Defra TG(16 and 22),  | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at   | Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH confirmed we would provide. AmeyArup confirmed that small number of locations due to availability of  | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of                     | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the operational study area.   | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |

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|----|--|---|---|--|---|---|--|---|--|
|    | <b>verification is of receptors within DCC.</b>  | study area which is predominantly rural in nature with pockets of urban settlements; overall, air quality is good. In addition to National Highways air quality monitoring data, the model was verified using local authority monitoring data from representative roadside locations adjacent to the ARN. As noted above in response to item (13), site typology was considered and two separate verification factors, one for urban and another for rural road links (and receptors), were derived and applied. Where possible, sites with ≥75% data capture were used; where this condition could not be met, in one instance, this has been noted. The verification using the rural zone for use with DCC receptors is considered to be representative as the site typology, setting and traffic were not considered to be materially different and therefore did not warrant an alternative approach or verification factor. The best monitoring data available in the study were also used. Due to the generally low background concentrations in the study area rural locations, an alternative rural factor would however unlikely change the conclusions of the assessment. | Relying on an RMSE of 12.6ug/m <sup>3</sup> is not considered robust, based on the guidance referenced in the ES chapter, and it is recommended that the modelling and verification that informed the assessment of construction and operational phase impacts is revisited. It is also not considered a limitation of the assessment to not use more monitoring data locations. Should DCC not monitor in this area, project specific monitoring should have been undertaken to sufficiently obtain a reliable baseline of air quality. This is not considered to have been presented. | monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes. In-line with TG(16 and 22) the model parameters were reviewed multiple times as part of the model verification, to no avail. So as to include at least one site on the A66 in Richmond DC, the adjustments were made accordingly.<br><br>Additional site-specific monitoring was undertaken for a period of four months to gain additional understanding of the baseline conditions in the study. These data presented in Appendix 5.3 Air Quality Baseline Monitoring (bias adjusted and annualised in-line with guidance) were not used for verification purposes given the short time scales of deployment, however they confirm the position that ambient NO <sub>2</sub> conditions are well below relevant objective across the study areas.<br><br>Having considered the comment, the points made regarding the model set up or alternative adjustment of results would not alter the assessment of no likely significant effects on air quality as there would still be negligible risk of exceeding the air quality objectives in DCC | receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle. | sites – hence data was supplemented at late stage.  | the technical note.  | However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase. |  |
| 14 | The rural verification zone of two monitors has a bias adjustment factor of 0.632 and an RMSE of 12.6 µg/m <sup>3</sup> ; this is well outside the RMSE of 10% of the objective (4 µg/m <sup>3</sup> for annual mean NO <sub>2</sub> ) | The suitability and representativeness of the verification for use with DCC receptors is set out in the response for item 12 above. The verification factor was derived using available monitoring data   | It is not considered reliable to only use two monitoring locations for verification in an assessment, especially when applied to such a   | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the  | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model   | Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst   | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |

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|--|--|---|--|---|---|--|---|--|----------------------|
|  | <p>recommended by LAQM TG16. <b>Discussion is required to explain how the results at sensitive receptors presented in DCC and the rural zone as a whole are reliable in this instance. This is considered a potentially material consideration, particularly in light of the presented slight adverse (albeit concluded not significant) effects at receptors in DCC boundary.</b></p> | <p>collected at representative rural roadside locations with 200m of the ARN. While the RMSE derived does not meet the criteria given in LAQM TG16, the use of two verification points, as opposed to one, reduces uncertainty in the assessment and improves the representativeness of the model verification (as noted above in response to item 13), it is therefore not perceived to be a risk to the assessment findings. No likely significant effects were identified within DCC and any change in verification method is unlikely to material change this conclusion. This is particularly relevant when considering the approach followed in-line with DMRB LA105 (rather than EIA specific significance criteria), which determines significance only at locations with predicted concentrations above the relevant air quality standard, in this case 40µg/m<sup>3</sup> for nitrogen dioxide, which is unlikely to occur for DCC receptors.</p> | <p>large area and when the agreement with monitoring data post-adjustment is very poor. An RMSE of 12.6ug/m<sup>3</sup> is considered very poor and could be representative of several things, including the poor data capture at the automatic monitor used for verification, if no annualisation was undertaken. It is additionally not considered appropriate to use an adjustment factor of less than 1; a reasonable worst-case adjustment factor should be used, despite the likelihood of the assessed receptors to exceed the air quality objective, or not.</p> | <p>DMRB LA105 standards– as set out in Chapter 5 of the Environment Statement (ES). Whilst the RMSE value is noted as being above the desired values in Defra TG(16 and 22), monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes. In-line with TG(16 and 22) the model parameters were reviewed multiple times as part of the model verification, to no avail. So as to include at least one site on the A66 in Richmond DC, the adjustments were made accordingly.</p> <p>Data capture for the continuous monitoring site at Leeming was poor and therefore the data were annualized for use.</p> <p>Additional site-specific monitoring was undertaken for a period of four months to gain additional understanding of the baseline conditions in the study. These data presented in Appendix 5.3 Air Quality Baseline Monitoring (bias adjusted and annualized in-line with guidance) were not used for verification purposes given the short time scales of deployment, however they confirm the position that ambient NO<sub>2</sub> conditions are well below relevant objective across the study areas.</p> <p>Having considered the comment, the points made regarding the model set up or adjustment of results would not alter the assessment of no likely significant effects on air quality as there would still be negligible risk of exceeding the air quality objectives in DCC</p> | <p>assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle.</p> | <p>confirmed we would provide.<br/>AmeyArup confirmed that small number of locations due to availability of sites – hence data was supplemented at late stage.</p> | <p>February 2023. Further meeting will take place in March to discuss the contents of the technical note.</p> | <p>there are limitations within the method they are not considered significant for the operational study area. However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase.</p> |                      |

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|----|---|--|--|---|--|--|--|--|--|
| 15 | <p>27 monitoring locations are noted to have been excluded from verification, and the reader of Appendix 5.4 Air Quality Assessment Results is directed to Table 1 for the reasons for exclusion. Table 1 only includes reasons for 19 monitors; none of the 19 sites are within DCC. The eight remaining monitors should be presented alongside the 19 in Table 1. It would be useful to discuss the use of the scheme specific monitoring for verification in light of the poor RMSE, where these are located at site types acceptable for verification as per LAQM TG16.</p> | <p>The comment on the exclusion of monitoring locations is noted. Scheme specific monitoring data are set out in Environmental Statement Appendix 5.3 Baseline Air Quality Baseline Monitoring (Document Reference 3.4, APP-152). A detailed review was undertaken on a project level alongside National Highways, in relation to the gathered data and its use for comparison against the formal verification. The data was not used formally in the assessment verification due to the short-time period, however the two verification factors were considered to perform reasonably well and had a high level of agreement to one another. Overall, National Highways concluded that it was unlikely for there to be any material changes to the conclusions of the assessment.</p> | <p>We disagree that the two verification factors perform well, in light of the RMSE of 12.6 µg/m<sup>3</sup> and how that contradicts the Defra guidance referred to in the ES chapter. This point is not considered to have been addressed on reliability of the results. A reasonable worst case assessment of impacts at sensitive receptors should be presented.</p> | <p>The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards as set out in Chapter 5 of the Environment Statement (ES). Whilst the RMSE value is noted as being above the desired values in Defra TG(16 and 22), monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes. In-line with TG(16 and 22) the model parameters were reviewed multiple times as part of the model verification, to no avail. So as to include at least one site on the A66 in Richmond DC, the adjustments were made accordingly. Data capture for the continuous monitoring site at Leeming was poor and therefore the data were annualized for use. Additional site-specific monitoring was undertaken for a period of four months to gain additional understanding of the baseline conditions in the study. These data presented in Appendix 5.3 Air Quality Baseline Monitoring (bias adjusted and annualized in-line with guidance) were not used formally for verification purposes given the short time scales of deployment, however the overall findings were the same. Having considered the comment, the points made regarding the model set up or adjustment of results would not alter the assessment of no likely significant effects on air quality as there would still be negligible</p> | <p>Reasons for the eight remaining monitors removed from verification should be presented as requested on 31.08.2022. It remains to be understood why more project specific monitoring with suitable monitoring periods was not undertaken to fill in this area with limited monitoring data. This is not considered a valid reason for such a project to only have two monitors used to verify the model output, and to use an adjustment factor that lowers it is not considered a reasonable worst case assessment. There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion</p> | <p>Validation exercise has been completed – demonstrates no likely significant effects. AECOM requested a copy of the verification exercise – TH confirmed we would provide. AmeyArup confirmed that small number of locations due to availability of sites – hence data was supplemented at late stage.</p> | <p>A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of the technical note.</p> | <p>Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the operational study area. However, there remain concerns that at The Sills, between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase.</p> | <p>Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved.</p> |

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|--|---|--|--|--|--|--|--|--------------------------|---|--|
|  |   |  |  | risk of exceeding the air quality objectives in DCC  | between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle.         |  |  |                          |   |  |
| <b>Construction phase dust</b>               |   |  |  |  |  |  |  |                          |   |  |
| <b>Construction phase traffic assessment</b> |   |  |  |  |  |  |  |                          |   |  |
| 24   | It was noted at the PEIR stage that no construction phase road traffic was available for assessment. The PEIR stated that an assessment of such emissions will be undertaken as part of the EIA and reported in the Environmental Statement (ES). ADMS Roads modelling is understood to have been undertaken for limited sections of the scheme – between M60 Junction 40 to Brough and between east of Bowes, to Scotch Corner. This Affected Road Network is understood to be determined based on changes of 1000 AADT or more and/or changes of 200 AADT or more as a result of the construction phase; the chapter does not make reference to speed bands factoring into the determination of the construction phase traffic ARN therefore it is assumed that this is not a part of the criteria used; this is not following LA 105 guidance. | Construction traffic data provided for the Project were limited to vehicle movements only based on the anticipated construction programme and phasing. No speed banding data was available to consider and assess as part of the Air Quality study | Applicant has confirmed that limited construction traffic data limited the scope of the assessment. The construction phase traffic assessment is therefore understood to be not meeting all of LA 105 guidance. The applicant should confirm whether speed bands are predicted to change with the scheme's construction phase. | Construction traffic speeds were not provided and therefore the data was not screened on this basis. The assessment is robust without screening for changes in construction traffic speed.                           | It is requested that the Applicant confirms that the numbers of vehicles are low enough that the speeds wont vary considerably, and no greater than the relevant LA105 screening criteria. | Maximum offsite HGV flow at 361 AADT – discussions confirmed speed band changes are unlikely to be changed.                      | Confirmed on the 10 February 2023 that this issue is considered closed                                   |                          |   |  |
| 25   | It is not clear whether AADT has been used for the construction phase assessment, or whether traffic data provided was split by the four periods required by LA 105 at  | Average Annual Daily Traffic (AADT) was used in the construction phase traffic assessment to maintain consistency with the operational phase assessment. Consistent  | The possibility of exceedances is understood to be low, however a representative baseline through the  | Traffic data for the construction and operational assessment were screened against the thresholds outlined in DMRB LA 105. Changes in construction traffic were not exceeding these thresholds in the Barnard Castle | There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline  | MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact |                          | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |  |

|    | DCC response 31.08.2022   | Applicant response 16.11.2022   | DCC response 24.11.2022   | Applicant response 15.01.2023   | DCC response 20.01.2023  | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23 | Update from 26.04.23  |
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|    | detailed air quality assessment stage of morning (AM), inter peak, evening peak (PM) and overnight period (OP). This should be clarified and if AADT has been used, reasons provided as to why this is considered acceptable and any limitations associated with this method choice.  | with the guidance in DMRB LA105, a proportionate approach was taken to the speed pivoting process. AADT was used because, as noted in the guidance, the possibility of exceedances of air quality thresholds was considered to be low. This is reflected in the assessment's findings as set out in the Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048). | use of air quality monitoring is not considered to have been undertaken, as noted in comments above. The monitoring data availability in the DCC area and the absence of monitoring in Barnard Castle should have informed the locations of the scheme-specific survey. The screening of the Barnard Castle area out of the assessment is considered a limitation.  | area and therefore a detailed assessment of construction traffic was screened out of the assessment   | characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle. | CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP  | from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP  |                          |   |
| 26 | Construction years are between 2024 and 2029. With reference to Figures 11-2 and 11-3 in Chapter 3.7 Transport Assessment of the ES, the peak construction traffic from workers and wagons per month is understood to be in April/May 2025 and the overall busiest year for construction will be 2025. 2024 is understood to have been assessed. The year of traffic modelled, or a method to explain how the consultant has assessed the worst-case impacts of the scheme, and the chosen year of emissions factors should be explained. | The overall busiest construction year was forecast to be 2025; however, to be consistent with the noise assessment, the air quality assessment is based on 2024.  | The maximum year of construction is understood to be 2025 and this is understood to not have been assessed. It should be confirmed whether the traffic data of the peak construction period has been used to represent 2024 in the air quality assessment. If so, this is considered appropriate as future emission predictions will be more cautious. If not, this is a limitation of the assessment and recommended to be | Peak construction vehicle movements occur in 2025 and have been used as a basis for the assessment. Construction traffic flows have been modelled using 2024 emissions data. Therefore we have used the largest forecast traffic flows (2025) during the construction period together with the worst-case vehicle emission factors (2024) to represent a conservative assessment. | The response that the air quality assessment has used 2025 traffic data, the largest year of construction, is welcomed. It is however not agreed that traffic data presenting a reasonable worst case has been utilised given the Transport Chapter present data different (higher) impacts. No further comment on this as this is considered to be covered in other responses.  | MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP |                          | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |



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|----|--|--|---|--|---|--|--|--------------------------|---|
|    |  |  | re-assessed to ensure the maximum impacts of the construction phase have been assessed.                               |  |   |  |  |                          |   |
| 27 | There is no detail on the methodology provided in the Environmental Statement Appendix 5.2 Air Quality Assessment Methodology for the dispersion modelling assessment of construction traffic, in the same level of detail as for the operational phase assessment. This should be provided to understand the construction phase traffic data and TRA, model input parameters, verification process and choice of met station data. If these parameters are the same as for the operation phase traffic emissions assessment of effects, then this should be stated, and justification of the method provided in relation to the construction phase affected road network. | The construction traffic assessment methodology followed the same approach used for the operational modelling, except for the level of detail in the traffic data, i.e., no speed band information (as acknowledged above in response to item 24). | Justification of the method provided in relation to the construction phase affected road network remains outstanding. | Response as 16.11.22 The construction traffic assessment methodology follows the same approach used for the operational modelling, except for the level of detail in relation to available traffic data. | The construction and operational phase ARNs cover different study areas. The same methods for both construction and operational phases therefore would not be considered appropriate. The Applicant has not provided the justification for this method choice, specifically for the construction phase, as requested.<br><br>There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. | MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP | File Note to be prepared to address issue whilst AECOM and DCC undertake a parallel review of the EMP and CTMP |                          | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |

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|----|--|---|---|--|--|--|---|---|----------------------|
|    |  |   |   |  | Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle.  |  |   |   |                      |
| 28 | <p><b>With reference to Figure 5.3 Air Quality Construction Phase Assessment, the construction phase ARN only falls within DCCs boundary on the A66 to the east of Barnard Castle leading to Scotch Corner. There appears to be no ARN east of Bowes at Scheme 7 Bowes Bypass and also no ARN to the west of Scheme 8 Cross Lanes to Rokeby. One of two construction compounds is noted by the Air Quality Chapter to be in Bowes, amongst other locations. It is understood that the construction traffic impact assessment in this area does not fall into the ARN and has been scoped out of requiring assessment on local air quality, possibly due to the criteria for AADT and HDV flow changes provided in Paragraph 5.6.4 of the Chapter not being exceeded. Explanation as to why these sections would not be materially affected by the scheme should be provided to suitably scope out these sections of construction within DCC, particularly in light of Bowes construction compound being in this location. A table similar to that provided for the operational phase traffic Table 5-10 would be useful. The other</b></p> | <p>Data provided for the Project and the construction traffic movements were screened in-line with the criteria in LA105 (where available). The worst-case scenario of the peak-averaged daily construction traffic were used and the ARN identified based on the changes in vehicle flows, as set out in the assessment as set out in the Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048). The location of construction compounds will be reviewed through the continued development of the design.</p> | <p>Confirmation required on whether the peak averaged daily construction traffic stated to be used was for 2025 or 2024. Question not considered to have been suitably answered on why roads adjacent to Bowes construction compound does not cause an increase of more than 1000 AADT, when roads further east of the compound do. Table of data requested is outstanding.</p> | <p>Peak construction vehicle movements occur in 2025 and have been used as a basis for the assessment. Construction traffic flows have been modelled using 2024 emissions data. Therefore we have used the largest forecast traffic flows (2025) during the construction period together with the worst-case vehicle emission factors (2024) to represent a conservative assessment. Construction traffic data was screened against the thresholds for HDV movements outlined in DMRB LA 105 and not total AADT movements (200 HDV AADT movements). The data highlighted in the Transport Assessment (Document Reference 3.7, APP-236) is based on a worst-case unlikely scenario for potential local short-term diversions, with no assumed mitigation in-place. As such, given the uncertainty around likelihood and duration, following discussion at a Project level, they were not considered appropriate to be included within the Air Quality Assessment and are based on a worst-case unlikely scenario for potential local short-term diversions, with no assumed mitigation in-place. As such, given the uncertain likelihood and duration, following discussion at a Project level, they were not considered appropriate to be included within the Air Quality Assessment. Bowes construction compound will be rechecked in terms of its HDV movements in readiness for Deadline 3.</p> | <p>Why roads adjacent to Bowes construction compound do not cause an increase of more than 1000 AADT, when roads further east of the compound do, is understood to be being looked into further by the Applicant. We reiterate that we would welcome a table of traffic data similar to that provided for the operational phase traffic Table 5-10 following this further consideration.</p> | <p>MS explained that for Bowes all lorries exporting material are assumed to be going towards Scotch Corner and A1 – access would not be via compound but from roads to the east – therefore lorries would be progressively lighter as moving through Bowes construction area. AECOM query is in relation to flows outside of red line boundary eg between schemes 7 and 8 MS confirmed that between the two schemes vehicle movements would be less than 200 – AECOM requested can MS provide a table with the numbers between the two schemes?</p> | <p>A table of data is to be issued by AmeyArup to DCC and AECOM</p> | <p>Information provided 28.04.23 setting out why the construction phase ARN doesn't extent west of Scheme 8 Cross Lanes to Rokeby and wasn't included in the Air Quality Assessment, with the construction vehicle movements all originating from the East of the scheme (for the eastern side of the Project) i.e. the further west you consider, the fewer vehicles are counted.</p> <p>Further information provided – confirmed resolved 05.05.23.</p> |                      |

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|----|---|---|--|--|---|---|--|--|----------------------|
|    | <b>construction compound locations should be confirmed and agreed with DCC prior to construction commencing.</b>  |   |  |  |   |   |  |  |                      |
| 29 | <b>Explanation should also be provided as to how Barnard Castle does not fall within the ARN for the construction phase. Following a review of Chapter 3.7 Transport Assessment it is apparent there is at least a 2,000 two-way AADT increase at A67 Barnard Castle Bridge in both Scenario C and D. It is additionally noted that Scenarios C and D combined are for a length of more than two years.</b> | <p>The data highlighted in the Transport Assessment (Document Reference 3.7, APP-236) is based on a worst-case unlikely scenario for potential local short- term diversions, with no assumed mitigation in-place. As such, given the uncertainty around likelihood and duration, following discussion at a Project level, they were not considered appropriate to be included within the Air Quality Assessment. are based on a worst- case unlikely scenario for potential local short-term diversions, with no assumed mitigation in-place. As such, given the uncertain around likelihood and duration, following discussion at a Project level, they were not considered appropriate to be included within the Air Quality Assessment.</p> <p>Paragraph 11.7.4 of the Transport Assessment (Document Reference 3.7, APP-236) states:<br/>“The impacts identified within this will help inform the potential issues that may arise during construction such that mitigation can be considered and implemented where possible. The project team will monitor the journey times on the A66 to ensure excessive delays are not occurring due to the works. If delays on the A66 are causing inappropriate local routes to be used</p> | <p>It should be made clear whether the mitigation is built in. It is standard practice for a reasonable worst case to be first considered, and then assessment of residual effects following mitigation. Worst case traffic data and impact appears to have been presented in the Transport Chapter but not in the Air Quality Chapter’s air quality assessment. Consistency between transport and air quality chapters should be made and where this is not possible, reasons provided for inconsistency. It does not appear that a reasonable worst case assessment been undertaken. <b>It is considered that the assessment is missing a significant risk that needs to be assessed unless a concrete mitigation can be determined. Clarification is requested on what short term is, in the context of the diversions.</b></p> | <p>Paragraph 11.1.3 of the Transport Assessment (APP-236) states: “construction advice has been provided by specialist construction advisor Sir Robert McAlpine (SRM). SRM have provided preliminary indicative information relating to Temporary Traffic Management (TTM) proposals, and potential compound locations such that the impact of; traffic management measures, and construction worker travel, on road capacity can be appraised during project construction”. This is the best information currently available.</p> <p>It also clarifies in paragraph 11.1.4 “ The Construction Traffic Management Plan forms Annex B13 of Environmental Management Plan (EMP) (Document Reference 2.7). Annex B13.is an extended essay plan for the Construction Traffic Management Plan (CTMP) for the Project. It will be completed on an iterative basis by the Principal Contractor (PC) as the Project progresses through detailed design and will be used to agree the final TTM measures for implementation during the construction of the Project.”</p> <p>The TTM proposals are therefore indicative, and therefore the CTMP will be updated once final TTM measures have been agreed. Figure 11-1 of the Transport Assessment (APP-236) shows that Scenario C will be in place for 365 days, and scenario D will also be in place of 365 days.</p> | <p>We would like to discuss this further to understand what the potential changes are in Barnard Castle and up to what level of traffic change.</p> <p>There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle.</p> | <p>MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP</p> | <p>File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP</p> | <p>Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved.</p> |                      |

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|  |                         | <p>then the project team will consider if any adjustments can be made to the TTM (Temporary Traffic Management) with the aim of reducing the delays.”</p> <p>Annex B13 of the Environmental Management Plan (EMP) (Document Reference 2.7, APP-033) provides an extended essay plan for the Construction Traffic Management Plan (CTMP) for the Project. It will be completed on an iterative basis by the Principal Contractor (PC) as the Project progresses through detailed design and will set out the proposed Temporary Traffic Management (TTM) measures for implementation during the construction of the Project. Major local businesses and other stakeholders that are likely to be impacted by the proposed traffic management will also be consulted regarding this CTMP. This will ensure that a comprehensive, detailed Traffic Management Plan is available and understood by all parties prior to commencing the works on site.</p> <p>The CTMP will be developed to ensure that the following key objectives are considered and addressed:</p> <ul style="list-style-type: none"> <li>• Safety of the travelling public, non-motorised users and roadworkers to ensure that no person is injured either working within or travelling through the site on the strategic road network</li> <li>• Clarity of temporary traffic management schemes to ensure that the CTMP is</li> </ul> |                         |                               |                         |  |  |                          |                      |

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|----|--|--|--|--|---|---|--|--------------------------|--|
|    |  | <p>built around the customers and stakeholders</p> <ul style="list-style-type: none"> <li>• Minimising delays to travellers on both trunk and local roads</li> <li>• Meeting the needs of the relevant Local Highway</li> <li>• Authorities</li> <li>• Addressing the needs of key local stakeholders</li> <li>• Maintaining adequate access for the emergency services and all affected properties during the construction works</li> </ul> |  |  |   |   |  |                          |  |
| 30 | <p><b>Following a review of Figure 11-1 in Chapter 3.7 Transport Assessment, it would appear that some of the construction phase scenarios will have similarities. It should be confirmed in the Air Quality Chapter how long the construction phase as a whole will be in areas of DCC and evidence provided as to how this has informed the screening and ARN determination.</b></p> | <p>Transport Assessment (Document Reference 3.7, APP-236) Figure 11-1 sets out the indicative construction programme per scheme, with works around Bowes and then Rokeby and Cross Lanes Junction being Scheme 7 and 8 respectively, showing two-year construction programmes. All worst-case construction traffic movements were reviewed against DMRB LA105 criteria and included in the ARN where the criteria were triggered.</p>        | <p>Statement against item 29 above does not correlate to the statement that all worst case construction traffic movement were reviewed. Worst-case construction traffic movements have not been assessed according to Point 29. Clarification is required.</p> | <p>Peak construction vehicle movements occur in 2025 and have been used as a basis for the assessment. Construction traffic flows have been modelled using 2024 emissions data. Therefore we have used the largest forecast traffic flows (2025) during the construction period together with the worst-case vehicle emission factors (2024) to represent a conservative assessment.</p> | <p>There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the</p> | <p>MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP</p> | <p>File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP</p> |                          | <p>Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved.</p> |

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|----|---|--|---|---|---|--|---|--------------------------|--|
|    |   |  |   |   | further assessment at Barnard Castle.   |  |   |                          |  |
| 31 | A particular concern is noted to be if construction-related vehicles affected or diverted local traffic within locations with sensitive receptors close to the routes for the compounds approaching the AQO. As noted in EMP Annex B13 Construction Traffic Management Plan (Application Document 2.7), the Construction Traffic Management Plan to be developed by the appointed contractor will ensure construction vehicles avoid these areas. | Duly noted, the CTMP will be developed by the appointed contractor to ensure construction vehicles avoid areas where there are sensitive receptors close to routes used by construction traffic and air pollutant levels are approaching their respective AQOs | Considering the points made in relation to a suitable air quality baseline having not been achieved, it is not likely that the appointed contractor will be able to develop the CTMP. Will the A67 route through Barnard Castle be avoided as a construction traffic route? | The Environmental Management Plan (Document reference 2.7, APP-019) (EMP) has been developed with the intent to control construction impacts and sets out controls required to be implemented in the construction phase. Annex B13 Construction Traffic Management Plan (Document 2.7, APP-033) sets out the essay plan for a Construction Traffic Management Plan (CTMP) that must be developed]. This essay plan includes the key stakeholders to be engaged within the development of the final Construction Traffic Management Plan (section B13.2.1) and includes Durham County Council. The EMP, confirms that a detailed CTMP is subject to consultation with the local planning and highway authorities (in accordance with the consultation provisions also provided within the EMP). The CTMP must then be approved by the Secretary of State as part of a 2nd iteration EMP prior to the start of works (see article 53 of the draft DCO (Document Reference 5.1, APP-285) and paragraph 1.4.11 of the EMP). These are legally enforceable requirements. | The Applicant does not appear to have answered the query made on 24.11.2022. Considering the points made in relation to a suitable air quality baseline having not been achieved, it is not likely that the appointed contractor will be able to develop the CTMP. There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle. | MS explained that modelling was on worst case without mitigation and does not include for diversions – will be addressed through CTMP to mitigate impacts – AECOM would like further session to understand how mitigation/ scenarios are linked in terms of the EMP and contractor commitments re CTMP | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP |                          | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |

|    | DCC response 31.08.2022  | Applicant response 16.11.2022  | DCC response 24.11.2022  | Applicant response 15.01.2023  | DCC response 20.01.2023  | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23  | Update from 26.04.23 |
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| 33 | Of the three designated habitats presented within Figure 5.3 in DCC, only one (Rokeby Park and Mortham Wood (ERIC LWS)) is reported on, however it would appear that transect receptor points have not been modelled. This does not align with the requirements of LA 105 guidance. At the distance of 7.5m from the road edge, there is a 24% increase in nitrogen deposition compared to the critical load for this site. Chapter 5 Air Quality does not reference this site in the discussion, although there may be an error in Paragraph 5.10.17 which refers to Lightwater Alluvial Forest part of the River Eden and Tributaries SSSI, located outside of DCC. This should be checked and confirmed. Chapter 6 of the ES Biodiversity is however noted by Chapter 5 Air Quality to conclude that there will be no likely significant effects at designated habitat sites. | There does appear to be a drafting error in the Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048) Paragraph 5.10.17, where Rokeby Park LWS should have been referenced with a change of 24% against the critical load of 10, with a change in 2.4 kg N/ha/yr. No further transect receptor locations have been included as the predicted change in annual mean NOx at these locations is considered to be imperceptible (<0.3µg/m3), in-line with DMRB LA105., in-line with DMRB LA105. | Error noted by applicant. The current version of DMRB LA 105 guidance does not require the consideration of annual mean NOx and annual mean NOx concentrations should not be used to screen whether or not impacts on designated ecological site are included in any air quality assessment, or not. | The drafting error in Chapter 5 of the Environmental Statement has been accepted and a report revision is being prepared which does not alter the overall conclusions presented in Chapter 5 of the Environmental Statement.<br><br>It is important to recognise the limitations of models and to use the outputs appropriately. For example, DMRB LA 105 section 2.90 sets out that no likely significant air quality effects shall occur where the "difference in concentrations is imperceptible i.e., less than 1% of the air quality threshold (e.g., 0.4µg/m3 or less for annual mean NO2)" based on uncertainties in modelling. This approach is used by the Environment Agency and also the Institute of Air Quality Management in their respective air quality guidance<br><br>In the same way, changes of less than 1% of the NOx critical level (30µg/m³ - therefore the criterion is 0.3µg/m³) were considered to be imperceptible and not considered further in the assessment. This approach is consistent with all NH projects. | It is suggested here that other clarification points we have requested input to within this table, also be taken into account in the report revision.<br><br>It is agreed that for the public exposure / human health element, that percentage change in ambient concentrations are appropriate to be used to determine significance. However for ecosystems, this process should be based on changes in nitrogen deposition rather than NOx. If this has been misunderstood by the Applicant's consultant, it is suggested that the air quality impact assessment on ecosystems be revisited. | AA to write to DCC to confirm that guidance being updated to reflect the approach being taken – explanation in PPT of issue. | Information has been shared and AECOM have confirmed this issue is now considered closed. | Confirm resolved.<br><br>Additional information provided in relation to the approach taken for the ecological assessment and understanding the NOx approach taken in the air quality impact assessment on designated ecological sites, and reviewed. This is considered to be resolved. |                      |
| 34 | Graham's Gill Jack-Wood Ancient Woodland and Steven Band Road Verge (NEYEDC LWS) do not have receptor points or transects marked on Figure 5.3, nor results reported in Table-8. Reasons for not reporting impacts on these two designated habitats should be provided.  | The impacts at these receptors have not been reported or illustrated as the predicted change in annual mean NOx at these locations is considered to be imperceptible (<0.3µg/m3), in-line with DMRB LA105. This approach is set out in sections 5.5.7 to 5.5.9 of Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048).  | The current version of DMRB LA 105 guidance does not require the consideration of annual mean NOx and annual mean NOx concentrations should not be used to screen whether or not impacts on designated ecological site are included in any air quality assessment, or not.                           |  | No response provided by the Applicant for this point. This is requested.   | AA to write to DCC to confirm that guidance being updated to reflect the approach being taken – explanation in PPT of issue. | Information has been shared and AECOM have confirmed this issue is now considered closed. | Confirm resolved.<br><br>Additional information provided in relation to the approach taken for the ecological assessment and understanding the NOx approach taken in the air quality impact assessment on designated ecological sites. This is considered to be resolved.               |                      |

|                                     | DCC response 31.08.2022   | Applicant response 16.11.2022   | DCC response 24.11.2022  | Applicant response 15.01.2023  | DCC response 20.01.2023   | Resolved at Update Session 10.02.23 / Comments   | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23  | Update from 26.04.23  |
|-------------------------------------|---|---|--|--|---|--|---|---|---|
| <b>Operational phase assessment</b> |   |   |  |  |   |  |   |   |   |
| 40                                  | It is not clear whether AADT has been used for the operational phase assessment, or whether traffic data provided was split by the four periods required by LA 105 at detailing air quality assessment stage of morning (AM), inter peak, evening peak (PM) and overnight period (OP). This should be clarified and if AADT has been used, reasons provided as to why this is considered acceptable and any limitations associated with this method choice. | Consistent with the guidance in DMRB LA105, a proportionate approach was taken to the speed pivoting process. AADT was used in the operational phase assessment because, as noted in the guidance, the possibility of exceedances of air quality thresholds was considered to be low. This is reflected in the assessment's findings. | Methodological point that period flows have not been used based on unlikely exceedances of AQOs. Considering the above points made in relation to the absence of a reliable air quality baseline, this may require revisiting. | The modelled concentrations are below the air quality objectives at human receptor locations across the ARN. Modelling undertaken is considered robust and demonstrates no significant effects, when judged against DMRB LA105 standards. Model set up or adjustment of results would not alter conclusions for air quality as the risk of exceeding air quality objectives is negligible. | This point is understood to rely on the outcome of the assessment at Barnard Castle. There are a number of points within the SoCG regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle. | AA view that due to existing baseline, lack of sensitive receptors didn't warrant reviewing Inter-peak data. | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP |   | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |
| 45                                  | Paragraph 5.5.7 of the Air Quality Chapter states: "It is important to recognise the limitations of models and to use the outputs appropriately. For instance traffic flows of less than a 1,000 AADT are not used in assessment as they are  | The AADT change criterion is taken from Note 2, section 2.1 in DMRB LA105. The NO2 change criterion is also quoted from section 2.90, item 2 in DMRB LA105. For NOX, the Environment Agency2 and the Institute of Air   | The current version of DMRB LA 105 guidance does not require the consideration of annual mean NOx and annual mean NOx concentrations should not be used to   | It is important to recognise the limitations of models and to use the outputs appropriately. For example, DMRB LA 105 section 2.90 sets out that no likely significant air quality effects shall occur where the "difference in concentrations is imperceptible i.e., less than 1% of the air  | It is agreed that for the public exposure / human health element, that percentage change in ambient concentrations are appropriate to be used to determine significance. However  | As above points on NOx   | Information has been shared and AECOM have confirmed this issue is now considered closed.   | Confirm resolved. Additional information provided in relation to the approach taken for the ecological assessment and understanding the |   |



|    | DCC response 31.08.2022   | Applicant response 16.11.2022  | DCC response 24.11.2022   | Applicant response 15.01.2023  | DCC response 20.01.2023   | Resolved at Update Session 10.02.23 / Comments                     | Resolved at Update Session 28.02.23 / Comments  | Update from DCC 06.04.23  | Update from 26.04.23  |
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|    | below the confidence that can be attributed to a traffic model. In the same way that changes of less than 1% of the AQO for NO <sub>2</sub> (40 µg/m <sup>3</sup> - therefore the criterion is 0.4µg/m <sup>3</sup> ) and NO <sub>X</sub> (30 µg/m <sup>3</sup> - therefore the criterion is 0.3µg/m <sup>3</sup> ) are considered to imperceptible and not considered further in assessment." This should be expanded on with further explanation.         | Quality Management <sup>3</sup> use an identical air pollutant change criterion approach in their respective guidance to determine perceptibility and the need for further assessment. | screen whether or not impacts on designated ecological site are included in any air quality assessment, or not.   | quality threshold (e.g., 0.4µg/m <sup>3</sup> or less for annual mean NO <sub>2</sub> )" based on uncertainties in modelling. This approach is used by the Environment Agency and also the Institute of Air Quality Management in their respective air quality guidance. In the same way, changes of less than 1% of the NO <sub>X</sub> critical level (30µg/m <sup>3</sup> - therefore the criterion is 0.3µg/m <sup>3</sup> ) were considered to be imperceptible and not considered further in the assessment. This approach is consistent with all NH projects.   | for ecosystems, this process should be based on changes in nitrogen deposition rather than NO <sub>X</sub> . If this has been misunderstood by the Applicant's consultant, it is suggested that the air quality impact assessment on ecosystems be revisited. |  |   | NO <sub>X</sub> approach taken in the air quality impact assessment on designated ecological sites. This is considered to be resolved.  |   |
| 49 | There are no human health sensitive receptors selected and modelled for each ARN link within DCC; this would have provided an understanding of impact of each ARN link. For example, the B6277 is a section of ARN within DCC and a residential property north of Thorsgill Beck has not been included in the dispersion modelling. Receptors are noted by the chapter to have been selected to represent the scale of impacts associated with the project. | Reviewer statement, no response required.  | We would have expected to see more receptors than included in the assessment as per LA 105. For example, the B6277 is a section of ARN within DCC and a residential property north of Thorsgill Beck has not been included in the dispersion modelling. At least one receptor per ARN link is requested to be included to ensure the air quality impact is robustly assessed. | The receptors selected in the air quality assessment were identified based on the ARN and provide representative exposure of potential worst-case impacts. For a project of this scale, it was simply not possible (nor indeed necessary given the existing baseline conditions) to provide a receptor assessment on every individual link in the ARN. The modelled concentrations across the network are well below the air quality objectives at human receptor locations across the ARN and the modelling undertaken is considered robust and demonstrates no significant effects, when judged against DMRB LA105 standards. The addition of new receptors would not alter conclusions for air quality as the risk of exceeding air quality objectives is negligible. | This point relies on the assumption that baseline air quality is well below air quality objections and is therefore understood to rely on the outcome of the assessment at Barnard Castle.  | North of the County Bridge at Barnard Castle point raised by AECOM | File Note will be prepared by AmeyArup to set out the approach taken to assessing the air quality impact from the traffic data provided as well as a breakdown on how the EMP and CTMP will be undertaken post DCO approval. AECOM and DCC will undertake a parallel review of the EMP and CTMP | Confirm resolved for operational air quality.<br><br>Additional assessment submitted at Deadline 3 at The Sills has been reviewed. This item is resolved for operational air quality in The Sills, as traffic changes are predicted to be lower than DMRB criteria. However, as set out in Item 1, concern remains for the construction phase at The Sills. | Amends to EMP suggested by DCC 26.04.23 to resolve matters. Confirm resolved. |
| 50 | The greatest air quality constraint from the scheme at the PEIR stage related to impacts on nature conservation sites, where there were potential concerns and risk of significant effects with nitrogen deposition and ammonia concentrations. This was noted to be considered in greater detail within the ES. Ammonia was requested to be  | Reviewer statement, no response required.  | Ammonia results at each receptor not presented and are requested to be.   | A call was held between National Highways and Natural England on Thursday 8th December A summary of the ammonia assessment will be set out in the Natural England Statement of Common Ground (SoCG).   | The document does not yet appear to be available. It is understood that this will be considered further.  | Ammonia technical note   | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of   | Ammonia (NH <sub>3</sub> ) note shared has been reviewed as part of Item 4 above and is now considered resolved.  |   |

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|    | included at scoping stage however ammonia results at each receptor are not presented. It is noted in Paragraph 5.2.3.20 of Appendix 5.2 Air Quality Assessment Methodology that the National Highways tool has been used to account for ammonia emissions impact on deposited nitrogen.   |   |   |  |   |  | the technical note.   |   |  |
| 51 | There are nine designated ecological sites (Rokeby Park and Mortham Wood (ERIC LWS), Graham's Gill Jack-Wood Ancient Woodland, Steven Band Road Verge (NEYEDC LWS), Bowes Moor SSSI, North Pennine Moors SPA and SAC, Mill Wood Ancient Woodland, Thorsgill Wood Ancient Woodland) plus a number of Ancient Trees within 200m of the ARN within DCC, with reference to Figure 5.4. Results are not presented for all of these sites in Appendix 5.4, or transect locations shown in Figure 5.4. | Transect locations are shown in Environmental Statement Figure 5.1: Cumulative Zones of Influence (Document Reference 3.3, APP-144). Results are only presented where the predicted change in NOx exceeds 0.3µg/m3 (1% of the critical load). This is noted on all the sheets within Environmental Statement Figure 5.4: Air Quality Operational Phase Assessment (Document 3.3, APP-068). The reasoning is given in sections 5.5.7 to 5.5.9 of Environmental Statement Chapter 5: Air Quality (Document Reference 3.2, APP-048). | The current version of DMRB LA 105 guidance does not require the consideration of NOx and annual mean NOx concentrations should not be used to screen whether or not impacts on designated ecological sites are included in any air quality assessment, or not. | It is important to recognise the limitations of models and to use the outputs appropriately. For example, DMRB LA 105 section 2.90 sets out that no likely significant air quality effects shall occur where the "difference in concentrations is imperceptible i.e., less than 1% of the air quality threshold (e.g., 0.4µg/m3 or less for annual mean NO2)" based on uncertainties in modelling. This approach is used by the Environment Agency and also the Institute of Air Quality Management in their respective air quality guidance. In the same way, changes of less than 1% of the NOx critical level (30µg/m3 - therefore the criterion is 0.3µg/m3) were considered to be imperceptible and not considered further in the assessment. This approach is consistent with all NH projects. | It is agreed that for the public exposure / human health element, that percentage change in ambient concentrations are appropriate to be used to determine significance. However for ecosystems, this process should be based on changes in nitrogen deposition rather than NOx. If this has been misunderstood by the Applicant's consultant, it is suggested that the air quality impact assessment on ecosystems be revisited. | Ammonia technical note                         | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 February 2023. Further meeting will take place in March to discuss the contents of the technical note. | Confirm resolved.<br><br>Additional information provided in relation to the approach taken for the ecological assessment and understanding the NOx approach taken in the air quality impact assessment on designated ecological sites. This is considered to be resolved.                         |  |
| 53 | <b>Given the poor RMSE derived from the verification exercise, discussion should be provided on how robust and reliable the results presented are, particularly in light of the impacts to designated ecological sites.</b>   | Please refer to the response to item 14 (above).  | See response in above points.   | The modelled concentrations are well below the air quality objectives at human receptor locations across the ARN. The modelling carried out is robust and has demonstrated that there is no potential for adverse likely significant effects, following the DMRB LA105 standards- as set out in Chapter 5 of the Environment Statement (ES). Whilst the RMSE value is noted as being above the desired values in Defra TG(16 and 22), monitoring data for the Project is limited. Outside of the Eden DC area, the data are even more  | It is noted that many of the methodological decisions made appear to have been scoped as such based upon reliance on the existing air quality baseline and comparison to the air quality objectives set for human health. This is not considered an appropriate methodology for ecological sites. In addition to this, there are a number of points within the SoCG   | As above covered by validation exercise.       | A technical note has been issued to DCC and their Consultants on 24 February 2023 which was discussed at the meeting of 28 Feb 2023. Further meeting will take place in March to discuss the contents of the technical note.      | Confirmed resolved. Additional verification information shared has been reviewed. This item is considered to be resolved, as whilst there are limitations within the method they are not considered significant for the operational study area. However, there remain concerns that at The Sills, | Amends to EMP suggested by DCC 26.04.23 to resolve matters.<br><br>Confirm resolved. |

|  | DCC response 31.08.2022 | Applicant response 16.11.2022 | DCC response 24.11.2022 | Applicant response 15.01.2023   | DCC response 20.01.2023  | Resolved at Update Session 10.02.23 / Comments | Resolved at Update Session 28.02.23 / Comments | Update from DCC 06.04.23   | Update from 26.04.23 |
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|  |                         |                               |                         | <p>limited. Only one monitoring site in the Richmond DC area was considered appropriate for verification purposes. In-line with TG(16 and 22) the model parameters were reviewed multiple times as part of the model verification, to no avail. So as to include at least one site on the A66 in Richmond DC, the adjustments were made accordingly,</p> <p>Having considered the comment, the points made regarding the model set up or alternative adjustment of results would not alter the assessment of potential air quality impacts on r sites as described in the in the Environmental Statement (ES) Chapter 6 Biodiversity (Document Reference 3.2, APP-049) and the Habitats Regulations Assessment (HRA) Stage 2 Statement to Inform Appropriate Assessment (Application Document 3.6 APP-235).</p> | <p>regarding the robustness of the air quality assessment undertaken, to include baseline characterisation, model assumptions and limitations for both construction and operational phases, the RMSE and predicted pollutant concentrations and impacts at receptors in DCC. The assessment undertaken is not considered robust or to have taken a reasonable worst case approach, however it is acknowledged that existing baseline air quality may be good within the study area. This is subject to further air quality work undertaking the additional assessment within Barnard Castle, and further discussion between DCC and the Applicant is requested to simplify communications. Suggestion that this point is revisited after this discussion and the further assessment at Barnard Castle.</p> |  |  | <p>between the Barnard Castle Bridge and Bowes Road, air quality is not well understood, which is relevant for the construction phase.</p> |                      |