A66 Northern Trans-Pennine Project

TR010062

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

16 December 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A66 Northern Trans-Pennine Project Development Consent Order 202x

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case)

Planning Inspectorate Scheme Reference	TR010062
Application Document Reference	NH/EX/7.2
Author:	A66 Northern Trans-Pennine Project Team, National Highways

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Rev 1	16/12/2022	Deadline 1

CONTENTS

1. Introduction

1.1 This document sets out the post hearing submissions and summarises the oral submissions made by National Highways (the "**Applicant**") at Issue Specific Hearing 1 ("**ISH1**") dealing with alternative route options, held on 30 November 2022 in relation to the Applicant's application for development consent for the A66 Northern Trans-Pennine Project (the "**Project**").

1.2 ISH1 was attended by the Examining Authority (the "**ExA**") and the Applicant, together with a number of Interested Parties.

1.3 Where the ExA requested additional information from the Applicant on particular matters, or the Applicant undertook to provide additional information during the hearing, the Applicant's response is set out in or appended to this document.

1.4 This document does not purport to summarise the oral submissions of parties other than the Applicant, and summaries of submissions made by other parties are only included where necessary in order to give context to the Applicant's submissions in response.

1.5 The structure of this document generally follows the order of items as they were dealt with at ISH1 set out against the detailed agenda items published by the ExA on 22 November 2022 (the "**Agenda**"). Numbered items referred to are references to the numbered items in the Agenda. Where post hearing notes have been added such notes are prefixed with "Post Hearing Note" for clarity.

2. Written summary of the applicant's oral submissions

<table>
<tr><th colspan="2">2.0 Alternative Route Options</th></tr>
<tr><th><u>Agenda Item</u></th><th><u>The Applicant's Response</u></th></tr>
<tr><td>Alternative Route Options</td><td>
Post Hearing Note: <u>Project Objectives</u>
The Applicant considers that it would assist to provide a summary of the Project Objectives that were referred to throughout ISH1 and within this document.
As outlined in the introductory sections of the Project Development Overview Report [Document Reference 4.1, APP-244], the development of the A66 Northern Trans-Pennine Project has been informed by knowledge of environmental, engineering and traffic constraints along the corridor, environmental appraisal of emerging design proposals, and incorporation of feedback from consultation and engagement with landowners and stakeholders. Central to this development throughout have been the Project Objectives, as shown in the table below (and outlined at paragraph 2.1.1 of the Project Development Overview Report).
<table>
<tr><th>Theme</th><th>Project objectives</th></tr>
<tr><td rowspan="10">Economic
Transport
Community
Environment</td><td>Regional: support the economic growth objectives of the Northern Powerhouse and Government levelling up agenda.</td></tr>
<tr><td>Ensure the improvement and long-term development of the Strategic Road Network (SRN) through providing better national connectivity including freight.</td></tr>
<tr><td>Maintain and improve access for tourism served by the A66.</td></tr>
<tr><td>Seek to improve access to services and jobs for local road users and the local community.</td></tr>
<tr><td>Improve road safety, during construction, operation and maintenance for all, including road users, walkers, cyclists and horse-riders (WCH), road workers, local businesses and local residents.</td></tr>
<tr><td>Improve journey time reliability for road users.</td></tr>
<tr><td>Improve and promote the A66 as a strategic connection for all traffic and users.</td></tr>
<tr><td>Improve the resilience of the route to the impact of events such as incidents, roadworks and severe weather events.</td></tr>
<tr><td>Seek to improve WCH provision along the route.</td></tr>
<tr><td>Reduce the impact of the route on severance for local communities.</td></tr>
<tr><td>Minimise adverse impacts on the environment and where practicable optimise environmental improvement opportunities.</td></tr>
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	*These route-wide Project Objectives were set following feasibility studies and input from a Stakeholder Reference Group, established to support development of the Project and identify corridor-level issues and problems (for further details of the Stakeholder Reference Group refer to Paragraph 2.3.4 and Annex 7.1 of Business Case A66 Schemes [Document Reference 4.1, APP-250]). Section 3.3. of the Project Development Overview Report outlines this process, with reference to the Northern Trans-Pennine Routes Strategic Study ("**NTPRSS**") reports [Document Reference 4.1, APP-248 and APP-249]. The NTPRSS sought to identify the strategic case for improvements to Trans-Pennine transport corridors, including the A66 route between Penrith and Scotch Corner.* *The resulting objectives demonstrate the importance of the A66 route as a national and strategic link for communities and freight and align with wider connectivity aspirations such as those held by organisations including Transport for the North. They also reflect recommendations from the Northern Powerhouse Independent Economic Review to support transformational economic growth across the Northern Region. From a community perspective, they highlight issues raised by the Stakeholder Reference Group around reliability, resilience, and safety of the route.* *As the A66 Northern Trans-Pennine project has progressed, these objectives have remained constant and have shaped route selection, design and development throughout each of its key stages.* *<u>Optioneering process</u>* *For wider context of the optioneering process as outlined in relation to specific Schemes at ISH1 and in this document, section 3 of the Project Development Overview Report provides a summary of the previous route option assessments carried out for the Project. The design development process is set out in more detail in section 4 with the specific design development of individual Schemes outlined in section 5. Also, of relevance to the wider optioneering process are the appendices to the Project Development Overview Report:* • *[Document Reference 4.1, APP-245] Appendix 1- A66 Northern Trans-Pennine Project Technical Appraisal Report* • *[Document Reference 4.1, APP-246] Appendix 2 - A66 Northern Trans-Pennine Project Scheme Assessment Report* • *[Document Reference 4.1, APP-247] Appendix 3 - A66 Northern Trans-Pennine Project Route Development Report* • *[Document Reference 4.1, APP-248] Appendix 4 - Northern Trans-Pennine Routes Strategic Study Stage 1 Report* • *[Document Reference 4.1, APP-249] Appendix 5 - Northern Trans-Pennine Routes Strategic Study Stage 3 Report* • *[Document Reference 4.1, APP-250] Appendix 6 - Highways England Business Case A66 Schemes*

	• *[Document Reference 4.1, APP-251] Appendix 7 - Highways England Business Case A69 Schemes* *The context of such documents is outlined in sections 1.1.5, 3.3.5, 3.3.22 and 3.3.24 of the Project Development Overview Report [Document Reference 4.1, APP-247].*
2.1 Scheme 08 (Cross Lanes to Rokeby)	
Agenda Item	**The Applicant's Response**
Traffic related ***The ExA will seek clarification on the actual increases in traffic on B6277, The Sills from the proposed development in comparison with the "Blue Option". This will involve asking the Applicant the following:*** • ***Confirm the "do minimum" against "do-something" modelled levels associated with both options and confirm difference in traffic flow;*** • ***Confirm that modelled flows have been verified by traffic counts on the B6277;*** • ***Identify the existing baseline traffic levels on the B6277; and*** • ***Identify and assess any specific harm from the proposed development resulting from the predicted 53% traffic increase on the section of the B6277 that is The Sills.***	**Modelled levels** In response to the **ExA's** query regarding the modelled levels associated with the Blue Option and the Black Option, **Joel Semakula,** counsel for the Applicant**,** outlined that the modelled levels associated with the options appear in two places within the application documents. Model One is found in paragraph 5.8.53 of the Project Development Overview Report [Document Reference 4.1, APP-247]. For Model Two, the Black Option appears at Table 3-1 of the Statement of Common Ground ("**SoCG**") with Durham County Council ("**DCC**") [Document Reference 4.5, APP-278], whereas the Blue Option is located within DCC's Relevant Representation [Document Reference 3.3, RR-073] which is where the comparison between the two options arises. **Matthew Sinnett,** Traffic specialist of Arup on behalf of the Applicant, explained that the Black and Blue Options, which were analysed using a 2015 traffic model, were presented at Statutory Consultation. Directing the ExA to Table 3-1 in the DCC SoCG, **Mr Sinnett** explained that within the first column of numbers, the 'Do Minimum' flow for the Black Option on the Sills is 1,165 vehicles per day, compared to the 'Do Something' flow of 1,645 vehicles per day. In order to consider the flow of the Blue Option which corresponds to this, it is necessary to consider DCC's Relevant Representation. **Mr Sinnett** quoted the first paragraph of page 2 to Appendix 1 of the representation which states that the Blue Option would see an increase of 397 vehicles per day, a 34% increase over the Do Minimum scenario. This would give a Blue Option total of 1,562 vehicles in the Do Something scenario and therefore the difference within this model between Black and Blue Options is 83 vehicles per day. **Mr Sinnett** then referenced Table 8-6 of the Transport Assessment [Document Reference 3.7, APP-236], which refers to the impact of the Black Option only. He confirmed that the transport model was updated in preparation for the DCO submission to ensure that it is based on up-to-date information with the overall baseline data within the whole model updated from a 2015 base year to a 2019 base year. He explained that for the Black Option, comparing the Do Minimum flow to the Do Something flow results in an increase of 524 vehicles across the day, which is what DCC referred to in its Relevant Representation. **Mr Sinnett** clarified that from a National Highways perspective, 'Do Minimum' essentially means 'do nothing' in practice, in that it does not take account of minimal intervention and considers the 'without project' scenario.

	The **ExA** asked for clarification as to whether the current model on the 2019 base year gives a comparison between the Black and Blue Options. **Mr Sinnett** confirmed that the Transport Assessment which is based on the 2019 model would only consider the Black option. The Applicant therefore agreed to provide a comparison of the Blue and Black Option modelling for Deadline 1. Such modelling can be found in a technical note at 0 to this document. Baseline In respect of the existing baseline traffic levels on the B6277, **Mr Sinnett** confirmed that the baseline traffic identified within paragraph 5.8.53 of the Project Development Overview Report [Document Reference 4.1, APP-247] is 245 vehicles (two-way daily flow) – that is the modelled 2015 flow. The refined model for 2019 is shown in Table 8-6 of the Transport Assessment. Whilst the baseline has not been included within the Transport Assessment for the refined model, **Mr Sinnett** confirmed that it is 767 vehicles per day. This change in flow comes as a result of the more detailed work undertaken, such that the model was refined in this area for it to better represent the existing road network. **Traffic count verification** **Mr Sinnett** confirmed that in 2017 there was a traffic count undertaken on the B6277 adjacent to the A66 to verify the model. **Environmental analysis** In response to queries raised by the **ExA** about the environmental implications of 53% more vehicles on the Sills daily, the Applicant agreed to consider and look at a complementary 'finer grained' environmental consideration at this location and to report referencing the Institute of Environmental Management and Assessment approach at this local level on factors such as pedestrian fear and intimidation, severance, etc. A summary of the scope of this local level consideration is provided at **Error! Reference source not found.** to this document. The Applicant will submit the local level consideration and report to the examination for Deadline 3. Queries were raised by Interested Parties, the HGV Action Group and Howard Charlesworth in respect of the extent to which there will be a reduction in the amount of traffic through Barnard Castle, as they considered that joining the A66 or A67 would require driving through the area. In response, **Mr Sinnett** clarified that the reduction in flow in Barnard Castle is cited within paragraph 8.1.28 and paragraph 8.1.29 of Chapter 8 of the Transport Assessment [Document Reference, 3.7, APP-236]. As a result of the improvements to the A66, journey times become shorter. This would attract East-West traffic on the A67 which would therefore move onto the A66, leading to an overall reduction in traffic in Barnard Castle. In relation to the Sills, **Mr Semakula** concluded by explaining that although there is expected to be a 53% daily increase of vehicles, the Sills has a low reporting of accidents. He noted that the Applicant is aware of

	the recent incident which occurred on the road as raised at the Open Floor Hearing held on 29 November 2022, and expressed regret that any such incident should occur and concern for those involved. There is an expectation that the increase in traffic would start at a low base, on what is generally considered to be a safe road. More importantly to the Project, improved road safety is a key concern on the A66 itself (and a Project Objective) and taking the 53% increase in context, the impact is not expected to be as great as the percentage suggests. While the Applicant understands the physical constraints on the Sills, there are a number of balancing benefits which need to be taken into account. In response to a query from the ExA, **Mr Semakula** confirmed that the 53% increase in traffic is not an objective of the Project but is an effect of it.
Applicant to briefly set out its route option selection process for Scheme 08 having specific regard to the "Blue Option". Applicant to have available to display Figures 24, 25 and 26 (displayed elsewhere in other documents) from page 4.1-100 of the Project Development Overview Report [APP-244] to aid the discussion.	**Frank Molloy** of Arup on behalf of the Applicant, provided an explanation as to the route selection process for Scheme 08 (Cross Lanes to Rokeby) including why the Black Option was chosen instead of the Blue Option with reference to Figures 24, 25 and 26 from page 4.1-100 of the Project Development Overview Report [Document Reference 4.1, APP-244]. The junction option development is outlined within the Route Development Report [Document Reference 4.1, APP-247], from paragraph 5.8.20 through to 5.8.51. This describes the design development of baseline options and alternatives at Cross Lanes and Rokeby. **Mr Molloy** explained that the Black Option considered western junctions at Cross Lanes and Rokeby. The Red Option considered an eastern junction at both locations and the Blue Option considered a western junction option at Cross Lane and an eastern junction option at Rokeby. In evaluating a junction at Cross Lanes, the considerations were based on the location and included an assessment of safety, potential impacts on local business and the sensitivity of traffic on the local network. Stakeholder feedback was also taken into account from community liaison groups, DCC and landowners. This led to the development of two options at Cross Lanes. The Applicant received feedback on the Red Option that it did not address the local traffic movement in the area, nor did it remove a key safety issue regarding the at-grade movement between the B6277 Moorhouse Lane and Rutherford Lane. It was also perceived to have a negative impact on local businesses. This led to the development of the western junction visible in the Blue and Black Options, which provides more direct access, and removes the safety issue. This was favoured by the local businesses and by DCC as a more direct connection for communities to the south. In relation to Rokeby, the preferred route announcement ("**PRA**") indicated a junction location to the west of St Mary's Church. Significant feedback was received following the PRA that the Applicant should be considering a junction option closer to the existing Rokeby location. Through analysis, it was concluded that it was prudent to sift this possibility against a western junction at Rokeby. This was developed in consultation with residents and stakeholders. This information was presented at an information event in August 2021, at Barnard Castle.

	Following this, the junction locations were sifted to come to a preferred location for Cross Lanes and Rokeby. At Cross Lanes, the western option was favoured primarily due to the safety benefits, alongside the walking, cycling and horse-riding advantages, and the reduced impact on local businesses. At Rokeby, the principal consideration for the eastern junction was the fragmentation of the Rokeby Park Registered Park and Gardens ("**RPG**") ("**Rokeby Park RPG**") heritage asset, so the eastern option was discounted on this basis. The western junction was therefore taken forward represented by the Black Option.
Heritage ***Applicant and Historic England to clarify the effect of the proposed development on Rokeby Park RPG and why the "Blue Option" was not taken forward.***	In relation to Rokeby Park RPG, **Mr Semakula** explained that the effect of the proposed development on Rokeby Park RPG is set out in Appendix 8.10 (Impact Assessment Tables) of the Environmental Statement [Document Reference 3.4, APP-187] with the assessment of significant effects being at section 8.9.38-39 of Chapter 8 of the Environmental Statement [Document Reference 3.2, APP-051]. **David Lakin,** Heritage expert of Arup, on behalf of the Applicant**,** explained that there would be minor adverse effects on the setting of the Rokeby Park RPG caused by the construction and the permanent placement of the Project. Mr Lakin stated that insofar as temporary effects, construction activities would occur within the setting of the resource, including moving plant, lighting and noise which would be visible from multiple points within the RPG. Construction activity within the wider setting of the parkland would be visible from a number of points within the parkland, but these are limited to a small number of sightlines from within the park and the area along its boundary with the A66 corridor. This would temporarily alter the character of the setting, which is of the rural estate landscape, increasing its busyness. The impact would be somewhat limited by the fact that, from the majority of the parkland, the works would be occurring within views of the existing road corridor. **Mr Lakin** explained that the permanent effects relate to changes to some of the views from the park towards estate farmland, which forms a hinterland to the designed estate. Both of these effects introduce change into the vicinity of the asset but do not significantly affect the value of the asset. The **ExA** queried whether an assessment in relation to paragraph 5.131 of the National Policy Statement for National Networks ("**NNNPS**") was undertaken and sought to understand the optioneering process that took place. **Mr Semakula** explained that the primary tool for discounting the Blue Option was the sifting assessment. He directed the ExA to paragraphs 5.7.33 to 5.7.35 within the Project Development Overview Report [Document Reference 4.1, APP-244] and paragraphs 5.8.79, 5.8.87 and 5.8.92 to 5.8.93 of the Route Development Report [Document Reference 4.1, APP-247], which explain the principal considerations and contain a sifting matrix summary. To assess potential harm and the difference between the Black and Blue Options, **Mark Smith,** Policy expert of Arup on behalf of the Applicant, explained that regard was had to paragraphs 5.131 and 5.132 of the NNNPS in decision making. **Mr Smith** explained that an assessment of the junction options at Rokeby concluded that both Blue and Black Options would result in impacts on a number of assets, including two

listed milestones, Cross Lanes Farmhouse, Rokeby Park RPG and Rokeby Park (LBI) and Rokeby Grove. The Blue Option would result in fragmentation of Rokeby Park RPG and introduce traffic to a nationally designated heritage asset, potentially resulting in a major adverse effect. It would also have an adverse impact upon the setting of the RPG both during construction and operation. The Black Option would not result in fragmentation of Rokeby Park, thus avoiding direct physical harm to the RPG. It would, however, introduce a change into the setting of St Mary's Church. On balance therefore, it was assessed that although both options resulted in adverse impacts the western junction option would result in the least harm and therefore the Black Option was preferred over the Blue Option. A conclusion of "Substantial Harm" was not reached in respect of the Blue Option however it was assessed as greater harm than the Black Option. It was noted that Historic England, as statutory consultee aligns with the finding that the Blue Option causes more harm to heritage assets than the Black Option.

Mr Semakula reiterated that the Blue Option would lead to greater harm as per paragraph 5.8.87 of the Route Development Report [Document Reference 4.1, APP-247]. He confirmed that in engaging in the comparative exercise between options, consultation responses were considered including the response received from Historic England. **Mr Semakula** directed the ExA towards ID references 1120, 1121 and 1123 of Annex N to the Consultation Report [Document Reference 4.4, APP-271] which includes extracts from Historic England's response to consultation as well as evidence of the regard the Applicant had to the response. **Mr Smith** explained that as a statutory consultee, importance was placed on Historic England's comments and overall conclusion that the Blue Option results in a greater level of harm to the asset.

***Post Hearing Note**: The Applicant considers that it would assist to provide some clarity in respect of the application of policy regarding heritage for the Blue and Black Options. A brief analysis of paragraphs 5.131 and 5.132 of the NNNPS is outlined below. Because neither option would lead to Substantial Harm to or total loss of significance of a designated heritage asset, analysis of paragraph 5.133 is not considered.*

NNNPS Policy	Analysis
5.131: When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. Once lost, heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage	*In policy terms, while it has not been concluded that the Blue Option would cause Substantial Harm, it would lead to a partial loss as it would have a direct physical effect on the Grade II* Rokeby Park RPG.* *As such, weight should be given to the conservation of the RPG. It is clear in policy terms that the harm or loss would require clear and convincing justification.* *The Applicant balanced these factors in its consideration of the Blue Option against the Black*

	asset or development within its setting. Given that heritage assets are irreplaceable, harm or loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. *Substantial harm to or loss of designated assets of the highest significance, including World Heritage Sites, Scheduled Monuments, grade I and II* Listed Buildings, Registered Battlefields, and grade I and II* Registered Parks and Gardens should be wholly exceptional.*	*Option and considered that given the lower level of harm and lack of direct physical effect caused by the Black Option that it was far more favourable in policy terms. Where there is a clear alternative to the Blue Option which causes less harm, it would not be possible to justify the direct physical effect on Rokeby Park RPG.* *The Legislation and Policy Compliance Statement [Document Reference 3.9, APP-242] confirms conformity of the Black Option with paragraph 5.131 of the NNNPS – it does not consider the Blue Option as it only considers the promoted route.*
	5.132: Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset, the greater the justification that will be needed for any loss.	*It is clear that the greater harm to the Grade II* Rokeby Park RPG and loss caused by the Blue Option would require a very strong justification. It was not and is not considered that such a case could be made given the existence of the Black Option which causes less harm.* *The Legislation and Policy Compliance Statement [Document Reference 3.9, APP-242] confirms conformity of the Black Option with paragraph 5.132 of the NNNPS - it does not consider the Blue Option as it only considers the promoted route.*
With regards the "Black Option", Historic England to explain the effect of the proposed development on the County Bridge, Rokeby Church and Egglestone Abbey and any other assets along the route from HGV movements.	**Lee McFarlane,** on behalf of Historic England, explained that Historic England has been liaising with the Applicant in respect of the Project for some time, and was engaged in discussion around Rokeby leading up to the PRA. **Ms McFarlane** stated that it has always been Historic England's view that National Highways ought to seek to select the route causing the least harm. It was stated that Historic England therefore supports the Applicant's choice of the Black Option. Historic England supports the western junction to the church, which causes the least amount of harm to the assets, whereas the eastern option causes the most harm as it severs the link through the Rokeby Park RPG directly. It was noted that Historic England has always maintained that any of the options cause less than Substantial Harm but there is less harm in the Black Option, compared to the Blue Option which directly severs the Rokeby Park RPG.	

	Mr Semakula directed the Interested Parties to Chapter 8 of the Environmental Statement [Document Reference 3.2, APP-051], which examines the significance and impact on heritage assets. He explained that as part of the Applicant's assessment of harm, both the Blue and Black Options were compared. **Kerry Whalley,** Environmental Lead at Arup on behalf of the Applicant provided an explanation of the sifting matrix which is summarised at paragraph 5.8.79 of the Route Development Report and included at Appendix 8-6 [Document Reference 4.1, APP-247] which provides a comparison between the Blue and Black Options. **Ms Whalley** explained that for every options decision that the Applicant made relating to the Project, a standardised approach was taken to understand the benefits and drawbacks – there were a number of factors aside from heritage considered. The western option was used as a baseline and the environmental and engineering factors were analysed, amongst others, to establish whether the alternative option (the eastern option) would be more beneficial, neutral or would lead to greater impact. In this instance, the eastern option was found to cause the most harm to heritage, amongst other variables. Due to the comparison between the options being close in this case, further environmental investigation and assessment was undertaken, which highlighted dominant factors impacting heritage, with the eastern option. Turning to the level of detail within the assessment criteria, **Ms Whalley** clarified that the reporting commenced as desk-based assessments, using outline drawings and survey data where it was available, followed by a more detailed environmental assessment which was included within the Preliminary Environmental Information Report ("**PEIR**") at Statutory Consultation. ***Post-Hearing Note:*** *Rokeby Park RPG is a nationally designated heritage asset. The significance of the asset and the likely significant impacts upon it have been assessed in line with the requirements in the NNNPS (paragraphs 5.126 – 5.127). The methodology used in the assessment is set out in section 8.4 of Chapter 8 (Cultural Heritage) of the Environmental Statement [Document Reference 3.2, APP-051]. The value (or importance) of each heritage resource within the study area was determined according to the Design Manual for Roads and Bridges ("**DMRB**") criteria set out in DMRB LA 104 Environmental Assessment and Monitoring as tabulated in Table 8-4 of the chapter. The methodology was agreed with technical stakeholders through the scoping process as described in section 5 of Chapter 4 of the Environmental Statement [APP-047]. Table 8-7: Chapter 8 (Cultural Heritage) of the Environmental Statement [Document Reference 3.2, APP-051] provides a summary of the key points from the Planning Inspectorate Scoping Opinion relevant to the Cultural Heritage assessment* *A description of the asset and the sources of information used in the assessment can be found in the Gazetteer of heritage assets in Environmental Statement Appendix 8.8- [Document Reference 3.4, APP-185] in Table 7 at paragraph 8.8.2.10 and Table 16 (paragraph 8.8.3.3) under the ID number 08-0048. An assessment of the significance of the asset and the contribution made to that significance by its setting is laid out in the Impact Assessment Table in Environmental Statement Appendix 8.10 [Document Reference 3.4,*

	APP-187]. Temporary construction impacts are assessed in Table 7 (paragraph 8.10.3.9) and permanent construction impacts in Table 15 (paragraph 8.10.4.9) of that appendix. *The assessment of significance was undertaken using publicly accessible data sets including the National Heritage List for England, Durham Historic Environment Record, collections in the County Record Offices of Durham and North Yorkshire, and online collections of material held by the British Library. The assessment of setting contribution to the significance was informed by site visits made in May and June 2021. Engagement with the owner of Rokeby Park and Historic England continued throughout the assessment.*
Noise ***Applicant to explain why the "Blue Option" was discounted despite being identified as benefiting residents from reduced traffic disturbance.***	**Mr Semakula** highlighted that the Blue Option was not discounted solely on the basis of the noise impact assessment. The Blue Option was discounted taking into account a number of factors including environmental, engineering, stakeholder, traffic, heritage, policy and economic considerations. Noise was therefore one aspect that fed into the holistic assessment presented in the Project Development Overview Report [Document Reference 4.1, APP-244]. In response to a query raised by Interested Party, Howard Charlesworth, **David Hiller,** Noise expert of Arup on behalf of the Applicant explained that the noise impacts from traffic modelled for the PEIR considered the routes through Barnard Castle as far as this was required by the Design Manual for Roads and Bridges. He further explained that the noise assessment in the PEIR compared a number of options under consideration at that stage. The Black and Blue Options had a broadly similar balance of beneficial and adverse likely significant effects at that stage. **Mr Semakula** confirmed that none of the proposed changes to be brought forward to the Project by the Applicant is Blue Option-related in respect of Scheme 08 (Cross Lanes to Rokeby).
2.2 Scheme 06 (Appleby to Brough)	
Applicant to briefly set out its route option selection process for Scheme 06.	**Mr Semakula** brought the ExA's attention to key documents relating to Scheme 06 (Appleby to Brough)- Section 5.5 of the Project Development Overview Report [Document Reference 4.1, APP-244], Section 5.6 of the Route Development Report [APP-247] and paragraphs 1.5.47 to 1.5.57 of Chapter 3, Environmental Statement [Document Reference 3.2, APP-046]. **Paul Carey,** Design Lead on behalf of the Applicant set out the Scheme 06 (Appleby to Brough) option selection process with reference to Figure 16 of the Project Development Overview Report [Document Reference 4.1, APP-244]. Early development of the Scheme led to two principal options. An online dualling solution was developed at the western end (Café 66 to Wheatsheaf area), and on the eastern end, an offline dualling solution was promoted (Wheatsheaf area to Brough). He explained that there were significant constraints in the area, including the North Pennines Area of Natural Beauty (the "**AoNB**") and the Ministry of Defence ("**MoD**") facilities in Warcop, as demonstrated on Figure 16 of the Project Development Overview Report [Document Reference 4.1, APP-244]. As the Scheme was developed through the Project Control

	Framework ("**PCF**") process that National Highways operate within, the route evolved to respond to data, appraisals and stakeholder feedback. In relation to the western end, the issue which the Scheme faced was whether the route should widen to the south or north of the existing A66. The proposal that was taken to Statutory Consultation was that it should widen to the south, but based on landowners' and residents' views, this was shifted to the north, as was submitted within the DCO application. **Mr Carey** explained that in respect of the central section of the Scheme, two options were developed during PCF Stage 3 (Black and Blue). The main difference between the two options was that one provided an elevated solution outwith the AoNB, with an elevation of 10-11 metres to allow connectivity to side roads and the MoD facility, running eastwards along fringe of the AoNB (Black Route). The alternative (Blue Route) had a lower-level impact of 3 metres above ground and moved further northwards. It put the existing A66 at the centre of the road and widened it in both directions (north and south). The preference taken forward was for the Blue Route based on the limited incursion into the AoNB and MoD land, leading to less of an influence on landscape, character and setting. The result of this option is that the road corridor is widened, whilst being further from residential areas reducing noise, air quality, safety and biosecurity impacts due to the lower elevation of the road. The options process at the eastern end of the Scheme involved comparing the Black Route to the Orange Route, to test the encroachment into the AoNB. The preference was for the Black Route at this location to avoid the greater impact on farm severance caused by the Orange Route, as well as the demolition of residential property. Furthermore, the impact on the setting of the AoNB would be greater with the Orange Route due to the introduction of a second road corridor in the landscape. The options outlined were combined to take forward a Black-Blue-Black Route for the western, central and eastern sections. ***Post Hearing Note:*** *The Applicant was asked to confirm, following engagement with the MoD, if the reprovision of the playing field (owned by the MoD and comprising Crown land for the purposes of the Planning Act 2008) would provide access by prior agreement to members of the public and the local school. The MoD has confirmed the designs for the replacement playing field / sports facility are being developed and that the MoD intends to continue with these previously agreed local access arrangements when the new playing field / sports facility becomes available, and when it is not in use by the MoD. See also Item 5.2 of the Applicant's Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case) (Document Reference 7.2).*
The ExA wishes to examine the design arrangement at Langrigg and concerns regarding the effect of the proposed development on the living	**Ms Joy Thompson,** a resident in the Langrigg area, expressed the view that the dual carriageway ought to go to the north of the existing A66 rather than to the south, particularly at the new Langrigg junction. Ms Thompson noted concerns around the additional noise and disruption to existing buildings, commenting that the creation of a new route to the north would be attractive to visitors, for walking and climbing excursions. **Dr Mary Clare Martin,** on behalf of **Mrs Thompson**, emphasised similar concerns, adding that the Scheme

conditions of the properties adjacent to it, one of which would be effectively encircled by roads and drainage ponds and access. Applicant to have available sheet 5 from the General Arrangement Plans for Scheme 06 [APP-014].	proposals will disrupt the environment by leaving the field to be full of roads and sink ponds. She referenced an issue of trust in respect of the limits of deviation, particularly in light of the amendments being made to the Project, when she considered that there is a strong case for a northern route. The **ExA** questioned particular aspects of the design, including the spur on Sheet 5 of the General Arrangement Drawing for Scheme 06 [Document Reference 2.5, APP-014] as being a large junction leading to a tight lane and the inclusion of two ponds. The ExA also requested more detail on what other design options have been considered for the road at this location so as to have less residential impact. In relation to the size of the junction, **Mr Carey** explained that it has been designed to accommodate heavy goods vehicles' movement to the north and south of the junction into a relatively narrow road. As a result, the turning circle overlaps, leading to the wider junction. Turning to the inclusion of the two ponds, **Mr Carey** confirmed that the larger pond would drain the A66, at a low point in the design and the smaller pond is designed to drain the local road. He confirmed that although they have been separated in accordance with guidance, the Applicant is considering how to minimise their size as part of the detailed design stage of the Project. **Mr Carey** referenced article 7 of the draft DCO [Document Reference 5.1, APP-285], which increases the Limits of Deviation at this location to allow flexibility on the east-west road, permitting the movement of the junction westwards. **Mr Semakula** outlined that the Applicant is continuing to look at localised changes in Langrigg, which is being reviewed as a potential area of change. The **ExA** noted that the property in question as shown on Sheet 5 of the General Arrangement Drawing for Scheme 06 (Appleby to Brough) [Document Reference 2.5, APP-014] is located outside the Order Limits, and is unconventionally shaped. It was put to the Applicant and Dr Martin whether it had been explored whether the property ought to be included within the Order Limits and acquired. **Dr Martin** confirmed that the possibility of acquisition had never been offered by the Applicant. She commented that Ms Joy Thompson would not consider relocating at this stage. ***Post Hearing Note:*** *The ExA asked the Applicant to confirm why Low Broomrigg (referred to during ISH1 as Langrigg Cottage) was kept outside the Order Limits and why compulsory purchase was not offered.* *The Applicant confirms that Low Broomrigg was excluded from the Order Limits and was not proposed to be acquired compulsorily because neither the property, nor the land on which it is located, is required for the development to which the application for development consent relates; neither is it required to facilitate that development, and nor is there any incidental requirement for it in connection with that development. As the Applicant has no requirement for the land, none of the purposes for which compulsory acquisition may be authorised pursuant to section 122 of the Planning Act 2008 apply to the land. It is for this reason that Low Broomrigg was not included in the Order limits and was not proposed to be acquired compulsorily.*

	The Applicant acknowledges that there are significant engineering works proposed in the vicinity of Low Broomrigg, which would change the existing views from the property to the west and to the north in particular, and which would also lead to changes in noise levels as well as affecting the setting of the property. Throughout their discussions with the Applicant about the Project and its impacts on Low Broomrigg, Dr Martin and her parents, Mr and Mrs Thompson, made it very clear that whilst the family objected to the Project, they had no wish to sell the property, as Mr and Mrs Thompson wanted to remain living in it. In this context, the Applicant considered that an offer to acquire the property under discretionary purchase would not be appropriate and accordingly the possibility of a discretionary purchase was not discussed until a meeting with Dr Martin and her parents at Low Broomrigg in September 2022, in which Dr Martin asked the Applicant about discretionary purchase but made it clear that this would be a last resort as her parents (Mr and Mrs Thompson) wished to remain in the property. The family asked the Applicant to reconsider the Project design with the objective of removing or reducing its impacts on the property. *In the light of the above, it is the intention of the Applicant to submit a request for a proposed change to the Project design in this location, with the aim of reducing its impact on the property. Details of the proposed change will be submitted to the ExA at Deadline 3.*
The ExA wishes to better understand the reasons why the alternative route north of the existing A66 into the land owned by the MOD and into the AONB was discounted.	**Mr Semakula** directed the ExA to paragraphs 6.5.66 to 6.5.191 of the Case for the Project [Document Reference 2.2, APP-008], alongside the Applicant's response to policies 5.151 to 5.155 of the NNNPS, set out in the Legislation and Policy Compliance Statement [Document Reference 3.9, APP-242]. **Mark Smith**, on behalf of the Applicant, explained that the Case for the Project sets out findings for the promoted route against each limb of the criteria within the NNNPS policy in respect of development in designated areas. This analysis includes an assessment of alternatives to comply with the exceptional circumstances test, demonstrated to be in the public interest. The promoted route was assessed against an alternative route for the central and eastern lengths. The overall conclusions from the assessment found that the exceptional circumstances and public interest aspects of policy 5.151 are met in respect of the promoted route. **Mr Smith** explained the combined and cumulative factors in support of the limited incursion as follows: i. the incursions within the AoNB are limited, in that the experience of the AoNB at this point of incursion is diluted by the significant presence of traffic, the roadside buildings and signage associated with the current A66 route corridor; ii. drawing from the Landscape Assessment within Chapter 10 of the Environmental Statement [Document Reference 3.2, APP-053], it was also concluded that the special qualities of the AoNB would remain and that there was potential for the conservation and enhancement of the landscape, to be delivered through

	adherence to design principles and ensuring that the Applicant addresses the requirements and commitments in the Environmental Management Plan [Document Reference 2.7, APP-019]; iii. it was also concluded that there would be no impact on the primary purpose of the AoNB of conserving and enhancing the landscape through adherence to design principles and the commitments in the Environmental Management Plan; iv. the economic objectives of the Project met at a local, regional and national level were achievable noting benefits in terms of the Levelling Up agenda and significant contribution to the Northern Powerhouse growth agenda; and v. positive feedback has been received based on consultation and engagement with local communities and stakeholders in respect of the promoted route. This encompasses key statutory bodies including Natural England and the AoNB Partnership, both of whom are in support of the chosen route but raised concerns with the alternative route which is located further to the north. In respect of the reasons for not pursuing a more northern alignment aside from the issues within the AoNB, **Monica Corso Griffiths,** Head of Design and DCO Lead for the Applicant, noted that one of the reasons that the route to the north of the existing A66 was not progressed was because it would need to be developed on land belonging to the MoD. Based on a number of discussions between National Highways and the MoD, the land to the north has been identified as operational and required for MoD training purposes. It is not possible to compulsorily acquire land belonging to the MoD, so the engagement with the Defence Infrastructure Organisation (DIO) on behalf of the MoD significantly impacted the Applicant's selection process in deciding the area in which to develop the Scheme. **Mr Semakula** referred to paragraphs 5.6.74 to 5.6.81 of the Route Development Report [Document Reference 4.1, APP-247] which outline relevant considerations in respect of necessitating that defence interests are considered including reference to paragraph 5.54 of the NNNPS which outlines that: *"…It is important that new national networks infrastructure does not significantly impede or compromise the safe and effective use of any defence assets".* In respect of the approach to alternatives and the extent of the incursion of the promoted route, **Mr Semakula** re-iterated the exceptional circumstances case as outlined by Mr Smith, concluding that the approach chosen minimises the incursions into the AoNB. In relation to the MoD land, **Ms Corso Griffiths** outlined that while the promoted route does involve incursions onto MoD land, the impact of the incursion in relation to the central section has been discussed with the DIO on behalf of the MoD, who recognise that the proposal as presented in the application minimises the impact on MOD's operations.

2.3 Scheme 0405 (Temple Sowerby to Appleby)	
Applicant to briefly set out its route option selection process for Scheme 0405, having regard to paragraph 1.4.11 of Chapter 3 of the ES. The ExA wishes, in particular, to better understand the reasons for the route choice at Kirby Thore having regard to its proximity to residential properties.	In addition to the main agenda item, the **ExA** wished to further understand the Purple Route and its relation to the Orange Route at Kirkby Thore, as it is referred to in Chapter 3 of the Environmental Statement [Document Reference 3.2, APP-046]. **Mr Semakula,** on behalf of the Applicant, provided relevant document references: the Project Development Overview Report [Document Reference 4.1, APP-244] section 5.4, the Route Development Report, section 5.5 [Document Reference 4.1APP-247] and Chapter 3 of the Environmental Statement [Document Reference 3.2, APP-046] sections 1.5.21 -1.5.34. **Kevin Crookes** of Amey, Civil Engineer and design lead for Scheme 0405 (Temple Sowerby to Appleby) on behalf of the Applicant, set out the general route selection process for the Scheme. He outlined that at PCF Stage 1, ten options were identified, six options were for the Kirkby Thore section, and four for the Crackenthorpe section. These options were assessed against the Project Objectives (Economic, Transport, Community and Environmental) included in Table 1.1, section 7.3 to 7.14 and Appendix F of the Technical Appraisal Report [Document Reference 4.1, APP-245]. Four of the Kirkby Thore and two of the Crackenthorpe options were subsequently discounted, for reasons including longer journey times, increased local severance and negative impacts on Scheduled Ancient Monuments. At PCF Stage 2 the shortlisted options presented at public consultation in Summer 2019 were Option E and Option F for Kirkby Thore and Option G and Option H for Crackenthorpe. These are the options listed in paragraph 1.4.11 of Chapter 3 of the Environmental Statement [Document Reference 3.2, APP-046]. The **ExA** asked, Mr Crookes to explain the approach to the Blue, Red, Black and Orange routes. **Mr Crookes** outlined that in relation to the Blue, Red, Black and Orange routes within Table 1.7 of Chapter 3 of the Environmental Statement [Document Reference 3.2, APP-046], Option E is the northern route around the top of Kirkby Thore, which is similar to the current Blue route. Option F is similar to the Orange alignment being the southern route. For Option C, both the Blue and Orange routes roughly follow option H in the Environmental Statement chapter. The Purple alignment was proposed at a later stage, when the PCF Stage 1 and 2 options were subsequently given further consideration – this is shown in the Route Development Report in Appendix B2. **Mr Crookes** clarified that the difference between the Purple and Orange routes was that the Purple alignment utilised a section of the existing carriageway passing through Kirkby Thore, so it was used to provide online dualling (existing carriageway with one direction of travel and another new carriageway to create the dualling). The **ExA** queried the proximity to residential properties in respect of the Red and Blue routes and **Mr Crookes** explained that those specific routes are located close to the northern part of the village due to the location of the abandoned Longriggs Mine workings that are between the proposed alignment and British

	Gypsum area. The Applicant has therefore sought to thread the alignment between the village and the mines without taking the route over the mine workings and maintaining as much separation as practicable from the northern part of the village. ***Post Hearing Note:*** *The Applicant was asked at the Hearing to provide relevant references to the application materials which support the analysis of the need for the northern routes to remain relatively close to Kirkby Thore village due to the need to avoid the abandoned gypsum mine. This decision is included in the Option E (northern) vs Option F (southern) sifting matrix. This is referred to in the Geology and Soils section of Table 7-3 (Temple Sowerby to Appleby (Kirkby Thore) Appraisal Summary) in the Scheme Assessment Report [Document Reference 4.1, APP-246] which refers to the risk from historical mining sinkholes. Further details of the historical mine workings can be found in Section 4.10 (Mining and Quarrying) of the Technical Appraisal Report [Document Reference 4.1, APP-245] with particular reference to paragraphs 4.10.38 to 4.10.55 which relate to historical mining. A plan of the mine ('Longriggs Mine Abandonment Plan') is located in Appendix C of the same document.* In relation to paragraph 1.4.11 of Chapter 3 of Environmental Statement [Document Reference 3.2, APP-046], **Historic England** stated that advice was given in respect of Scheduled Monuments at Kirkby Thore, being the Roman Fort and the Civilian Settlements on the outskirts of the village on the western side. Historic England commented that if the option was to remain online, it will have a far greater impact on the Scheduled Monuments than they would be willing to support. Interested Party, Emma Nicholson raised a number of concerns and questioned the consideration given to the 'Do Minimum' option in providing an upgrade to the existing A66 – she commented that the extent of consideration was limited and the option was discarded promptly. **Mr Semakula** referenced the Applicant's Response to Relevant Representations Part 2 of 4 [PDL-011] in which the Applicant has provided a response to a number of Ms Nicholson's points. In respect of the 'Do Minimum' issue raised, **Mr Carey** confirmed that throughout the development of the Project, 'Do Minimum' has been taken into account and considered. At PCF Stage 0, the principles of route selection looking at feasibility studies took a route-wide, corridor-wide and regional-wide approach, including an appraisal of 'Do Minimum' throughout the process. As the Project has progressed and as the transport solution emerged, 'Do Minimum' interventions have been given continued consideration, taking guidance from HM Treasury's Green Book1 in regard to the definition of 'Do

[1] HM Treasury – The Green Book – Central Government Guidance on Appraisal and Evaluation March 2022

	Minimum'2. Mr Carey explained that this consideration relates back to the Project Objectives that were set at PCF Stage 0 as a consequence of the feasibility studies (which can be found in the Project Development Overview Report [Document Reference 4.1, APP-244] section 3.3.13, as well as other application documents). The objectives are thematic including economic, transport, community and environment objectives (refer to Agenda item 2.0 of this document). In appraising the routes throughout each of the PCF stages and in having regard to consultation responses, the premise of 'Do Minimum' has been constant throughout, be it a single carriageway solution, an offline solution, safety improvements, or smaller scale improvements. However, to satisfy the economic, transport, community and environmental Project Objectives, the Applicant is of the view that these objectives cannot be achieved with such discrete, smaller-scale 'Do Minimum' interventions, and dualling is therefore the 'Do Minimum' option required to satisfy the objectives as per The Green Book guidance. ***Post Hearing Note****: The Applicant was asked to provide further detail in respect of the sifting of the Purple and Orange Options as well as single carriageway options. The alternative options selection process undertaken in PCF Stage 3 in April 2021 (including the Orange and Purple Options) are discussed in the Route Development Report [Document Reference 4.1, APP-247] at paragraphs 5.5.36 to 5.5.51. Sketches of the dual carriageway options considered are included in Appendix B.2 (Map of refined alternatives) and a numerical summary of the sifting matrix is included in Appendix B.3.* *It was raised in the hearing that the Purple Option was thought to be a single carriageway option, however, the Applicant can confirm that is not the case. The Purple Option was an online dualling / split carriageway option that utilises the existing A66 in the vicinity of Kirkby Thore village for eastbound traffic, with a new carriageway and structure to cross Trout Beck to the south of the existing alignment for westbound traffic. To the east of Trout Beck, westbound traffic would use the existing A66 and a new carriageway to the north was proposed for eastbound traffic. A 40mph speed limit was proposed for some sections of this route option due to the existing sub-standard highway geometry in this location.* *The PCF Stage 3 route option selection process undertaken in April 2021 for Temple Sowerby to Appleby did not include single carriageway options because this type of solution was not considered to achieve the Project Objectives set out in Table 1 of the Project Development Overview Report [Document Reference 4.1, APP-247]. In particular, an online single carriageway option following the existing A66 at Kirkby Thore cannot achieve the safety, capacity and reliability objectives.*

[2] As defined in the Glossary of The Green Book, *"Do-minimum option in the Green Book refers to the minimum intervention required to deliver the core business needs required to deliver the SMART objectives identified in the strategic appraisal. This excludes additional features that take advantage of opportunities present during implementation of change."* For the A66 Northern Trans-Pennine Project, these objectives are as introduced by **Mr Carey** during the hearing, outlined at Agenda item 2.0 of this note, and shown throughout the application documents, particularly the Project Development Overview Report [APP-244], its appendices [APP-245 to APP-251 inclusive], and the Case for the Project [APP-008]. It is the view of the Applicant that the 'Do Minimum' option that achieves the Project objectives as per *The Green Book* guidance is dualling of the A66 between M6 Junction 40 and A1(M) Junction 53 Scotch Corner.

	A summary of PCF Stage 0 stage is located in section 3.3 of the Project Development Overview Report [Document Reference 4.1, APP-247]. Paragraph 3.3.6 lists the corridor level issues and problems identified by the Stakeholder Reference Group. This list includes the unreliability of journey times due to slow moving vehicles on the single carriageway sections and the impact of incidents on single carriageway sections. *Accident information for the route has also been assessed in section 9.3 (Collision data) of the Transport Assessment [Document Reference 3.7, APP-236]. Paragraph 9.3.6 states that the accident rate of a single carriageway section is 73% higher than that of the dual carriageway sections.*
2.4 Other Schemes	
The ExA will hear from Interested Parties who may wish to ask specific questions on other schemes.	**Kate Wilshaw, on behalf of Friends of the Lake District** raised concerns about whether road upgrades (and the Project more broadly) are necessary, as opposed to undertaking junction and safety improvements instead. Ms Wilshaw also cited the carbon and climate change implications of the Project as concerns. She stated that the Lake District National Park Authority (the "**LDNPA**") are discouraging visitors from arriving by car (as per its Management Plan). **Emma Nicholson** queried whether a Heritage Impact Assessment is required for the Lake District National Park. **Mr Semakula** on behalf of the Applicant emphasised improving access to key tourist sites as a justification for the Project. In relation to the environmental concerns, he referenced Chapter 7 of the Environmental Statement [Document Reference 3.2, APP-050] which assesses the potential climate impacts of the Project. ***Post Hearing Note:*** *The Applicant notes the focus on sustainable travel and transport within Outcome 5 of the Lake District National Park Partnership's Management Plan 2020-2025 and the desire to increase the rate of decarbonisation in travel and increase opportunities for sustainable and active travel. Tables 6-1 and 6-2 of the Case for the Project [Document Reference 2.2, APP-008] outline the anticipated benefits resulting from implementation of the proposed upgrades brought forward as part of the Project at Scheme 0102 M6 Junction 40 to Kemplay Bank Roundabout, and Scheme 03 Penrith to Temple Sowerby. In addition, Paragraph 7.3 of the Case for the Project [APP-008] outlines the Project's conformity with Paragraph 3.1 of the NNNPS, specifically that "the need for development of the national networks, and the Government's policy for addressing the need, must be seen in the context of the Government's wider policies on economic performance, environment, safety, technology, sustainable transport and accessibility, as well as journey reliability and the experience of road users."* *One of the Project Objectives is to maintain and improve access for tourism served by the A66 (see Table 1 of the Project Development Overview Report [Document Reference 4.1, APP-244]. Paragraphs 13.10.65-67 of Chapter 13 (Population and Human Health) of the Environmental Statement [Document Reference 3.2, APP-056] outline the positive contribution of the Project to communities, facilities and services, with reduced*

	delays and improved travel conditions and journey times for users facilitating greater connectivity and reliability. *It was determined that a Heritage Impact Assessment was not necessary for the Lake District National Park World Heritage Site, as outlined in the response provided to RR-055 set out in the Applicant's Response to Relevant Representations Part 2 of 4 [PDL-011]; "it is considered that there would not be any significant effects upon the site from a Heritage perspective". The Lake District World Heritage Site is situated more than 2km at its closest point to the Project.* *Environmental Statement Chapter 8 Cultural Heritage [Document Reference 3.2, APP-051] utilises a 1km study area and therefore the designation lies outside of the scope of study. This approach to the Environmental Impact Assessment was agreed with Historic England as part of the statutory consultation process and is detailed within Appendix 2 of the EIA Scoping Opinion [Document Reference 3.4, APP-149], pages 401-405 of 475, inclusive.* *Environmental Statement Chapter 10 Landscape and Visual [Document Reference 3.2, APP-053] describes how the Lake District National Park and English Lake District World Heritage Site boundaries coincide with the Landscape and Visual Impact Assessment study area, with the nearest scheme being Scheme 0102 (M6 Junction 40 to Kemplay Bank), which is 2.5km from the National Park boundary. Paragraph 11.5.11 of the EIA Scoping Report [Document Reference 3.4, APP-148] states:* *"The setting of the National Park within this area is heavily influenced by major highways and other transport infrastructure such as the M6 and West Coast Mainline railway and as such, the limited works in this area are not considered likely to have a noticeable impact on the setting of the Lake District National Park. Effects on this designation are therefore proposed to be scoped out of the EIA."* *Chapter 4.6 of the EIA Scoping Opinion [Document Reference 3.4, APP-149] provides the Planning Inspectorate's response to the EIA Scoping Report. In relation to "Effects on the Lake District National Park during construction and operation (M6 Junction 40 Penrith scheme)", the Planning Inspectorate states:* *"On the basis that the setting of the National Park within this area is deemed to be heavily influenced by major highways and other transport infrastructure such as the M6 and West Coast Mainline railway, coupled with the limited nature and character of the works proposed at this scheme that are assessed as unlikely to have a noticeable impact on the setting of the Lake District National Park, the Inspectorate is content that landscape and visual effects on this designation can be scoped out of the ES."*

	The LDNPA was identified as a Section 43 Local Authority (for the purposes of Section 42(1)(B)) of the Planning Act 2008 as noted in Table A3 of the EIA Scoping Opinion. However, Appendix 2 of this document does not record a reply from LDNPA by the statutory deadline and therefore there is no record of a reply from them to the Planning Inspectorate's consultation on the Scoping Report. *At statutory consultation, the LDNPA did express concern in regard to impacts upon longer views from the National Park. Annex N of the Consultation Report (Document Reference 4.4, APP-271] responded to this point at ID reference 1164 with reference to the Landscape and Visual assessment within Environmental Statement Chapter 10 Landscape and Visual (Document Reference 3.2, APP-053], stating that this "…scoped out significant effects on the National Park, as due to distance, intervening features and topography there is no change to the view or to the landscape character perceived from the National Park."*

A66 Northern Trans-Pennine Project

TR010062

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case) - Appendix 1 – Traffic Technical Note

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

16 December 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A66 Northern Trans-Pennine Project Development Consent Order 202x

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case) – Appendix 1 – Traffic Technical Note

Planning Inspectorate Scheme Reference	TR010062
Application Document Reference	NH/EX/7.2
Author:	A66 Northern Trans-Pennine Project Team, National Highways

Version	**Date**	**Status of Version**
Rev 1	16/12/2022	Deadline 1

CONTENTS

1. Introduction

During Issue Specific Hearing 1 (ISH1), held on 30 November 2022, on alternative route options, the Examining Authority (ExA) requested that the assessment of the Rokeby and Cross Lanes 'Blue Option' is updated using the traffic model that was summitted as part of the Development Consent Order (DCO) application. This is in response to questions regarding the forecast increase in traffic on The Sills as a result of the Project.

Figure 1-1 shows the locations referred to within this note.

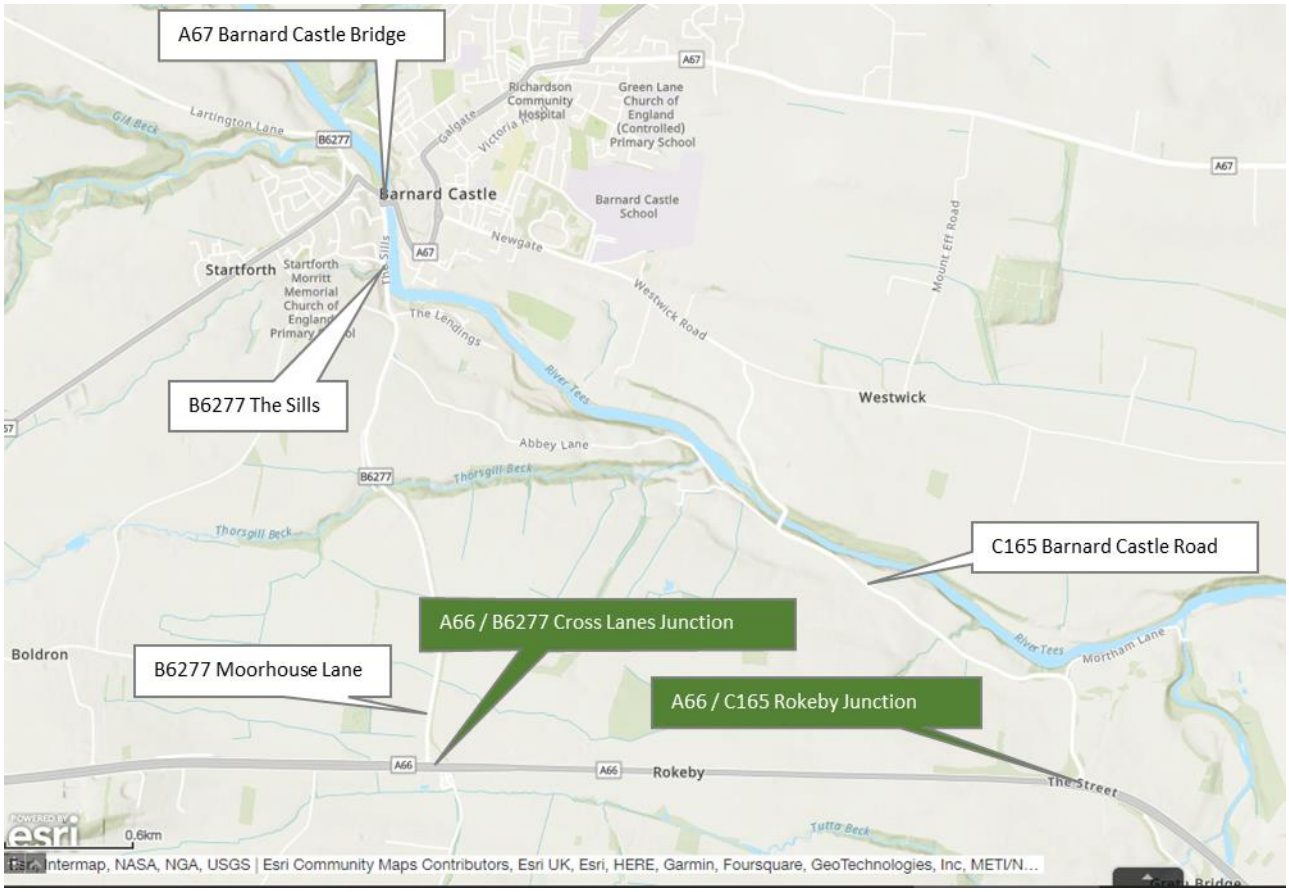


Figure 1-1: Location Plan

The opportunity has been taken to provide a definition of the term 'Do Minimum' as used specifically within the traffic modelling. This definition is discussed in section 2 of this note, while sections 0 to 5 discuss the results of the modelling for the Cross Lanes to Rokeby scheme and its impact on the B6277 within Barnard Castle.

2. Definition of Do Minimum within Traffic Modelling

Clarification is provided in terms of the definition of the Do Minimum with regard to Traffic Modelling. Paragraph 5.1.5 of the Transport Assessment [APP-237] states:

Two scenarios have been developed for the forecast modelling work:

- *The Do Minimum (DM) – reflects forecast conditions in the assessment year including all committed developments and with forecast year population in place.*
- *The Do Something (DS) – reflects the Do Minimum (DM) forecast but with the addition of the A66 Northern Trans-Pennine Route Project.*

This definition is based on that used within TAG (Transport Analysis Guidance) Unit M4 Forecasting and Uncertainty chapters 7.4 and 7.5, although in the document the scenarios are called 'With Scheme' and 'Without Scheme' forecasts.

This definition is different to that used within the Green Book[1]. The Green Book definition of the Do Minimum, contained within the Glossary of the document is:

Do-minimum option in the Green Book refers to the minimum intervention required to deliver the core business needs required to deliver the SMART objectives identified in the strategic appraisal.

All subsequent discussion of the 'Do Minimum' within this note refers to the modelling definition as defined within the Transport Assessment.

[1] HM Treasury: The Green Book – Central Government Guidance on Appraisal and Evaluation

3. Presentation of junction alternatives at August 2021 stakeholder engagement event

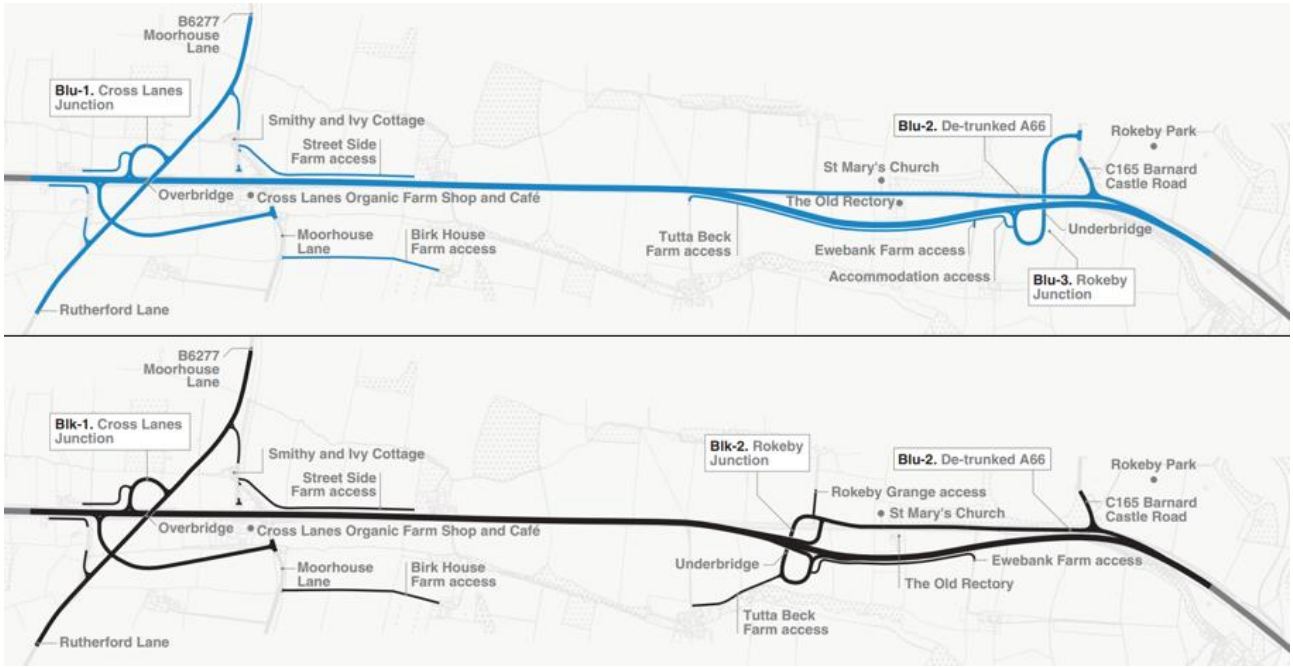
Paragraphs 5.7.30 -5.7.32 of the Project Development Overview Report (PDOR) [APP-244] describe a stakeholder engagement event held in August 2021 during which the three options being prepared for Statutory Consultation (Red, Blue and Black) were presented. More details of the modelling undertaken are provided in the following sections.

3.1. Scheme Design

Figure 3-1 shows the Black and Blue Option alignments which were presented at this event. The red option was also presented but is not considered any further as the red option is not the subject of this note.

- It should be noted that both options included the same design at Cross Lanes (B6277).
- At Rokeby, the Black Option adopts a junction layout which is situated further west of the current junction at Rokeby Park whereas the Blue Option had a junction which is much closer to Rokeby Park.

Figure 3-1: Blue and Black option alignments at Statutory Consultation



3.2. Traffic Model

The model used to test these options is described in paragraph 4.2.2 of the Combined Modelling and Appraisal Report [APP 237]. This model was the A66TM (A66 Traffic Model) and had a base year of 2015, i.e. it was based on data collected in or before 2015. All data was adjusted as necessary such that the model represented conditions in a 2015 base year.

3.3. Results

Paragraph 5.8.53 and Table 13 of the Project Route Development Report [APP 247] (Appendix 3 of the PDOR) contain the results of the assessment. This table is reproduced below as Table 3-1.

Table 3-1: Comparison of Options Presented at August 2021 Stakeholder Consultation

	Northbound	Southbound	Total	Difference
B6266Moorhouse Lane[2]				
Existing (2015 AADT vpd)	121	124	245	
Do Minimum (2046 AADT vpd)	389	217	606	
Do Something PCF2 Option K (2046 AADT vpd)	2022	1248	3270	+2664 Compared to Do Minimum
Do Something Black Option (2046 AADT vpd)	929	400	1329	-1941 Compared to PCF2
Do Something Red Option (2046 AADT vpd)	916	665	1581	-1689 Compared to PCF2
Do Something Blue Option (2046 AADT vpd)	662	585	1247	-2023 Compared to PCF2

	Northbound	Southbound	Total	Difference
C165 Barnard Castle Road				
Existing (2015 AADT vpd)	1384	1637	3021	
Do Minimum (2046 AADT vpd)	1754	2162	3916	
Do Something PCF2 Option K (2046 AADT vpd)	183	1083	1266	-2650 Compared to Do Minimum
Do Something Black Option (2046 AADT vpd)	1122	1970	3092	+1826 Compared to PCF2
Do Something Red Option (2046 AADT vpd)	1189	1710	2899	+1633 Compared to PCF2
Do Something Blue Option (2046 AADT vpd)	1609	1783	3392	+2126 Compared to PCF2

On the B6277 Moorhouse Lane, in terms of two-way flow (i.e. northbound + southbound), the difference between the Black Option and Do Minimum is +723, vehicles per day and difference between Blue and Do Minimum is + 641 vehicles per day. This means that the Black Option increases traffic flow on the B6277 by 82 vehicles per day more than the Blue option.

It is worth noting that 100 vehicles per day would relate to less than 10[3] vehicles per hour, or 1 vehicle every 6 minutes.

[2] This refers to the B6277 Moorhouse Lane (B6266 stated in error)
[3] This has been calculated by assuming a typical daily traffic flow profile that assumes between 9 and 10% of daily traffic occurring within the traditional morning and evening peak hours.

4. Statutory Consultation

The route options were reassessed and presented for Statutory Consultation. The results of this assessment are contained within two documents within the DCO submission. The results for the Black Route were reported in Appendix A of Statement of Common Ground with Durham County Council [APP-278] while the Relevant Representation from Durham County Council [RR-073] noted a 397 or 34% increase on the Sills within the Blue Option over the Do Minimum scenario. More details of the modelling undertaken are provided in the following sections.

4.1. Scheme Design

The junction layouts shown in Figure 3-1 (in addition to that of the Red Option) were taken forward to be presented at Statutory Consultation.

4.2. Traffic Model

The assessment presented at Statutory Consultation used the 2015 base year A66TM. Therefore the 'Do Minimum' model run is the same as that discussed in Section 3.2 of this note, however the 'Do Something' models for the Black and Blue options contain some small adjustments to the modelling of the A66 Project, remote from the Rokeby and Cross Lanes scheme to allow for other design changes within the A66 project that were made during 2021 before Statutory consultation, as noted in paragraph 4.3.1 of the Project Development Overview Report (APP-244).

4.3. Results

The full results of models run for Statutory Consultation are shown in Table 4-1.

Table 4-1: Comparison of Options at Statutory Consultation (Annual Average Daily Traffic)

	Do Minimum	Black Route			Blue Route		
		Do Something	Absolute Increase	% Increase	Do Something	Absolute Increase	% Increase
B6277 The Sills	1165	1645	480	41%	1562	397	34%
B6277 Moorhouse Lane	606	1380	774	128%	1292	686	113%
C165 Barnard Castle Road	3,916	3,209	-707	-18%	3522	-394	-10%
A67 Barnard Castle Bridge	9507	7853	-1654	-17%	7825	-682	-18%

On the B6277 Moorhouse Lane, in terms of two-way flow, the difference between the Black and Do Minimum is +774, and difference between Blue and Do Minimum is + 686 vehicles. This means that the Black Option increases traffic flow on the B6277 by 83 vehicles more than the Blue option. The Do Something flows in the Blue and Black option are greater than those reported in Table 3-1, due to the later version of the 'Do Something' models used. The absolute difference between the Black and Blue options at this location is nearly identical (+/-1 vehicle per day) within the two model runs.

On the B6277 The Sills, in terms of two-way flow, the difference between the Black and Do Minimum is +480, and difference between Blue and Do Minimum is + 397 vehicles. This means that the Black Option increases traffic flow on the B6277 at the Sills by 83 vehicles per day more than the Blue option.

It is worth noting that 100 vehicles per day would relate to less than 10 vehicles per hour, or 1 vehicle every 6 minutes.

5. DCO Application

Following Statutory consultation, and the decision to take forward the Black Option, the results of an assessment of the proposed option were reported in Table 8-6 of the Transport Assessment [APP 236]. This chapter provides the results of this assessment together with the results of the test requested by the ExA at ISH1, namely that an assessment of the Rokeby and Cross Lanes Blue Option is undertaken using the traffic model that was submitted as part of the DCO application. The test, that has been run following ISH1 as a result of the request by the ExA and for the purposes of this note will provide an equivalent set of Blue Option traffic forecasts from the DCO model.

5.1. Scheme Design

Since the Statutory Consultation traffic modelling work was undertaken, the Cross Lanes junction has been updated. Figure 5-1 presents the Cross Lanes junction layout from Statutory Consultation (as shown in Figure 3-1 and the updated layout used for the DCO application.

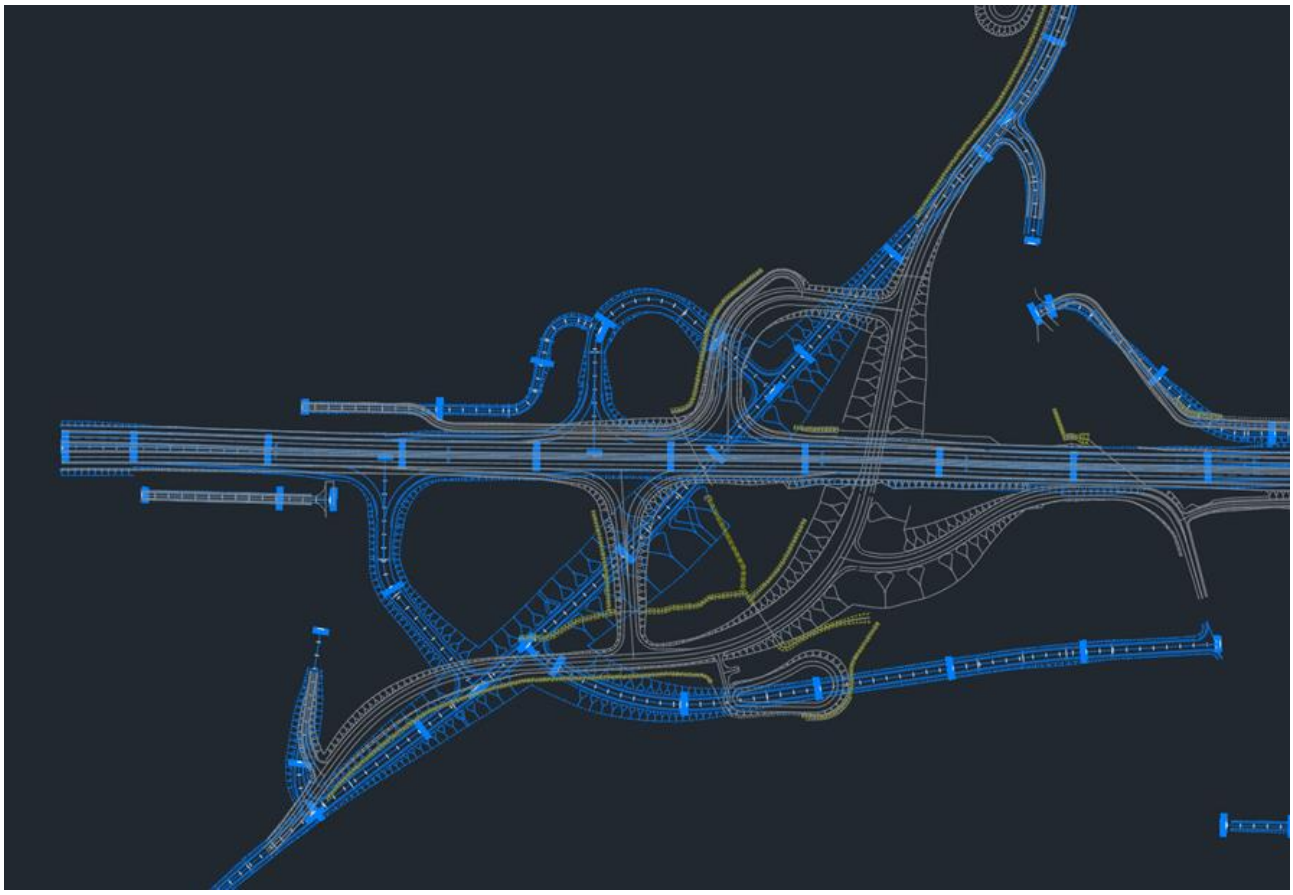


Figure 5-1: Cross Lanes Junction – Layout used at Statutory Consultation (blue diagram) and at DCO (grey diagram)

The grey alignment shown in Figure 5-1 effectively supersedes the arrangement tested at Statutory Consultation (shown in blue above) and reflects the Blue Option as it would have been, if presented at DCO application. The changes can be summarised as follows:

- The straight alignment between Rutherford Lane and the B6277 Moorhouse Lane is now more snaking
- The link to Moorhouse Lane on the south was moved north of the Farm Shop.
- The siting of the priority junctions for each carriageway have been moved slightly east.

At Rokeby, the proposed Blue Option junction alignment put forward at Statutory Consultation remains largely the same, with the connection between the A66 westbound carriageway and the C165 Barnard Castle following the same alignment and location as before. This constitutes the main difference between the Black and Blue options, where the Rokeby junction is situated closer to Rokeby Park.

The only update to the Blue Option since Statutory Consultation is the junction between the C165 Barnard Castle and the de-trunked A66 where the Black and Blue Options follow the same alignment. Previously, a priority junction was proposed in this location, but this has now changed to include a roundabout instead which follows the same design change seen in the development of the Black Option from Statutory Consultation to DCO application. This was implemented to improve safety and slow traffic down on the de-trunked approach up towards the listed railings and wall of the Rokeby Park and Gardens. This will have minimal impact on traffic flows but has been included as part of this modelling work for completeness and consistency alongside the Black Option presented as part of the DCO application.

5.2. Traffic Model

The traffic model was refined in PCF Stage 3 such that it is suitable to inform the DCO application. It is typical practice within National Highways to update their regional model every five years to ensure they are based on the most up to date information available. Therefore, the Project team has taken the opportunity to update the base year model from 2015 to 2019. 2019 represents the most recent year experiencing “normal” network conditions prior to the Covid-19 pandemic.

As part of the model refinement undertaken, further work was undertaken within PCF Stage 3 to review the observed speed on the links within the model around Barnard Castle to improve the representation of the network in this area in response to the continuing concerns about the impact of the junction at this location.

5.3. Results

Table 5-1 shows a comparison of traffic flows between the DCO Black Option and Blue Option tested within the 2019 model. Flows are provided as annual average daily traffic (AADT).

Table 5-1: Comparison of Options Using 2019 Model (Annual Average Daily Traffic)

	Do Minimum	Black Route			Blue Route		
		Do Something	Absolute Increase	% Increase	Do Something	Absolute Increase	% Increase
B6277 The Sills	993	1515	522	53%	1199	206	21%
B6277 Moorhouse Lane	993	1515	522	53%	1199	206	21%
C165 Barnard Castle Road	2079	1831	-248	-12%	2483	404	19%
A67 Barnard Castle Bridge	7700	7312	-388	-5%	7022	-678	-9%

On the B6277 The Sills, in terms of two-way flow, the difference between the Black and Do Minimum is +522 vehicles, and difference between Blue and Do Minimum is + 206 vehicles per day. This means that the Black Option increases traffic flow on the B6277 at the Sills by 314 vehicles per day more than the Blue option. This increase in the difference between the Black and Blue options i.e. +83 in the 2015 models, vs +314 in the 2019 models (an absolute difference of 231 vehicles per day) is as a result of the model refinement undertaken between the Blue and Black options.

The reason that traffic would divert from the C165 Barnard Castle Road to the B6277 The Sills is because the scheme impacts upon the journey time between Greta Bridge on the A66 and Barnard Castle. Within both models the change in journey times remains consistent in both black and blue options. Therefore, the reason for the discrepancy is because the origins and destinations of the trips that make up the traffic on the two roads is different between the two models. Verification of the detailed trip matrices in this area could only be undertaken through undertaking detailed roadside interview surveys on both routes coupled with significant further modelling. Given that the models are in agreement about the impact of the Black Option compared to the Do Minimum (i.e. the increase on the Sills is +480 in the 2015 model and +522 in the 2019 model), and that the difference between the Black and Blue Options forecast on the Sills is very small (314 vehicles per day difference – or around 30 vehicles per hour, or I vehicle every 2 minutes) then the need for such further work is not merited.

6. Summary

The difference in traffic flows between the Black and Blue Options at The Sills is predominantly attributed to the location of the westbound A66 junction at Rokeby. In the Blue Option, the C165 Barnard Castle Road becomes more attractive for traffic travelling from the east towards Barnard Castle and therefore, traffic flows are lower in the Blue Option compared with the Black Option on The Sills.

- Within the model runs undertaken using the 2015 based model, the Black Option increases traffic flow on the B6277 the Sills by 82 vehicles more than the Blue option.
- Within the model runs undertaken using the 2019 based model, the Black Option increases traffic flow on the B6277 the Sills by 314 vehicles more than the Blue option.

The reason for this difference is because the origins and destinations of the trips that make up the traffic on the two roads is different between the two models. Verification of the detailed trip matrices in this area could only be achieved through undertaking detailed roadside interview surveys on both routes coupled with significant further modelling. Given that the models are in broad agreement about the impacts of both routes then the need for such further work is not merited.

A66 Northern Trans-Pennine Project

TR010062

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case) - Appendix 2 – The Sills - Scope for complementary environmental consideration

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

16 December 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A66 Northern Trans-Pennine Project Development Consent Order 202x

7.2 Issue Specific Hearing 1 (ISH1) Post Hearing Submissions (including written submissions of oral case) - Appendix 2 – The Sills – Scope for complementary environmental consideration

Planning Inspectorate Scheme Reference	TR010062
Application Document Reference	NH/EX/7.2
Author:	A66 Northern Trans-Pennine Project Team, National Highways

Version	Date	Status of Version
Rev 1	16/12/2022	Deadline 1

The Sills – Scope for complementary environmental consideration

1.1. The outline scope of this local level consideration is as follows, further detail of which is provided in paragraphs 1.2 to 1.6.

- More granular / environment assessment of the impact of increased traffic on the Sills.
- Institute of Environmental Assessment and Management ("IEMA") subjective assessment of being a pedestrian/pedestrian experience and consideration of noise in the same context.

1.2. A more granular complementary environmental consideration of the forecast traffic increases on the Sills will be undertaken, which will identify and assess the community impacts that may arise from this forecast increase.

1.3. For the purpose of this consideration 'the Sills' will be defined as the B6277 within Startforth between the junction between it and the Lendings and the junction between it and the A67 at the County Bridge. Please see Figure 1.1 in Appendix 1 for local context.

1.4. The forecast traffic increases will be set out in both the 'Do Minimum Scenario' and the 'Do Something' scenario (as defined in section 2 of Appendix 1), considering increase in car and HGV traffic. The consideration will account for the differences in base traffic flows on the B6277 adjacent to the A66 and base traffic flows on 'The Sills' within Startforth.

1.5. The following community impacts will be considered; Local Amenity (air quality, noise and visual), Community Severance (impacts on pedestrians, impact on active travel and other road users) and Safety (actual and perceived - all road users). The impacts will be considered with reference to the relevant industry standard guidelines (including Institute of Environmental Assessment, Guidelines for the Environmental Assessment of Road Traffic (1993).)

1.6. The Local Amenity impacts will report the results of the qualitative appraisals undertaken to support the existing information within the Environmental Statement. In the case of noise, we will report further detail from and complement the existing assessment with qualitative analysis. This assessment in the Environmental Statement reported no significant impacts on the Sills, therefore we will provide more detail on how this outcome was determined taking into account the community impacts considered. In terms of Air Quality the report will consider the modelling undertaken against DMRB LA105 against the commonly used industry standard guidelines for non-road schemes i.e. Environmental Protection UK / Institute of Air Quality Management (EPUK/IAQM) - Land-Use Planning & Development Control: Planning For Air Quality, v1.2 Jan 2017.

1.7. The Community Severance and Safety appraisal will qualitatively assess the effects of increased traffic on actual and perceived safety for pedestrians and other vulnerable road users, and consider how this may influence behaviours such as willingness to walk and cycle on the Sills. Indirect effects on wellbeing will be considered, including access to services, social isolation and levels of physical activity.