

M5 Junction 10 Improvements Scheme

Environmental Statement Appendix 1.2 Scoping Opinion Responses TR010063 – APP 6.15

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6.15 Environmental Statement: Appendix 1.2 Scoping Opinion Responses

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1. Scoping Opinion Responses

This appendix is to support the Chapters 1-4 of the Environmental Statement for M5 Junction 10 Improvements Scheme.

Table A1-1 below is a response from GCC to the Scoping Opinion comments received from PINS.

Table A1-1 - Summary of the responses from GCC to the comments made by PINS in the scoping opinion received August 2021

Comment	GCC Response
<p>Description of the proposed development</p>	
<p>The ES should include the following:</p> <ul style="list-style-type: none"> • a description of the Proposed Development comprising at least the information on the site, design, size, and other relevant features of the development; and • a description of the location of the development and description of the physical characteristics of the whole development, including any requisite demolition works and the land-use requirements during construction and operation phases. <p>The description of the Proposed Development in the Scoping Report does not provide the size of the proposed development, either in terms of the overall length, width of carriageways and other components, or the vertical alignments of cuttings or embankments. The likely dimensions, including height, of the proposed West Cheltenham Link Road viaduct crossing of the River Chelt are not described. The ES should describe the scale of the Proposed Development, in particular including all details which have been used to inform the assessment of environmental effects.</p> <p>The description in the Scoping Report does not include any detailed information on proposed fencing, noise attenuation barriers, drainage features, lighting, gantries, or signage. Again, the ES should contain the relevant information necessary to establish the basis of the assessment of likely significant effects.</p>	<p>The information to address these points is included in the ES. The Scheme is described in Chapter 2 of the ES (application document TR010063 – APP 6.2).</p>
<p>Figure 1-1 shows the proposed operational layout. While this figure includes a scale, it has been produced at a low resolution with a limited level of detail and is not annotated with any of the information highlighted</p>	<p>Note that it is Figure 2-1 that presents the overall operational layout in the ES. This has been increased to A3 size to improve readability. Additional figures are provided</p>

Comment	GCC Response
<p>above. The Inspectorate advises that the ES is accompanied by sufficiently detailed plans at an appropriate scale showing the design parameters on which the assessment of likely significant effects has been based.</p>	<p>in the General Arrangement Plans (application document TR010063 – APP 2.9) showing the Scheme in more detail.</p>
<p>Chapter 2 of the Scoping Report explains that the existing exit slip roads at M5 Junction 10 will be removed and the existing overbridge will be demolished under the Proposed Development. The ES should include a description of these works and any other demolition requirements and assess any significant effects where these could occur.</p>	<p>The information to address these points is included in the ES. The proposed development, including the removal of existing structures, is described in Chapter 2 of the ES (application document TR010063 – APP 6.2).</p>
<p>The Scoping Report describes the intention to include cycling and pedestrian routes within the new M5 Junction 10 arrangement, adjacent to the A4019 as part of the widening works, and as segregated routes along the proposed West Cheltenham Link Road. The layout of these features is not visible on Figure 1-1. The integration of the new infrastructure with existing features is also briefly described, for example the inclusion of access to properties along the A4019 within Uckington. The Inspectorate would expect the ES to include a description of these features, supported by sufficiently detailed plans at an appropriate scale, and an assessment of any likely significant effects.</p>	<p>These details are shown on the more detailed figures provided in the General Arrangement Plans (application document TR010063 – APP 2.9), and are described as part of the description of the Scheme in Chapter 2 of the ES (application document TR010063 – APP 6.2)..</p>
<p>Paragraphs 2.4.2 and 3.3.48 to 3.3.49 of the Scoping Report discuss the option to designate Withybridge Lane as a quiet lane to enhance the equestrian, cycling, and walking facilities within the area as part of the Scheme, and provide an outline of the traffic management measures required to achieve this. Should this element be taken forward as part of the Proposed Development, it should be fully described in the ES along with an assessment of the associated likely significant environmental effects.</p>	<p>The information to address these points is included in the ES. The Scheme is described in Chapter 2 of the ES (application document TR010063 – APP 6.2). This includes the planned changes to Withybridge Lane.</p>
<p>Paragraph 2.4.17 of the Scoping Report discusses the intended restoration of land taken temporarily by the Proposed Development, and the areas affected are shown on Figure 2-5. The ES should provide as much detail as possible on the nature of the restoration works and proposed management operations (including timescales), and a description and assessment of the associated likely significant effects.</p>	<p>The information to address these points is included in the ES. The Scheme is described in Chapter 2 of the ES (application document TR010063 – APP 6.2). The land take required by the Scheme is now shown on the Land Plans (application document TR010063 – APP 2.2).</p>

Comment	GCC Response
<p>It is appreciated that at this stage details of the construction period are not known, although it is noted that potential construction compound locations are included within the temporary land-take identified in Figure 2-5. The ES must clearly set out the assumptions made in the environmental assessments with respect to construction phasing, working hours, relevant working methodologies, and overall timescales for the construction period. Where known, the nature and quantity of materials used (including soil) should be described and an assessment provided of the associated likely significant effects.</p>	<p>The information to address these points is included in the ES. The construction details available at the point of submission of the DCO are provided in Section 2.8 of Chapter 2 of the ES (application document TR010063 – APP 6.2).</p> <p>The arrangements for the construction of the Scheme have been developed by the buildability contractor to a level of detail sufficient to provide certainty on the land take required to build the Scheme and defining key construction methods and equipment to inform the environmental assessment. Potential locations of construction compounds, topsoil storage areas and construction working areas for the contractor have been identified and are included within the temporary land take for the Scheme, and are shown on the Works Plans (application document TR010063 – APP 2.4). The assessments of construction effects assume the implementation of best practice, based on industry guidance and professional experience.</p> <p>This construction programme is based on the current preliminary design of the Scheme and will be updated by the Principal Contractor when appointed during the detailed design stage.</p>
<p>It is noted that the Proposed Development is not intended to be decommissioned, however, the Inspectorate would expect the ES to provide an assessment of any likely significant effects of the removal of any elements of the Proposed Development during construction and operation, as part of the relevant environmental aspect assessments carried out e.g., the materials and waste assessment.</p>	<p>This is addressed as part of Chapter 12 of the ES (Materials and Waste chapter, application document TR010063 – APP 6.10), with regards to the demolition of existing structures within the Scheme, for example the existing A4019 overbridge.</p>
<p>Alternatives</p>	
<p>The EIA Regulations require that the Applicant provide ‘A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects’.</p> <p>The Inspectorate notes the information provided in Chapter 3 of the Scoping Report and Paragraph 4.3.7 stating the Applicant’s intention to consider alternatives within the ES. The Inspectorate would expect to see a discrete section in the ES that provides details of the reasonable</p>	<p>Information on alternatives, and an assessment of their respective environmental effects is included in Chapter 3 of the ES (application document TR010063 – APP 6.2).</p>

Comment	GCC Response
<p>alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.</p>	
<p>Flexibility</p>	
<p>A number of the chapters within the Scoping Report refer to ‘scheme options’ (Chapters 5, 7, 9, 10, 11, 13, and 14) and Chapter 7 refers to an ‘Option 2B’. Chapter 3 of the Scoping Report states that a preferred option, ‘Option 2’ has been chosen and does not indicate that multiple options remain under consideration. The project description in the ES must be consistently reflected throughout the assessments presented. Where multiple options are being considered, these should be clearly defined and described within the project description in the ES.</p>	<p>Following the preferred route announcement for the Scheme, a single option was selected (Option 2). The ES has assessed this single option only.</p>
<p>The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters should be clearly defined in the draft Development Consent Order (dDCO) and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.</p>	<p>Comment noted. The ES has assessed a single option only.</p>
<p>Relevant National Policy Statements (NPSs)</p>	
<p>Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the Secretary of State and include the Government’s objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.</p> <p>The designated NPS relevant to the Proposed Development is the NPS for National Networks (NPS NN). Chapter 1 of the Scoping Report</p>	<p>No further action required.</p>

Comment	GCC Response
<p>identifies this and sets out the background to identification of the NSIP status of the Proposed Development, and the national, regional, and local policy considered relevant to the Proposed Development.</p>	
<p>Scope of the Assessment</p>	
<p>The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:</p> <ul style="list-style-type: none"> • to demonstrate how the assessment has taken account of this Opinion; • to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects; • to set out the proposed mitigation and/or monitoring measures including cross-reference to the means of securing such measures (e.g., a dDCO requirement); • to describe any remedial measures that are identified as being necessary following monitoring; and • to identify where details are contained in the Habitats Regulations Assessment (HRA report)(where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, that inform the findings of the ES. 	<p>These recommendations have been reviewed as part of the development of the ES. Appendix 1.2 (application document TR010063 – APP 6.15) provides information on how the assessment has taken account of this Opinion.</p> <p>The Register of Environmental Actions and Commitments (REAC), submitted as part of the DCO for the Scheme (application document TR010063 – APP 7.4) provides information on the mitigation and/or monitoring measures, along with details on the means of securing these measures.</p> <p>A HRA Screening Assessment, and a HRA Statement to Inform and Appropriate Assessment (SIAA) are included as part of the ES, as Appendix 7.13 (application document TR010063 6.15) and 7.14 (application document TR010063 6.15) respectively.</p> <p>An assessment of the cumulative effects is included within each of the topic chapters (Chapters 5-14, application documents 6.3 – 6.12), and also within Chapter 15 (Cumulative Effects Assessment, application document TR010063 – APP 6.13).</p>
<p>The Inspectorate would expect the ES to include figures as necessary to show:</p> <ul style="list-style-type: none"> • the parameters of the Proposed Development assessed; • the study areas applied in the assessments and predicted extent of impacts where applicable; • relevant baseline data such as the locations of identified receptors; and • the location and design of mitigation measures as applicable to the assessment of residual effects. 	<p>Figures containing this information are provided as part of the respective chapters in the ES.</p>
<p>The Inspectorate considers that where a DCO application includes works described as ‘Associated Development’, that could themselves be defined as an improvement of a highway, the Applicant should ensure that the ES</p>	<p>Whilst the DCO application includes works described as ‘Associated Development’, such as infrastructure associated with cycle/pedestrian access, and the alteration/diversion/stopping up of local roads, accesses and other rights of way,</p>

Comment	GCC Response
<p>accompanying that application distinguishes between; effects that primarily derive from the integral works which form the proposed (or part of the proposed) NSIP and those that primarily derive from the works described as Associated Development. This could be presented in a suitably compiled summary table. This will have the benefit of giving greater confidence to the Inspectorate that what is proposed is not in fact an additional NSIP defined in accordance with s22 of the PA2008.</p>	<p>these are not considered as themselves defined as an improvement of a highway for the purposes of s.22(5) and have therefore not been assessed separately within the ES for the Scheme.</p>
<p>The ES should identify any other types of works which are necessary to deliver the integral proposals but do not form part of the proposed road improvement NSIP, for example utilities works, and assess any associated environmental effects. It is noted from Figure 1-1 of the Scoping Report that the southern extent of the Proposed Development crosses the path of overhead electrical lines and the proposed DCO boundary appears to include existing electrical pylons. Where such utilities works comprise an NSIP in their own right, the relevant NPS should be identified and consideration should be given to the relevance of the environmental requirements of that NPS, for example NPS for Electricity Networks Infrastructure (EN-5). The ES should clearly set out the NPSs which are of relevance to the Proposed Development.</p>	<p>Noted. Works to move existing utilities will be required in order to construct the Scheme as described in the ES. These works include the transfer of the utilities within the existing Piffs Elm culvert into new crossings created underneath the M5 to the north of the existing culvert; and the minor diversion of the gas main that crosses the line of the Link Road. These works will be undertaken as part of the construction of the Scheme. There are no works considered to comprise an NSIP in their own right.</p> <p>Regarding the overhead electrical lines referred to, there are no works planned for these. There is considered to be sufficient working headroom underneath the existing electrical lines, and the existing pylons do not need to be relocated.</p>
<p>Baseline Scenario</p>	
<p>The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.</p>	<p>This is addressed in the ES with regards to impacts to air quality (Chapter 5, application document TR010063 – APP 6.3) and noise (Chapter 6, application document TR010063 – APP 6.4) in assessing the Do Minimum and Do Something scenarios.</p>
<p>The Inspectorate notes the information in the Scoping Report on the Joint Core Strategy (JCS) and the role of the Proposed Development in the delivery of strategic development plans. It is noted from Paragraph 1.1.1 that the time period for the JCS spans 2011 to 2031 and up to 2041 in relation to new homes and employment land. It is not clear from the information on the JCS allocation areas to what extent proposals may come forward within the timescales of the Proposed Development. The Inspectorate advises that the ES should provide relevant information on ongoing developments within the vicinity of the Proposed Development</p>	<p>This information is included as part of the cumulative effects assessment (CEA) presented in Chapter 15 (application document TR010063 – APP 6.13).</p> <p>The methodology used for the CEA is described in Chapter 4 (application document TR010063 – APP 6.2), and sets out the way in which Reasonably Foreseeable Future Projects (RFFPs) have been taken into consideration in the ES.</p>

Comment	GCC Response
application site, and clearly state which developments will be assumed to be under construction or operational as part of the future baseline.	
Forecasting methods or evidence	
The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.	Information is provided in the respective chapters of the ES.
The Inspectorate notes and welcomes the information in Chapter 4 of the Scoping Report and expects the ES to include a similar chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.	Similar information is presented in Chapter 4 of the ES (application document TR010063 – APP 6.2).
The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	Details are provided in the respective chapters of the ES as applicable.
Residues and Emissions	
The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.	Information is provided in the respective chapters of the ES.
The Inspectorate notes from Chapter 4 of the Scoping Report that the methodologies within the DMRB are intended to be applied to the assessments, and that heat and radiation are not included within the scope of this guidance (Paragraph 4.1.6). The Scoping Report proposes to scope out assessment of heat and radiation on the basis of advice from Highways England that they are not relevant to highways schemes. The Inspectorate agrees that while significant environmental effects from heat	The assessment has been undertaken in line with the methodology set out in DMRB. An assessment of heat and radiation have therefore been scoped out of the assessment as per the recommendations of DMRB.

Comment	GCC Response
<p>and radiation are not likely to result from the Proposed Development, the ES should provide information on the reasoning undertaken to reach this conclusion, supported by reference to industry standards and guidance, and professional judgement.</p>	
<p>Mitigation and monitoring</p>	
<p>Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements.</p> <p>The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.</p> <p>The Inspectorate notes the information in Chapter 4 of the Scoping Report with regards to the application of the mitigation hierarchy. The ES should clearly distinguish between measures which are proposed as mitigation, compensation, or enhancement.</p>	<p>Details of the mitigation measures are presented in the respective chapters of the ES. Section 2.6 of Chapter 2 (application document TR010063 – APP 6.2) provides details of the environmental design for the Scheme, which includes the mitigation measures.</p> <p>Details of how these mitigation measures are secured are presented in the REAC (application document TR010063 – APP 7.4).</p>
<p>Risks of Major Accidents and/or Disasters</p>	
<p>The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development.</p> <p>The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development’s potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage, or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.</p>	<p>An assessment of major accidents and disasters relevant to the Scheme is provided in Appendix 1.4 (application document TR010063 – APP 6.15).</p>
<p>Climate and Climate Change</p>	
<p>The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for</p>	<p>The ES includes a climate chapter (Chapter 14, application document TR010063 – APP 6.12) that considers the effects the Scheme could have on climate (emissions)</p>

Comment	GCC Response
<p>example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development.</p>	<p>as well as how climate could affect it, i.e. an assessment of climate vulnerability. The vulnerability assessment includes consideration of adaptive capacity that is embedded into the design.</p>
<p>Transboundary Effects</p>	
<p>The Inspectorate notes the information provided in Chapter 4 of the Scoping Report which sets out the requirements of Regulation 32 of the EIA Regulations and the requirement of Schedule 4 Part 5 of the EIA Regulations for an ES to include a description of the likely significant transboundary effects to be provided in an ES. Chapter 4 identifies the nearest European Economic Area (EEA) State as France (250 km from the Proposed Development) and sets out the anticipated spatial extent of the environmental effects considered. The Scoping Report states that the Proposed Development is not considered likely to have significant effects on a EEA State.</p> <p>Having considered this information and the nature and location of the Proposed Development, the Inspectorate is not aware that there are potential pathways of effect to any EEA states but recommends that, for the avoidance of doubt, the ES details any such consideration and assessment.</p>	<p>Addressed within Chapter 4 of the ES (application document TR010063 – APP 6.2).</p>
<p>Reference list</p>	
<p>A reference list detailing the sources used for the descriptions and assessments must be included in the ES.</p>	<p>This information is included in the respective chapters of the ES.</p>
<p>Coronavirus (COVID-19) Environmental Information and Data Collection</p>	
<p>The Inspectorate understands that measures adopted in response to COVID-19 may have consequences for an Applicant's ability to obtain relevant environmental information for the purposes of their ES. For example, the ability to conduct specific surveys and obtain representative data may be affected by these measures. The ES should explain any such limitations and any assumptions made relating to the environmental information on which it relies.</p>	<p>Details are included in the respective chapters of the ES as applicable.</p>

Comment	GCC Response
<p>Air Quality</p>	
<p><u>Further assessment of ecological receptors</u> Paragraph 5.12.4 states that further assessment is not recommended based on the absence of sensitive ecological receptors. The Inspectorate does not agree to scope out assessment of air quality effects on ecological receptors for the following reasons:</p> <ul style="list-style-type: none"> i. Paragraph 5.5.1 states an absence of ‘designated ecological receptors’ ‘within the vicinity of the study area’. It goes on to state that the study area will be reviewed as the ARN is revised so it is not yet known if the absence of designated sites will remain the case once this process of refinement is undertaken; ii. There is no information on whether any non-designated sensitive ecological receptors may be affected, for example the hedgerow network, orchards, and deciduous woodland identified in Chapter 7 of the Scoping Report; and iii. There is insufficient information on the receptors likely to be affected to scope out further assessment of this matter. <p>The ES should provide an assessment of the likely significant effects of air quality changes on ecological receptors, with cross reference to the relevant aspect chapter as appropriate.</p>	<p>The</p> <p>The information referenced in 5.12.4 (of the ES Scoping Report) was based on the location of designated (national and European) ecological receptors within the provisional study area presented in the PEAOR. The ES has determined the affected road network (ARN) and study area for the Scheme, based on the most recently available traffic data. In addition to identifying whether there were any National and European designated ecological sites within 200m of the ARN, other designated sites of principal importance for the conservation of biodiversity within the study area were examined including local nature reserves, local wildlife sites, nature improvement areas, ancient woodland and veteran trees. The ES provides an assessment of all designated habitats in accordance with DMRB LA105 guidance. Background nitrogen deposition rates, modelled road NOx and derived road ammonia contributions were combined to give a total nitrogen deposition for each designated habitat receptor, and the change in nitrogen deposition rate with the Scheme was calculated at each receptor. Potential air quality effects on the hedgerow network, orchards and deciduous woodland are not required to be assessed as part of the air quality assessment.</p>
<p><u>Baseline environment</u> The ES should ensure that it is based on the most up to date information possible, including the location, extent, and nature of existing Air Quality Management Areas (AQMA). Comments from CBC are noted regarding recent changes to AQMA within its administrative area and the Inspectorate advises the Applicant to discuss the applicable baseline with CBC and other relevant stakeholders.</p>	<p>A summary of the baseline environment is included in Chapter 5 (application document TR010063 – APP 6.3) of the ES. This includes information on AQMAs as well as data from air quality monitoring stations within the study area. The information included within the ES is based on the most up to date information available at the time of writing the report.</p> <p>The assessment takes into account the most recent changes to the CBC AQMA in 2020.</p>
<p><u>Continuous monitoring data</u> The Scoping Report mentions a delayed CBC plan to install additional monitoring stations. It is not clear whether these stations will be operational in time for any monitoring data to be included in the ES,</p>	<p>New automatic air quality monitoring stations (continuous and low-cost sensors) have been added to the CBC monitoring network. Published results from these recording stations have been incorporated into the baseline conditions, where available.</p>

Comment	GCC Response
<p>however the Inspectorate advises that all sources of data and any limitations to data collection are set out in the ES.</p>	<p>This information has not been incorporated specifically into the dispersion model, which considers a 2019 base year. Air quality monitoring recorded in 2020 and 2021 are generally considered to be compromised due to the temporary change in travel habits during the COVID-19 pandemic.</p>
<p><u>Study area for air quality modelling</u> While it is considered likely that roads within central Cheltenham within the AQMA will be susceptible to changes in operational traffic, other areas may also be similarly susceptible, in particular any roads close to the threshold of air quality objective compliance. The Inspectorate notes the intention to consult with CBC and recommends that the Applicant seeks to agree the final extent of the study area for modelling of air quality effects with CBC.</p>	<p>The study area was defined in accordance with DMRB LA105 guidance, as directed by National Highways as the Scheme falls within the Strategic Road Network. The ARN is based on all roads meeting the traffic scoping criteria and adjoining roads within 200 m of sensitive receptors which form part of the air quality modelled road network. The air quality study area is situated within the administrative boundaries of Cheltenham Borough Council (CBC), Gloucester City Council and Tewkesbury Borough Council (TBC) and includes part of the Cheltenham Borough Council Air Quality Management Area 2020. CBC are statutory consultees and have responded to the consultations detailed in Chapter 1 (application document TR010063 - APP 6.2) of this ES.</p>
<p>Noise and Vibration</p>	
<p><u>Operational vibration</u> Given the information provided on the nature of the Proposed Development and the surrounding area, the Inspectorate agrees that significant effects from vibration during operation are unlikely to occur and that this matter can be scoped out of the assessment in the ES.</p>	<p>No further action required. Vibration has been scoped out of the ES.</p>
<p><u>Noise surveys</u> The Scoping Report states that baseline noise surveys were planned for Spring 2021. The ES should explain why the chosen survey period is representative of typical baseline conditions, given the potential for variations in traffic flows and therefore noise levels during the COVID19 pandemic.</p>	<p>The surveys took place after the 17th of May 2021, when indoor socialising was allowed, in order for the noise levels to be as 'normal' as possible during the pandemic. An explanation will be included in the ES.</p>
<p><u>Noise sources</u> The Scoping Report states that all other noise sources aside from road traffic have been excluded from this stage of assessment of the baseline, given the land use within 600m of the Proposed Development. The Inspectorate notes that as the proposed DCO boundary and the study</p>	<p>A cumulative assessment of the Scheme, with development areas, is included in the ES.</p>

Comment	GCC Response
<p>area are yet to be finalised, further survey of the baseline noise environment is proposed. As part of this survey work consideration should be given to the potential overlap of the construction phases of nearby areas allocated for development described in Chapter 1 of the Scoping Report. It would be helpful if the ES included cross-reference between the noise assessment and the assessment of cumulative effects, as appropriate.</p>	
<p><u>Mitigation measures</u> Where mitigation measures involve physical construction such as bunds, noise barriers and screening, the ES should consider the environmental effects and opportunities associated with these, e.g. the potential for significant effects on visual receptors or ecological receptors.</p>	<p>Visual effects on receptors are addressed in Chapter 9 (Landscape and Visual, application document TR010063 – APP 6.7).</p>
<p><u>Extent of residual effects</u> The Scoping Report states that properties within 100m of works could be subject to significant effects from construction noise. The Inspectorate notes that this is not consistent with the extent prior to mitigation of 300m (Paragraph 6.2.2), and it is not explained how this level of effectiveness of the currently undefined mitigation measures has been arrived at. The ES should clearly explain the anticipated effectiveness of the specific mitigation measures proposed when reporting the predicted residual effects.</p>	<p>This has been included as part of the assessment presented in Chapter 6 (Noise and Vibration, application document TR010063 – APP 6.4).</p>
<p><u>Determination of significant of residual effects</u> It is noted that noise levels may be significant following mitigation. The ES should explain whether construction noise levels will be of sufficient magnitude and duration to trigger a requirement for noise insulation or temporary rehousing.</p>	<p>This has been considered as part of the assessment presented in Chapter 6 (Noise and Vibration, application document TR010063 – APP 6.4)..</p>
<p>Biodiversity</p>	
<p><u>Features identified to be of less than local importance</u> It is not possible based on the information provided to identify the specific features included in this broad valuation, and whether the valuation applied has been agreed with the relevant consultees. Therefore, it is not possible to scope this matter out at this stage and the Inspectorate</p>	<p>Noted. Further details on the baseline environment for Biodiversity are presented in Chapter 7 (Biodiversity, application document TR010063 – APP 6.5).</p>

Comment	GCC Response
<p>advises that details of the features identified and to what extent their valuation has been discussed with stakeholders are reported in the ES, and further justification provided for exclusion of significant environmental effects.</p>	
<p><u>Wye Valley and Forest of Dean bat sites SAC</u> The Inspectorate understands from the Scoping Report that the SAC is located 20km from the Proposed Development site and notes the application of the Bat Conservation Trust (BCT) core sustenance zones. The Inspectorate agrees that there is evidence to suggest that significant effects are unlikely. However, it is unclear how the bat survey data (noted as ongoing) has informed the exclusion of significant effects. The ES should include this information.</p>	<p>Further detail is included in the updated HRA, which is also included in the ES in two appendices to the Biodiversity chapter. A HRA Screening Assessment, and a HRA Statement to Inform and Appropriate Assessment (SIAA) are included as Appendix 7.13 (application document TR010063 6.15) and 7.14 (application document TR010063 6.15) respectively.</p>
<p><u>Severn Estuary SAC/SPA/Ramsar/SSSI</u> The Scoping Report presents generalised information on the likely quantities and types of pollutants taken into account and the mitigation to be applied to minimise adverse effects to watercourses which are hydrologically connected to the Severn Estuary. Given the distance between the potentially affected watercourses and the designations, the Inspectorate agrees that the likelihood of significant effects is low. However, information on the specific residual effects is not provided and the Inspectorate would expect to see a fully reasoned rationale for excluding significant effects, supported by more detailed information in the ES. The Inspectorate welcomes the intended inclusion of these designated sites in the HRA screening report for the Proposed Development and advises that this is coordinated with the EIA reported in the ES.</p>	<p>Noted. Further detail is included in the updated HRA, which is also included in the ES in two appendices to the Biodiversity chapter. A HRA Screening Assessment, and a HRA Statement to Inform and Appropriate Assessment (SIAA) are included as Appendix 7.13 (application document TR010063 6.15) and 7.14 (application document TR010063 6.15) respectively.</p>
<p><u>Walmore Common SPA and Coombe Hill Canal SSSI</u> The Scoping Report suggests that based on surveys and research, Bewick's swan, the qualifying feature of the SPA, does not utilise habitats within the study area. Based on the information provided, it is agreed that there is no evidence for a pathway for significant effects to occur, and the Inspectorate agrees to scope this site out of the EIA subject to this remaining the case. Specific information on the location of wintering bird</p>	<p>Noted. Further detail, including the location of the wintering bird surveys, is included in the ES. Further detail is included in the updated HRA, which is also included in the ES in two appendices to the Biodiversity chapter. A HRA Screening Assessment, and a HRA Statement to Inform and Appropriate Assessment (SIAA) are included as Appendix 7.13 (application document TR010063 6.15) and 7.14 (application document TR010063 6.15) respectively.</p>

Comment	GCC Response
<p>surveys is not provided in the Scoping Report and the Inspectorate would expect this information to be included within the ES.</p>	
<p><u>Water vole and dormouse, further surveys for these species</u> The Inspectorate notes that these species are considered to be absent following the survey work undertaken of the suitable habitat present, and that no further surveys are proposed. The Inspectorate accepts that if these species are demonstrated to be absent from the Proposed Development area no significant effects will occur. However, the reasoning behind the exclusion of likely significant effects should be included in the ES, supported by evidence of the survey locations and specific information on the habitats affected by the Proposed Development.</p>	<p>Noted. Further detail is included in the Biodiversity chapter (application document TR010063 – APP 6.5) and its supporting appendices.</p>
<p><u>Terrestrial invertebrates</u> The Scoping Report proposes to scope out effects on terrestrial invertebrates on the basis that there will be no relevant habitat loss. However, habitat loss is not the only relevant impact-effect pathway. While the Inspectorate accepts the rationale regarding noble chafer habitat loss in this paragraph in principle, insufficient information has been provided regarding other impact pathways and resulting effects for terrestrial invertebrates to allow these to be scoped out. The ES must include an assessment of the likely significant effects on this ecological feature from habitat loss in the case of the terrestrial invertebrates in general, and from other impacts in the case of noble chafer.</p>	<p>Noted. Further detail is included in the Biodiversity chapter (application document TR010063 – APP 6.5) and its supporting appendices.</p>
<p><u>Badger and plants</u> Paragraph 7.13.5 proposes to scope badgers and plants out of the assessment in the ES due to these features being of below local value. From Table 7-1 this statement appears to relate to common and widespread plant species, but it is not clear if it extends to invasive non-native species (INNS) and it is noted that the Scoping Report records Himalayan balsam as present within the study area. For clarity, the ES should provide sufficient information on ecological features that require record and assessment for legal reasons to allow the need for appropriate mitigation to be identified and subsequently considered by the decision-maker. The Inspectorate expects badger and INNS to be addressed in the</p>	<p>Features that have been identified to be of less than local importance are not considered to be important ecological features, however sufficient information is provided in the Biodiversity chapter (application document TR010063 – APP 6.5) and its supporting appendices about such features in order that appropriate mitigation can be developed, to comply with legislation. Badgers and INNS will be addressed in this way.</p> <p>Regarding notable plants the valuation has not just relied on desk study data. Extensive habitat surveys have been undertaken at the optimal time of year for botanical survey. These concluded that the intensively managed agricultural habitats</p>

Comment	GCC Response
<p>ES in this capacity. While the desk study data is reported in Table 7-1 as having an absence of records of notable plant species, no targeted botanical surveys are reported in the Scoping Report and it is acknowledged within the document that desk study data alone cannot be relied upon as confirmation of absence. The Inspectorate does not agree to scope notable plant species of conservation concern out of the ES at this stage due to the uncertainty around the risk of significant effects. Should further information be available to provide certainty that no significant effects would occur, this feature can be scoped out of the assessment.</p>	<p>which dominate the study area are unlikely to support notable plant species, and only common and widespread plant species were observed during the surveys, even within the small areas of more diverse grassland (which were noted as having the potential to support notable plant species). This is considered to provide robust justification for scoping out notable plant species.</p>
<p><u>Study area and changes to the Proposed Development boundary</u> The ES should respond to any changes to the extent of the Proposed Development, updating the environmental assessments as necessary including a review of the appropriateness of the study areas applied in capturing the extent of likely significant effects.</p>	<p>The Environment team have been aware of changes to the Scheme design and have updated the assessments undertaken accordingly.</p>
<p><u>Currency of data and validation surveys</u> The Inspectorate notes the suite of work already carried out and the information provided in the Scoping Report on ongoing data collection and the need for survey validation in order to ensure the ES is based on up-to-date information. The Applicant is advised that as well as the work discussed in the Scoping Report, other survey work may be required (e.g. an arboricultural survey as advised by CBC and Tewkesbury Borough Council in their responses provided in Appendix 2 of this Scoping Opinion). The desk study information may also need to be updated. The Applicant is encouraged to seek advice as far in advance as possible from relevant stakeholders to ensure a robust basis for the assessment.</p>	<p>An arboricultural survey has been undertaken for the Scheme. The desk study information was updated in July 2022. Appendix 7.17 (Validation report, application document TR010063 - APP 6.15) details the validation surveys undertaken in 2022 to determine whether any of the baseline conditions have changed considerably (since the majority of the extended Phase 1 habitat surveys were undertaken pre-2022), and validate, or otherwise, the results described, and conclusions drawn in the ES (and associated Technical Appendices).</p>
<p><u>Value of ecological features</u> In Table 7-1 all terrestrial habitats, all bat species, all other notable mammals, and all breeding and wintering bird species are grouped together and assigned the same value. The Inspectorate considers that this approach may lead to under valuation of some features within these wider groups. The Applicant is advised to seek agreement on the valuation assigned to ecological features with relevant stakeholders.</p>	<p>Noted. Further detail to justify the valuation of species/species groups is included in the ES. Statutory consultation and targeted consultation has been undertaken through the development of the design, and is summarised in Chapter 1 (application document TR010063 - APP 6.2). Consultation has been ongoing with Natural England.</p>

Comment	GCC Response
<p><u>Potential impacts</u></p> <p>The Inspectorate notes the statement that this is not an exhaustive list of potential impacts, but advises that lighting impacts during construction and operation, and increased recreational disturbance should be considered in the ES where applicable. It is noted that prevention of illumination is listed under mitigation for bat species in Paragraph 7.7.8, however disturbance from lighting is not acknowledged as a potential impact of the Proposed Development. While pollution events and dust are listed here, nitrogen deposition (including from ammonia emissions) is not, and the Inspectorate would expect the ES to include an assessment of likely significant effects in this regard.</p>	<p>Noted, these potential impacts are considered in the Biodiversity chapter (application document TR010063 - APP 6.5).</p>
<p><u>Potential effects and mitigation measures</u></p> <p>There remains uncertainty around the risks of encountering some protected species and species of conservation concern. Within this section potential effects are described in a general way and typical mitigation measures are outlined. The ES should identify specific mitigation for particular features/ locations and describe these measures in detail, including how they will be secured in the dDCO or other legal mechanism. Monitoring is mentioned in Chapter 4 in general terms. The ES should explain what monitoring or ongoing management is intended for the ecological mitigation measures to ensure their effectiveness and appropriateness.</p>	<p>Noted, further details will be provided in the Biodiversity chapter (application document TR010063 - APP 6.5) and its supporting appendices.</p> <p>Details of how these mitigation measures are secured are presented in the REAC (application document TR010063 – APP 7.4).</p>
<p><u>Mitigation for great crested newts – District Level Licensing (DLL) Scheme</u></p> <p>The Inspectorate notes the possibility of pursuing the DLL Scheme as an alternative to the mitigation described for great crested newts. The ES should provide evidence regarding how and where this approach has been used in relation to the proposal, which should include a counter-signed certificate from Natural England, or a similar approval from an alternative DLL provider. It is noted that the mitigation for great crested newt may also be relied upon to reduce adverse effects on common toad. Should the DLL Scheme approach be adopted the implications for other ecological features including common toad should be considered and if</p>	<p>DLL is being pursued for the Scheme and Atkins is working with NatureSpace (the DLL provider) to secure the relevant documentation, which will be submitted with the ES. Common toad are considered as a separate receptor within the ES, and mitigation has been included for this species.</p>

Comment	GCC Response
<p>necessary alternative mitigation for these features should be included within the ES.</p>	
<p>Road drainage and the Water Environment</p>	
<p><u>Flood risk from tidal flooding, from sewers, and from artificial waterbodies</u> The Inspectorate considers that it is appropriate to scope out the risks of flooding from tidal flooding based on absence of these sources within the study area. Noting the information on the likely risk from sewers and in relation to the Dowdeswell Reservoir, the Inspectorate agrees that likely significant effects from flooding are unlikely to occur from these sources. The Inspectorate agrees to scope out these sources from detailed assessment, however the ES should present the rationale provided in the scoping information.</p>	<p>The ES presents the rationale for scoping the various sources of flood risk as provided in the scoping information.</p>
<p><u>Flood risk – sequential test</u> It is noted that the Proposed Development is located in areas classified as Flood Zone 2 and 3. The Scoping Report does not currently refer to the sequential/exemption test, however it is assumed that this information will be provided in the Flood Risk Assessment intended to support the ES (Table 8-4). The ES should explain how the tests have been applied and they have informed the design layout and flood mitigation requirements for the Proposed Development, where relevant.</p>	<p>Appendix 8.1 (Flood risk assessment, application document TR010063 - APP 6.15) explains how the sequential test and the exception test, have been applied to the Scheme.</p>
<p><u>Baseline information</u> The ES should include the necessary information to establish whether shallow perched groundwater or springs could be present and subject to significant environmental effects.</p>	<p>This information is included as part of the ES. Background mapping has been used to identify locations of springs with cross reference to hydrogeological information to develop a conceptual understanding.</p>
<p><u>Assumptions and limitations</u> The Scoping Report details that information relating to flood risk baseline conditions and known incidents of flooding will be sourced from the Environment Agency. The Inspectorate would expect this to include the most up to date climate change allowances, as stated in the Scoping Report as being applied to the FRA (Paragraph 8.10.3). Whilst noting that the applicant is Gloucestershire County Council, the ES should ensure to include data from the relevant council(s) departments as the Lead Local</p>	<p>The ES has applied the July 2021 climate change allowances provided by the Environment Agency. The assessments presented in the Scoping Report used earlier values, which were higher than the 2021 allowances.</p>

Comment	GCC Response
<p>Flood Authority, other relevant local authorities responsible for preparing flood plans, or the relevant internal drainage boards(s).</p>	
<p><u>Mitigation measures</u> The Scoping Report mentions temporary and permanent flood/surface water storage and compensation areas as part of the intended mitigation measures for the Proposed Development. The ES should confirm the location and design parameters/specifications of these features and the intended timing of implementation. The ES should assess any associated significant environmental effects of their construction and operation as part of the Proposed Development.</p>	<p>The ES presents the locations for the compensatory floodplain and flood storage area (included as part of the Scheme description in Chapter 2 (application document TR010063 - APP 6.2). Details of how they perform is presented in Chapter 8 (TR010063 - APP 6.6) and its supporting Appendix 8.1 (TR010063 - APP 6.15).</p>
<p>Landscape and Visual</p>	
<p><u>Landscape character at a national and county level</u> The Inspectorate agrees that based on the information provided, the Proposed Development is unlikely to give rise to significant effects on landscape character at a national and county level. The Inspectorate agrees that this matter can be scoped out of the assessment in the ES.</p>	<p>No further action required.</p>
<p><u>Visual receptors at Hardwicke, Hayden and Hayden Green, Springbank and Springbank Primary Academy, Pilgrove Way and Pilgrove Way playground, Hayden allotments, and Swindon Village.</u> The Inspectorate understands the reasoning presented in Table 9-2, and considers it likely that subject to finalisation of the study area and design of the Proposed Development that this reasoning would lead to a conclusion of neutral visual effects. However, little evidence to support the reasoning provided is included in the Scoping Report, and importantly, the study area and understanding of the Proposed Development's impacts are yet to be finalised. Therefore, the ES should provide an assessment of the likely significant effects on these receptors where these could occur, or provide evidenced reasoning to support the conclusion that they would be unaffected.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES.</p>
<p><u>Landscape and visual receptors outside of 1km</u> The Scoping Report states that the Zone of Theoretical Visibility (ZTV) and study area will remain under review during the assessment. The</p>	<p>No further action required.</p>

Comment	GCC Response
<p>Inspectorate agrees that given the information provided on the location of the Proposed Development and the surrounding landscape features, that landscape receptors beyond 1km can be scoped out of further assessment in the ES. The Inspectorate notes the rationale in Paragraph 9.2.4 of the Scoping Report with regard to the identified visual receptors. Subject to the outcomes of the further refinements to the Proposed Development and to the ZTV providing evidence that no significant visual effects beyond 1km are likely, The Inspectorate agrees to scope out visual receptors beyond 1km from the DCO boundary.</p>	
<p><u>Study area and use of ZTV</u> It is noted from the Scoping Report that the proposed ZTV may be applied along with field work and consultation to identify the final selection of viewpoints. The Inspectorate notes the approach is not yet defined, and advises that the ES must fully explain and justify the methodology used to refine the study area.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES.</p>
<p><u>Identification of receptors</u> Figure 9-1 indicates the location of potential landscape and visual receptors; with visual receptors labelled as VR1, VR2 etc. The receptors are not identified by name on this Figure, however Table 9-2 lists visual receptors by name/description but without reference to these labels. The ES should ensure that where number references are used that they are consistent on any relevant figures and tables presented within it.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES.</p>
<p><u>Assumptions and limitations</u> The ES should include an assessment of potential landscape and visual effects for both daytime and night-time conditions, in particular in relation to the identified requirement to assess the effects on longer distance views and on adjacent residential receptors.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES. However the night-time effects will be high-level and not quantitative.</p>
<p><u>Operational impacts</u> As well as the environmental design features specifically mentioned in the Scoping Report, the Inspectorate advises that impacts from noise attenuation measures should also be assessed.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES.</p>

Comment	GCC Response
<p><u>Mitigation and likely residual effects</u> The phrases ‘short term’ and ‘long term’ are not defined here. As proposed elsewhere in this chapter of the Scoping Report, the ES must consider the temporal aspect of the likely significant effects, and explain any assumptions made around the length of time needed for mitigation measures to become effective e.g. maturation of the mitigation planting identified in Section 9.7. This information should be clearly defined in the ES when identifying the residual effects of the Proposed Development.</p>	<p>The information to address these points is included in Chapter 9 (application document TR010063 - APP 6.7) of the ES.</p>
<p>Geology and Soils</p>	
<p><u>Soils of other importance e.g. designated nature conservation sites; or deciduous woodland designated as Priority Habitats and/or National Forest Inventory sites</u> The Inspectorate agrees that where a particular type of feature is absent from the study area and therefore no pathway exists for significant effects to occur, that effect can be scoped out of the ES. The Scoping Report states that no relevant nature conservation designated sites are present within the study area, but provides limited evidence in this regard. While the Inspectorate agrees to scope out soils of importance associated with these designations, this evidence should be presented in the ES. Areas of woodland which are designated as Priority Habitats and/or National Forest Inventory sites are identified within the vicinity of Junction 10. The Scoping Report states that effects on soils associated with the priority habitats can be scoped out based on the habitats’ limited dependence on the soil type present. The Inspectorate is content to scope this matter out of the geology and soils assessment.</p>	<p>Details on the environmentally sensitive sites present within the Scheme boundary have been included within the ES baseline.</p> <p>Noted - soils of importance associated with environmentally sensitive sites and effects on soils associated with the priority habitats have been scoped out of the ES.</p>
<p><u>Bedrock geology and superficial deposits (including geological designations)</u> Given the information provided the Inspectorate agrees that it is appropriate to scope out geological designations, given the absence of any such designations within the study area.</p>	<p>Noted - geological designations have been scoped out of the ES.</p>
<p><u>Hydrology</u> The Scoping Report refers to the study area and then states that there are no licenced surface water abstractions “on site”. The ES should be</p>	<p>Noted.</p>

Comment	GCC Response
<p>clear in its terminology when referring to the study area applied. Hydrological and hydrogeological assessments should also include, where available, information on private water abstraction supplies.</p>	
<p><u>Design and mitigation – requirements for ground investigation</u> The ES should indicate whether ground investigations are proposed to be undertaken to inform the ES or for detailed design works. Where ground investigation information is not proposed to inform the assessments within the ES, the data sources and methodology that have been applied should be explained and justified in the ES.</p>	<p>A ground investigation for the Scheme was completed in August 2021. The results are presented and considered within Chapter 10 (application document TR010063 - APP 6.8) of the ES.</p>
<p><u>Effects associated with water quality</u> The Inspectorate notes that Paragraph 10.1.3 of the Scoping Report states that effects associated with water quality are assessed within Chapter 8 (Road Drainage and the Water Environment). However, Table 10-1 and Table 10-2 set out the methodology for determining significance of effects to surface water features based on DMRB LA113. Chapter 8 also states that this methodology has been applied within its proposed scope. The ES should avoid duplication of the assessment of significant effects on surface water quality, making cross reference between relevant chapters where necessary.</p>	<p>Although the same methodology has been used to assess impact, each chapter considers a different impact to the surface water and groundwater receptors. Chapter 10 (application document TR010063 - APP 6.8) considers the effects to surface water and groundwater from land contamination. Chapter 8 (application document TR010063 - APP 6.6) considers effects related to surface water, hydromorphology, flood risk and groundwater.</p>
<p>Cultural Heritage</p>	
<p><u>Geophysical survey</u> The Scoping Report refers to the requirement to undertake a geophysical survey in order to identify unknown archaeological assets. The ES should explain how the geophysical survey will be used to inform the requirement for additional mitigation measures, for example trial trenching or other intrusive survey methods.</p>	<p>The geophysical survey and trial trenching for the Link Road have been conducted and used to inform the assessments reported in Chapter 11 (application document TR010063 - APP 6.9) of the ES. The ES considers the results of both geophysical survey and evaluation trenching in its findings and addresses the need for additional mitigation.</p>
<p><u>Archaeological management plan</u> The Scoping Report recommends production of an Archaeological Management Plan. The ES should make it clear as to what stage of the Proposed Development this is required, e.g. in advance of or during construction, and set out how the plan is to be legally secured e.g. by DCO requirement.</p>	<p>The ES addresses the need for the Archaeological Management Plan. The REAC (application document TR010063 - APP 7.4) describes how this will be secured.</p>

Comment	GCC Response
Materials and Waste	
<p><u>Material demand and waste produced during operation (including maintenance)</u></p> <p>The Inspectorate considers that significant effects from operational and maintenance material demand and waste arisings are unlikely, based on the predicted minimal volume and low hazard potential of waste. It is agreed to scope out the effects of material demand and waste produced during operation and maintenance of the Proposed Development.</p>	<p>Comment noted. No further action taken.</p>
<p><u>Mineral Safeguarding areas and mitigation</u></p> <p>The Scoping Report states that Mineral Consultation/Safeguarded Areas have been identified, and the assessment criteria in Table 12-4 include consideration of sterilisation of safeguarding sites. However, this potential impact is not explicitly identified in Section 12.6 and mitigation is not discussed. The ES should include an assessment of the potential for mineral sterilisation as a result of the proposed Development, and any required mitigation measures to prevent sterilisation occurring, for example whether prior extraction could be included as a mitigation measure for the Scheme.</p>	<p>The information to address these points is included in Chapter 12 (application document TR010063 - APP 6.10) of the ES, including mitigation such as prior extraction. However this needs to be balanced against the requirements to retain excavated material on site to offset the need to import materials for the Scheme construction such as embankments.</p>
Population and Human Health	
<p><u>Financial compensation</u></p> <p>No environmental matters have been proposed to be scoped out of the assessment. The Inspectorate agrees that financial compensation lies outside the scope of EIA.</p>	<p>Noted - financial compensation lies outside the scope of EIA.</p>
<p><u>Timing of construction effects and of mitigation</u></p> <p>Whilst the precise timing of construction activities and phasing of the Proposed Development are not yet known, these have potential to alter the magnitude of impacts. The ES should clearly set out the anticipated timing and duration of construction effects and the proposed implementation of mitigation measures, within the context of the overall phasing of the proposals. This should include any relevant 'advance works', and works included within the Proposed Development as mitigation for other environmental effects.</p>	<p>The information to address these points, regarding the timing and duration of construction effects and proposed implementation of mitigation measures, is included in Chapter 13 (application document TR010063 - APP 6.11) of the ES.</p> <p>The assessment of magnitude of impacts, reported in the ES, takes into account embedded mitigation. Essential (additional) mitigation measures, as outlined in the comment, are clearly stated before a residual effect is then determined.</p>

Comment	GCC Response
<p><u>Population effects – WCH enhancement opportunities</u> The Scoping report states that opportunities exist for enhancement to routes used by walkers, cyclists, and horse riders. The ES should clearly describe any such measures to be implemented, ensuring consistency between the proposed DCO, the overall project description in the ES, and relevant aspect assessments in the ES such as the assessment of population effects.</p>	<p>The EIA process evaluates the opportunities for WCH enhancement. Any measures intended to be carried forward to implementation have been described clearly, in a manner consistent with the overall project description.</p>
<p>Climate</p>	
<p><u>Extreme weather events during construction</u> The Inspectorate considers that further assessment of extreme weather events during construction may be scoped out on the basis that proposed measures for management of extreme weather events would be incorporated within the CEMP.</p>	<p>No further action required.</p>
<p><u>Specific major accident scenarios and quantitative assessment</u> The Scoping Report states that no assessment of specific major accident and disaster scenarios requiring repair, maintenance or replacement works to be carried out that would lead to additional GHG emissions beyond those anticipated in normal operation. On the basis of the uncertain nature of such events, the Inspectorate considers that this matter may be scoped out.</p>	<p>No further action required.</p>
<p><u>Mitigation for carbon emissions</u> If opportunities to reduce and sequester carbon emissions are sought through third-party projects, the ES must demonstrate what if any elements of this are to be included within the proposed DCO, and how any such measures on which the ES relies are intended to be legally secured.</p>	<p>Such opportunities have not been identified at the time of submission of this ES.</p>
<p><u>Carbon budgets and project stages</u> The Scoping Report indicates that construction would take place within the third carbon budget (up to the end of 2022), the anticipated opening year of the Proposed Development is 2025 within the fourth carbon budget. The operational year of assessment is not identified in this chapter, although it is understood that the operational phase extends</p>	<p>This detail is presented in Chapter 14 (application document TR010063 – APP 6.12) of the ES.</p>

Comment	GCC Response
<p>beyond the end of the 5th Carbon Budget period (2032) and that the 6th Carbon Budget has been set at 2033-2037. The ES should clearly explain the anticipated contributions of each project phase within the context of the applicable carbon budget when emissions would occur, including in relation to a defined operational phase.</p>	
<p><u>Construction material supply and transport</u> The Scoping Report states that emissions from these sources will be included in the assessment, however, no study area has been set and it is not explained how the activity data, or the emissions factors are to be determined. This information should be provided in the ES.</p>	<p>This information is presented in Chapter 14 (application document TR010063 – APP 6.12) of the ES.</p>
<p><u>Emissions from change in land use</u> For clarity, the ES should define the threshold of ‘significant areas of land use change’ which would trigger this specific assessment.</p>	<p>This information is defined in Chapter 14 (application document TR010063 – APP 6.12) of the ES in accordance with DMRB LA 114 paragraph 3.12.</p>
<p>Cumulative Impact Assessment</p>	
<p><u>Reasonably Foreseeable Future Projects (RFFP) long List Review</u> The review of the developments to be included within the RFFP list for cumulative effects should be undertaken as close as possible to the commencement of the ES assessment to ensure the most up to date information is used. The Applicant should seek to agree the list with relevant stakeholders, in particular the local planning authorities.</p>	<p>An RFFP list was created to inform the PEIR. This has been reviewed as late as practicable within the ES production programme; and relevant stakeholders have been invited to comment on the methodology for the identification of the RFFP longlist and how this was screened to produce the shortlist.</p>
<p><u>RFFP long list for consultation</u> It is noted that this table does not include the other proposals identified in Chapter 1 of the Scoping Report included in the package of improvements to be taken forward separately, namely the upgrade to Arle Court Park and Ride (Arle Court Transport Hub) and junction improvements at Coombe Hill. It is acknowledged that this list will be subject to review and refinement, however the ES should ensure that the other developments of relevance to each aspect assessment are clearly justified and that the summary chapter for cumulative effects is consistent with this information.</p>	<p>The list will be refined as per the comment and will align with the other proposals outlined in Chapter 1 of the Scoping Report.</p>

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