

# A47/A11 Thickthorn Junction

**Scheme Number: TR010037**

**Volume 6**

## **6.3 Environmental Statement Appendices** **Appendix 4.1 – Scoping Opinion Responses**

APFP Regulation 5(2)(a)

Planning Act 2008

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

March 2021

Infrastructure Planning

Planning Act 2008

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

The A47/A11 Thickthorn Junction  
Development Consent Order 202[x]

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**ENVIRONMENTAL STATEMENT APPENDICES**  
**Appendix 4.1 – Scoping Opinion Responses**

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# 1. Scoping opinion responses table

## 1.1. Introduction

- 1.1.1. The Scoping Opinion (**TR010037/APP/6.6**) and the comments from consultees have been considered in undertaking the Environmental Impact Assessment (EIA) and in preparing the Environmental Statement (ES) (**TR010037/APP/6.1**).
- 1.1.2. Comments from the Planning Inspectorate and the responses are recorded in the following tables.
- 1.1.3. Further consultation with topic specific consultees is detailed in Chapters 5 to 15 of the ES (**TR010037/APP/6.1**).

Table 1-1: Planning Inspectorate Scoping Opinion

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<b>1.1 Background</b>		
Paragraph 1.1.1	On 8 February 2018, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Highways England (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed A47/A11 Thickthorn Junction (the Proposed Development).	N/A
Paragraph 1.1.2	In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion 'as to the scope, and level of detail, of the information to be provided in the environmental statement'.	N/A
Paragraph 1.1.3	This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled A47/A11 Thickthorn Junction EIA Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.	N/A
Paragraph 1.1.4	The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.	N/A
Paragraph 1.1.5	Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account: <ul style="list-style-type: none"> <li>a) <i>any information provided about the proposed development;</i></li> <li>b) <i>the specific characteristics of the development;</i></li> </ul>	N/A

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	<p>c) <i>the likely significant effects of the development on the environment; and</i></p> <p>d) <i>in the case of a subsequent application, the environmental statement submitted with the original application.</i></p>	
Paragraph 1.1.6	This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.	N/A
Paragraph 1.1.7	The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).	N/A
Paragraph 1.1.8	The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).	N/A
Paragraph 1.1.9	This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or associated development or development that does not require development consent.	N/A
Paragraph 1.1.10	<p>Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:</p> <ul style="list-style-type: none"> <li>(a) a plan sufficient to identify the land;</li> <li>(b) a description of the proposed development, including its location and technical capacity;</li> <li>(c) an explanation of the likely significant effects of the development on the</li> </ul>	N/A

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	<p>environment; and</p> <p>(d) such other information or representations as the person making the request may wish to provide or make.</p>	
Paragraph 1.1.11	The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.	N/A
Paragraph 1.1.12	In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on 'the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'.	N/A
Paragraph 1.1.13	The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA.	A report to inform the HRA has been completed and is submitted as part of the DCO application <b>(TR010037/APP/6.9)</b>
<b>1.2 The Planning Inspectorate's Consultation</b>		
Paragraph 1.2.1	In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the prescribed consultation bodies before adopting this scoping opinion. A list of the bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.	N/A
Paragraph 1.2.2	The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in undertaking the EIA.	N/A

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
Paragraph 1.2.3	The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.	N/A
Paragraph 1.2.4	Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in carrying out the EIA.	N/A
<b>1.3 Article 50 of the Treaty on European Union</b>		
Paragraph 1.3.1	On 23 June 2016, the United Kingdom (UK) held a referendum and voted to leave the European Union (EU). On 29 March 2017 the Prime Minister triggered Article 50 of the Treaty on European Union, which commenced a two year period of negotiations regarding the UK's exit from the EU. There is no immediate change to legislation or policy affecting national infrastructure. Relevant EU Directives have been transposed into UK law and those are unchanged until amended by Parliament.	N/A
<b>The Proposed Development (2.1 Introduction)</b>		
Paragraph 2.1.1	The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/resources.	N/A
<b>2.2 Description of the Proposed Development</b>		
Paragraph 2.2.1	The Applicant's description of the Proposed Development and its location is provided in Scoping Report Sections 2.3 and 2.4. Figure 1.1 depicts the location of the Proposed Development.	N/A



Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
Paragraph 2.2.2	The Proposed Development comprises changes to and between the A47 Thickthorn Junction, the A11 Round House Roundabout and Newmarket Road. It includes new interchange link roads to link the A11 and the A47. In addition, two alternative options (A and B) are proposed for reconnecting Cantley Lane South, a side road to the south of the A11 and to the west of the A47, to the proposed new road layout. These options are shown on Figure 3.1.	N/A
Paragraph 2.2.3	The proposed application site is located where the A47 Norwich Southern Bypass meets the A11 (connecting Norwich to Cambridge and London). It lies on the south western edge of the suburban extent of Norwich. The Breckland railway line passes 700m to the south of the junction.	N/A
Paragraph 2.2.4	The area surrounding the Proposed Development is predominantly rural, comprising arable and pastoral agriculture and woodland, bound with an extensive network of hedgerows. On the northern side of the Proposed Development lie Thickthorn Park and Ride, a hotel, an electricity substation, a service station, and two restaurants.	N/A
<b>2.3 The Planning Inspectorate's Comments - Description of the Proposed Development</b>		
Paragraph 2.3.1	The Scoping Report contains only limited detail, with the main characteristics of the Proposed Development explained in high-level terms. The description of the Proposed Development is unclear and not consistent with what is shown on Figure 1.1 of the Scoping Report. For example, the description provides for two options for the side road strategy (to reconnect Cantley Lane South) and states that these options are collectively referred to as the 'Proposed Scheme', however neither option is presented on Figure 1.1. The description provided omits the other elements of the Proposed Development, such as, for example, the interchange link roads. The information provided on the link roads lacks detail and is confusing.	Further detail on the Proposed Scheme design is contained within the development consent order application – the Introduction to the Application <b>(TR010037/APP/1.3)</b> and the Scheme Design Report <b>(TR010037/APP/7.3)</b> .
Paragraph 2.3.2	In addition, the description of the Proposed Development provided in the noise and vibration chapter is confusing as it refers to 'Option A' and 'Option B' in relation to the entire Proposed Development, rather than only in respect of Cantley Lane South, as described in	A clear and detailed description of the Proposed Scheme is contained within the ES Chapter 2, The

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	Chapter 2, Section 2.4 and shown on Figure 3.1 of the Scoping Report, and no differentiation is made between Cantley Lane and Cantley Lane South. The description of development provided in the ES must be consistently applied throughout.	proposed scheme, section 2.4. <b>(TR010037/APP/6.1).</b>
Paragraph 2.3.3	Section 2.4 of the Scoping Report is focussed on the side road options, and the other elements of the Proposed Development are presented in terms of the overarching objectives rather than information about what it will specifically comprise. Particular elements are then mentioned in subsequent chapters in the absence of context, such as the 'in-channel works' required for the 'culvert extension and stream diversion, between the A11 and Cantley Lane South' (paragraph 8.4.3). The Applicant should ensure that the description of the Proposed Development in the ES is sufficiently detailed to ensure a robust assessment.	A clear and detailed description of the Proposed Scheme to allow robust environmental assessment is contained within ES Chapter 2, The proposed scheme, section 2.4. <b>(TR010037/APP/6.1).</b>
Paragraph 2.3.4	The legend in Figures 1.1 and 3.1 refer to 'Highways England led improvements' (shown in orange) and 'Proposed developer funded improvements' (shown in blue). A footnote included in Figure 3.1, but not in Figure 1.1, states that the development marked in blue is 'a local scheme progressed by developers with South Norfolk District Council'. This suggests that these elements are not included in the DCO application. However the land required for their construction is clearly included in the DCO site boundary (Figure A.1, Appendix A). This further confuses the understanding of what constitutes the Proposed Development.	Developer led works have been removed from the Proposed Scheme.
Paragraph 2.3.5	The Inspectorate expects that at the point of application the ES should include a detailed description of the Proposed Development which includes all of the works for which development consent is sought, supported by clear figures. Details of components such as underpass structures, signage, gantries, lighting, drainage features, landscaping and environmental mitigation features have not been provided in the Scoping Report and this information should be provided in the ES.	A clear and detailed description of the Proposed Scheme is contained within the ES Chapter 2, The proposed scheme, section 2.4. <b>(TR010037/APP/6.1).</b>
Paragraph 2.3.6	The length of the scheme (in km) and the size of the application site (in hectares) must be specified in the ES. The Inspectorate notes that such information is provided in paragraph 2.4.1 of the Scoping Report; however, given that there are two options for the side road	The length of the Proposed Scheme in kilometres and area in hectares is given in the ES Chapter 2,

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	strategy, it is not clear if the dimensions provided include Option A, Option B, both or neither.	The proposed scheme, section 2.4. <b>(TR010037/APP/6.1)</b> .
Paragraph 2.3.7	The Inspectorate notes that the DCO site boundary shown on Figure A.1 (Appendix A) includes parcels of land at Intwood and Station Farm, but it is not clear from the description in the Scoping Report what permanent and/or temporary works are proposed within these areas. No information is provided in the Scoping Report relating to the physical characteristics of the Proposed Development in terms of demolition works, construction land-take, and the use and removal of soils and other materials. The ES should identify any demolition works, construction facilities and accesses, site clearance activities, ground and excavation works, works to services and utilities, and construction emissions that form part of the Proposed Development (and therefore have the potential to cause environmental impacts). The ES should take these activities into account within the various aspect assessments where relevant.	The ES identifies potential impacts from construction and operation of the Proposed Scheme <b>(TR010037/APP/6.1)</b> .
Paragraph 2.3.8	The ES should clearly identify and differentiate between the land that would be required temporarily during construction (eg the location of construction compounds, access routes) and the land that would be required for the operational phase. The DCO application site boundary must allow for the land-take associated with all works and project elements proposed as part of the application, including requisite demolition works, drainage features, and areas of land used for mitigation purposes.	Permanent and temporary land take is detailed in ES Chapter 2, The proposed scheme, section 2.6 <b>(TR010037/APP/6.1)</b> and on the Land Plans <b>(TR010037/APP/2.3)</b> .
Paragraph 2.3.9	Throughout the Scoping Report, reference is made variously to 'the Proposed Scheme', 'the project', 'the site footprint', 'the construction footprint', 'the construction site', 'the red line boundary', and 'the scheme area'. Some of these terms appear to be used interchangeably. This is of particular relevance to understanding the study areas applied and how the relevant baseline information has been captured, and therefore understanding the basis of the assessments of the effects of the Proposed Development. The terminology used in the ES should be clearly explained and consistently applied throughout so that the likely significant effects of the Proposed Development can be fully understood.	Consistent referencing is used in the ES <b>(TR010037/APP/6.1)</b> . The ES describes the proposed scheme as the "Proposed Scheme" but the remainder of the application documents refer to the "Scheme".

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
Paragraph 2.3.10	Paragraph 2.4.4 of the Scoping Report describes a proposed new overbridge over the A11. It states that it would be a 3-span structure comprising one 50m span and two 30m spans, and would be 100m long in total. These dimensions do not equate and are therefore at odds. The Applicant should ensure that the parameters specified in the ES are consistent with the draft DCO (dDCO) and are applied consistently throughout the assessment.	This reference has now been revised in the Proposed Scheme design.
<b>Alternatives</b>		
Paragraph 2.3.11	The Scoping Report includes a discrete section (Section 3) that describes the alternative route alignments that were considered and consulted upon, and provides information on the reasoning for the selection of the preferred option(s). Scoping Report paragraph 3.1.1 makes reference to the consideration of environmental (and other) criteria but no further details have been provided.	Further detail is provided in ES Chapter 3, Section 3.3 <b>(TR010037/APP/6.1)</b> .
Paragraph 2.3.12	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'.	Further detail is provided in ES Chapter 3, Section 3.3 <b>(TR010037/APP/6.1)</b> .
<b>Flexibility</b>		
Paragraph 2.3.13	The Applicant's attention is drawn to the Inspectorate's Advice Note Nine 'Using the 'Rochdale Envelope' 1 , which provides additional details on the recommended approach.	Noted. Further detail is provided in ES Chapter 2, The proposed scheme, section 2.7 <b>(TR010037/APP/6.1)</b> .
Paragraph 2.3.14	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 will need to be clearly defined in the 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	Noted. Further detail is provided in ES Chapter 2, The proposed scheme, section 2.7 <b>(TR010037/APP/6.1)</b> .

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	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. Where flexibility is sought for any elements of the Proposed Development the ES should set out the parameters that would apply, clearly setting out any proposed limits of deviation.	
Paragraph 2.3.15	It should be noted that if the Proposed Development changes materially during the EIA process and prior to submission of the DCO application the Applicant may wish to consider requesting a new scoping opinion.	Noted.
<b>3. EIA Approach – 3.1 Introduction</b>		
Paragraph 3.1.1	This section contains the Inspectorate’s specific comments on the scope and level of detail of information to be provided in the Applicant’s ES. General advice on the presentation of an ES is provided in the Inspectorate’s Advice Note Seven ‘Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements’ <sup>2</sup> and associated appendices.	Noted.
Paragraph 3.1.2	Aspects/matters are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant’s Scoping Report. The Inspectorate has set out in this Opinion where it has/has not agreed to scope out certain aspects/matters on the basis of the information available at this time. The Inspectorate is content that this should not prevent the Applicant from subsequently agreeing with the relevant consultees to scope such aspects/matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.	Noted.
Paragraph 3.1.3	Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/minimise adverse effects is secured through DCO requirements (or	Noted.

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	other suitably robust methods) and whether relevant consultees agree on the adequacy of the measures proposed.	
<b>3.2 Relevant National Policy Statements (NPSs)</b>		
Paragraph 3.2.1	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 SoS 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.	Noted.
Paragraph 3.2.2	The designated NPS relevant to the Proposed Development is the National Policy Statement for National Networks (NPSNN).	Noted.
<b>3.3 Scope of Assessment</b>		
Paragraph 3.3.1	<p>The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:</p> <ul style="list-style-type: none"> <li>- to demonstrate how the assessment has taken account of this Opinion;</li> <li>- to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;</li> <li>- to set out the proposed mitigation and/or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);</li> <li>- to describe any remedial measures that are identified as being necessary following monitoring; and</li> </ul> <p>to identify where details contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.</p>	<p>This table demonstrates how the assessment has taken account of the Scoping Opinion. Each technical assessment has considered the Scoping Opinion</p> <p>Residual effects are presented in each of the technical assessments and assessed as part of the ES Chapter 15 Cumulative effects assessment <b>(TR010037/APP/6.1)</b>.</p> <p>Mitigation measures are presented in each technical assessment. The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and any other mitigation required is set out in the Environmental Management Plan (EMP) <b>(TR010038/APP/7.4)</b> which will be secured by requirement 4 of the DCO</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
		<p>(TR010038/APP/3.1).Monitoring recommendations are presented in each technical assessment (TR010037/APP/6.1).</p> <p>Details of European sites are presented in the HRA (TR010037/APP/6.9) and ES Chapter 8 (Biodiversity) (TR010037/APP/6.1).</p>
Paragraph 3.3.2	<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 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 as defined in s22 of the PA2008.</p>	<p>All works to be undertaken as part of the Proposed Scheme are included in the DCO (TR010037/APP/3.1).</p>
Paragraph 3.3.3	<p>It is noted that paragraph 1.1.3 of the Scoping Report states that a 'final version' of the Scoping Report will be appended to the ES. The Inspectorate advises that there is no requirement for a Scoping Report to be submitted with the DCO application. The Applicant is referred to the Annex to the Planning Inspectorate's Advice Note Seven, which provides advice about the presentation of an Environmental Statement.</p>	<p>The Scoping Report (TR010037/APP/6.5) has been added to DCO application as a key reference source and need to avoid directing PINS to websites.</p>
<b>Baseline Scenario</b>		
Paragraph 3.3.4	<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>Description of the baseline is provided in Section 2.4 of Chapter 2 (The Proposed Scheme) and technical chapters 5 to 14 (TR010037/APP/6.1)</p>
<b>Forecasting methods or evidence</b>		

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
Paragraph 3.3.5	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.	The timescales of all surveys undertaken is clearly presented within each technical chapter <b>(TR010037/APP/6.1)</b> .
Paragraph 3.3.6	The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly states which effects are 'significant' and 'non-significant' for the purposes of the EIA Regulations. It is noted that descriptions of the levels of significance used are provided in Table 1.1 of the Scoping Report, under 'Approach to Assessment', and that the subsequent table combines receptor sensitivity and impact magnitude values to determine the level of significance of an effect. However, the criteria used to define sensitivity and magnitude values have not been provided. The Inspectorate expects these criteria to be described in the ES in the overarching methodology chapter or in individual aspect chapters where there is any departure from that.	Further detail is provided in ES Chapter 4, Environmental assessment methodology and the individual environmental topic chapters <b>(TR010037/APP/6.1)</b> .
Paragraph 3.3.7	The Inspectorate notes that within Table 1.2 of the Scoping Report 'slight or moderate' levels of significance are shown for some of the combinations of magnitude and sensitivity values, for example, where there is a minor impact on a receptor with high sensitivity. As it is indicated that an effect that is determined to be of a moderate level or above is considered to constitute a significant effect, the Applicant must explain and justify this approach in the ES.	Further detail is provided in ES Chapter 4, Environmental assessment methodology, Section 4.5 and the individual environmental topic chapters <b>(TR010037/APP/6.1)</b> .
Paragraph 3.3.8	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.	Limitations to the assessment have been presented in Section 4.3 of Chapter 4 (Environmental assessment methodology) and in each technical chapter <b>(TR010037/APP/6.1)</b> .
<b>Residues and emissions</b>		
Paragraph 3.3.9	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,	The respective technical chapters considers the requirements stated <b>(TR010037/APP/6.1)</b> .



Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	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.	
Paragraph 3.3.10	The Inspectorate notes that heat and radiation effects have been scoped out for assessment on the basis that they are unlikely to arise due to the nature of the Proposed Development. The Inspectorate agrees that significant heat and radiation effects are unlikely and that this matter may be scoped out of the ES.	Heat and radiation effects remain scoped out of the ES, as reported in the EIA Scoping Report <b>(TR010037/APP/6.5)</b> .
<b>Mitigation</b>		
Paragraph 3.3.11	The Inspectorate notes that the Scoping Report states a number of times that mitigation measures will be set out in a Construction Environmental Management Plan (CEMP). Any mitigation relied upon for the purposes of the assessment should be described in detail within the ES, and 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 cross-reference made to specific DCO requirements or other legally binding agreements submitted with the DCO application.	The proposed mitigation is described in each technical chapter. The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and any other mitigation required is set out in the record of environmental actions and commitments contained within the Environmental Management Plan (EMP) <b>(TR010038/APP/7.4)</b> which will be secured by requirement 4 of the DCO <b>(TR010038/APP/3.1)</b> .
<b>Vulnerability of the development to risks of major accidents and/or disasters</b>		
Paragraph 3.3.12	The ES should include a description of the potential vulnerability of the Proposed Development to risks of major accidents and/or disasters, including vulnerability to climate change, which are relevant to the Proposed Development. Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the	The Planning Inspectorate noted in the EIA Scoping Opinion <b>(TR010037/APP/6.6)</b> that the ES is unlikely to review a standalone assessment of major accidents and disasters.

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	
Paragraph 3.3.13	Having had regard to the particular nature of the Proposed Development and the justification provided in the Scoping Report, the Inspectorate agrees that the Proposed Development is unlikely to require a standalone assessment regarding the Proposed Development's vulnerability to risks of, or its potential to cause, major accidents and/or disasters, on the basis that this will be covered in the ES technical chapters. The Inspectorate notes and welcomes the statement in the Scoping Report confirming that the ES will include a table which identifies where this has been considered in the relevant technical chapters, such as, for example, road drainage and the water environment in respect of flood risk and culvert design. The Applicant should liaise with the relevant statutory consultees to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and disasters.	Further detail is provided in ES Chapter 4, Environmental assessment methodology paragraphs 4.1.11 to 4.1.13, Section 4.1.
<b>Transboundary effects</b>		
Paragraph 3.3.14	Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES. The Inspectorate notes that the Applicant has indicated in the Scoping Report whether the Proposed Development is likely to have significant impacts on another European Economic Area (EEA) State.	Further detail is provided in ES Chapter 4, Environmental assessment methodology, Section 4.1 <b>(TR010037/APP/6.1)</b> .
Paragraph 3.3.15	Regulation 32 of the EIA Regulations inter alia requires the Inspectorate to publicise a DCO application on behalf of the SoS if it is of the view that the proposal is likely to have significant effects on the environment of another EEA State, and where relevant, to consult with the EEA state affected. The Inspectorate considers that where Regulation 32 applies, this is likely to have implications for the examination of a DCO application.	Further detail is provided in ES Chapter 4, Environmental assessment methodology, Section 4.1 <b>(TR010037/APP/6.1)</b> .
<b>A reference list</b>		
Paragraph 3.3.16	A reference list detailing the sources used for the descriptions and assessments must be included in the ES.	Further detail is provided in the individual ES chapters <b>(TR010037/APP/6.1)</b> .

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<b>3.4 Confidential Information</b>		
Paragraph 3.4.1	<p>In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information. Where documents are intended to remain confidential the Applicant should provide these as separate paper and electronic documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2014.</p>	<p>Noted. Confidential information will not be incorporated in other documents intended for publication. Confidential reports will be highlighted to the Planning Inspectorate.</p>
<b>4. Aspect Based Scoping Tables</b>		
<b>Air Quality (Scoping Report section 5)</b>		
<p><i>Ref 1 para 5.2.2 Study area</i></p>	<p>It is not clear whether the reference to the local air quality assessment study area relates to all phases of the Proposed Development, or operation only. Paragraph 5.2.1 of the Scoping Report cross-refers to environmental constraints depicted in Figures B.1 and B.2 but these identify what appear to be generic buffer zones around the Proposed Development of 500m and 5km, respectively. The Inspectorate expects the study area(s) to be clearly described in the ES and delineated on related plans.</p>	<p>This is applicable to both the operation and construction phases and are made clear in the ES Chapter 5, Air quality <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 2 para 5.3.4 Baseline data</i></p>	<p>Table 3.1 of the Scoping Report provides the monitoring data for three diffusion tube roadside sites that are located 'in close proximity' to the Proposed Development, although the distance from the Proposed Development site</p>	<p>Distances and figures presenting the locations of the monitoring sites are presented within the ES Chapter 5, Air quality, Section 5.7 <b>(TR010037/APP/6.1)</b>.</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	is not specified. The relevance of the monitoring data relied upon for the assessment must be clearly explained in the ES.	
<p><i>Ref 3</i> <i>Para 5.3.7 and 5.9.3</i> <i>Modelling</i></p>	<p>Very limited information is provided on the Defra Pollution Climate Mapping (PCM) model referenced in relation to European Union (EU) limit values compliance. It is noted that 'ADMS-Roads' will be used to model the operational phase impacts.</p> <p>Details of all models used for the purposes of the assessment and the data on which the assessment relies should be provided in the ES. The existing baseline and the future baseline data should be clearly differentiated.</p>	<p>The Scoping Report provides information on the PCM model to indicate that the risk of the Proposed Scheme causing a non-compliance of the Air Quality Directive is low. The ES methodology sets out the approach to the modelling assessment and the approach taken for determining compliance with the Air Quality Directive. The assessment has been undertaken in line with the requirements of the updated DMRB LA 105.</p>
<p><i>Ref 4</i> <i>Section 5.6</i> <i>Baseline information</i></p>	<p>The Scoping Report states that the Proposed Development is unlikely to result in non-compliance with the Air Quality Directive. However, the 2016 monitoring data presented for one of the three closest South Norfolk District Council (SNDC) diffusion tube locations to the site shows an annual concentration close to the relevant annual mean objective for NO<sub>2</sub>, and Chapter 15 of the Scoping Report notes that there is potential for cumulative air quality effects. Paragraph 5.3.11 notes that there are no AQMAs 'within the vicinity' of the Proposed Development although the study area has not yet been defined and it is previously indicated that there is an AQMA approximately 5km away. The Applicant should ensure that the conclusions reported in the ES are fully justified and supported by the evidence.</p>	<p>Compliance with the Air Quality Directive is determined and assessed through the PCM model. There are no PCM links nearby at risk of exceeding the EU limit values. The study area for the assessment has been determined using available traffic data and any PCM links within the study area were considered within the assessment. All conclusions are fully justified in the ES Chapter 5, Air quality <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 5</i> <i>Para 5.3.5-5.3.6</i> <i>Baseline – projected background concentrations</i></p>	<p>The Defra projected background concentrations are no longer current and have been updated. The projections used for the assessment in the ES must be up to date.</p>	<p>The latest suite of Defra tools will be used to support the air quality assessment and this is clearly stated in the ES Chapter 5, Air quality, Section 5.7 <b>(TR010037/APP/6.1)</b>.</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<p><i>Ref 6</i> <i>Section 5.4</i> <i>Assumptions and limitations</i></p>	<p>A number of uncertainties are identified in relation to modelling. The assumptions used to inform the modelling should reflect the worst case scenario.</p>	<p>The approach to dealing with uncertainties is addressed through model verification in accordance with Defra guidance. The approach has been clearly presented in the ES Chapter 5, Air quality, Section 5.4 <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 7</i> <i>Para 5.5.3</i> <i>Assessment</i></p>	<p>The Scoping Report does not proposed to include fine particulate matter (PM2.5) in the assessment in the ES, although a projected background concentration is shown in Table 5.2, along with projections for NOx, NO2 and PM10. The Inspectorate considers that the ES should include an assessment of PM2.5 emissions and that significance should be determined taking into account performance against relevant target/limit values.</p>	<p>PM2.5 has been included within the assessment as presented in ES Chapter 5 (Air Quality) <b>(TR010038/APP/6.1)</b>. The assessment has been undertaken in line with the requirements of the updated DMRB LA 105.</p>
<p><i>Ref 8</i> <i>Para 5.7.1</i> <i>Construction impacts</i></p>	<p>It is noted that the main impacts on sensitive receptors during construction are anticipated to occur from on-site dust emissions associated with construction activities and vehicle movements. Potential off-site construction impacts which may result in a significant effect, such as for example, from construction traffic on local roads, should be assessed.</p>	<p>Construction dust assessment follows the methodology of the updated DMRB LA105.  This is stated in the assessment methodology of the ES Chapter 5, Air quality, Section 5.6<b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 9</i> <i>Section 5.7</i> <i>Mitigation</i></p>	<p>The Inspectorate notes that it is anticipated that construction impacts would be mitigated through measures included within a CEMP. No reference is made to mitigation of operational impacts, or to potential residual effects. The potential impacts during all phases of the Proposed Development and the mitigation measures proposed to address them should be described in the ES and clear cross- reference made to the location of the proposed mitigation measures within other application documents such as, for example, the CEMP, and to where they are secured in the dDCO. Any residual effects should be identified.</p>	<p>The potential effects from construction have been considered and assessed within the ES Chapter 5 (Air Quality) <b>(TR010038/APP/6.1)</b>. Design, mitigation and enhancement measures are set out in the EMP <b>(TR010038/APP/7.4)</b> which will be secured through requirement 4 of the DCO <b>(TR010038/APP/3.1)</b>,</p>
<p><i>Ref 10</i> <i>Para 5.9.3 &amp; 5.9.4</i></p>	<p>The proposed scope of the assessments, both in terms of the pollutants that will be included, and the temporal scope, is unclear, and also appears inconsistent between the</p>	<p>Sections 5.4 and 5.7 of ES Chapter 5 Air quality <b>(TR010038/APP/6.1)</b> sets out the pollutants to be</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<i>Methodology</i>	<p>local and regional assessments. For example, only NOx and PM10 are mentioned; reference is made to an opening year 'Do-Minimum' and 'Do-Something' scenarios (which are not explained) in respect of local impacts, and it is indicated that a 'design year' assessment will be made in relation to regional impacts. The ES should clearly set out the scope of each assessment and explain the relationship between the local and regional assessments, including any differences in approach.</p>	<p>assessed for the local and regional assessments. The local air quality assessment will consider NOx NO<sub>2</sub> and PM10 only as these are the pollutants of particular concern for road traffic. The ES will clearly set out an explanation of the Do-Minimum and Do-Something scenarios and will clearly define the scope of each assessment as required by DMRB guidance.</p>
<i>Ref 11</i> <i>Section 5.9</i> <i>Methodology</i>	<p>The approach to determining at which receptors there is '...a reasonable risk of exceeding an air quality threshold...' should be clearly explained in the ES. The approach that will be applied to determining a significant effect is unclear. Only magnitude criteria are defined, and sensitivity criteria have not been provided. Table 5.3 of the Scoping Report refers only to 'properties', and no reference is made to ecological receptors. It is therefore, unclear what is proposed to constitute a significant effect. Information on the methodological approach applied to the assessments must be set out in the ES and encompass impacts on both human and ecological receptors.</p>	<p>The approach to determining a significant effect will be undertaken in accordance with the updated DMRB LA 105. The ES Chapter 5 (Air Quality) Section 5.4 (<b>TR010038/APP/6.1</b>) sets out all the elements which are considered when determining if an air quality effect is significant and will include both human health and ecological effects.</p>
<i>Ref 12</i> <i>Ecological receptors</i>	<p>The ES should assess, as appropriate, impacts to non-designated sites and species that could be significantly affected by the Proposed Development. The Inspectorate recommends that the relevant ecological receptors for the assessment are agreed with Natural England (NE) and SNDC. The assessment should be informed by the ecological assessment and cross-reference made to relevant information in the ES ecology chapter.</p>	<p>ES Chapter 5 Air quality (<b>TR010038/APP/6.1</b>) Section 5.4 confirms the assessment includes the impact to ecological receptors and is informed by the ecology assessment (ES Chapter 11 Biodiversity).</p>
<b>4.2 Cultural Heritage (Scoping Report section 6)</b>		
<i>Ref 13</i> <i>Para 6.2.1</i> <i>Study area</i>	<p>The ES should provide a robust justification as to why the 1km study area is appropriate and sufficient to capture all heritage assets which could experience impacts to their setting taking into account, for example, visual intrusion or increased noise emissions.</p>	<p>Further consultation was carried out to discuss a study area based on zone of visual influence (ZVI) and noise projection reports (see landscape and noise sections below of this table).</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	<p>Paragraph 6.2.2 of the Scoping Report states that a ZVI (assumed to refer to the ZTV) will be used to identify any heritage assets that would be affected by the construction of the Proposed Development. The Inspectorate also considers that the ZTV (or equivalent) should also be used to identify heritage assets affected during operation of the Proposed Development.</p> <p>Effort should be made to seek agreement with relevant consultees regarding the appropriate study area.</p>	
<p><i>Ref 14</i> <i>Para 65.1</i> <i>Guidance</i></p>	<p>The Inspectorate notes the potential for impacts on buried archaeological resource. Where relevant the ES should take into account guidance contained in Historic England's guidance document 'Preserving Archaeological Remains'5.</p> <p>The ES should explain which of the Chartered Institute for Archaeologists standards and guidance have been used to inform the ES.</p> <p>The Inspectorate draws the Applicant's attention to the revised Historic England Good Practice Advice note 3, which was updated December 20176.</p>	<p>The EIA has been carried out in accordance with all relevant and up-to-date guidance. See Appendix 6.1 of the ES (<b>TR010037/APP/6.3</b>).</p> <p>Paragraph 6.4.2 in Section 6.4 of the ES Chapter 6 Cultural heritage (<b>TR010037/APP/6.1</b>) lists the guidance used to inform the assessment.</p>
<p><i>Ref 15</i> <i>Para 6.7.1-6.9.6</i> <i>Proposed methodology</i></p>	<p>The Scoping Report states that a detailed assessment will be undertaken. However, the description of the detailed assessment in DMRB HA208/07 includes a variety of options applicable to the detailed assessment approach. Consequently it is unclear what the precise scope of the assessment will be. The ES should include both a desk-based assessment and an archaeological field evaluation (where relevant). The scope of the field evaluation (where relevant) should be discussed and ideally agreed with South Norfolk District Council Conservation Officer and archaeological staff at Norfolk County Council as appropriate. The Inspectorate notes that the Applicant has defined an approach to the assessment according to the criteria set out in Section 6.9. The Applicant should also have</p>	<p>This report is a desk based assessment, suitable as supporting background documentation to the ES Chapter 6 Cultural heritage (<b>TR010037/APP/6.1</b>).</p> <p>The programme of trial trenching was implemented in accordance with a written scheme of investigation and trial trench location plan, approved in advance by Norfolk County Council Environmental Services (NCC ES).</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	regard to the recommendations made by Historic England (contained in Appendix 2 of this Scoping Opinion) in this respect and ideally agree the approach.	
<b>4.3 Landscape (Scoping Report Section 7)</b>		
<p><i>Ref 16</i> <i>Para 7.2.1</i> <i>Study area</i></p>	The study areas used for the landscape assessment and the visual assessments in the ES should be justified and efforts made to agree these with the relevant consultees. The ES should explain how consultation has influenced the approach taken to the assessment.	An outline explanation of the basis for the extent of the study area was included in the Scoping Report and further detailed explanation/justification has been provided in Section 7.6 of ES Chapter 7 Landscape and visual <b>(TR010037/APP/6.1)</b> following further ZTV analysis and site surveys.
<p><i>Ref 17</i> <i>Para 7.9.3</i> <i>ZTV</i></p>	The Scoping Report states that the ZTV will be established assuming a viewer height of 1.6m above ground level. However, the Inspectorate notes that DMRB recommends that the observer height is 1.8m above ground level. The ES should clearly explain the approach taken to the assessment and any assumptions made or deviation from recognised guidance should be identified and justified.	A height of 1.6m has been used in the final ES <b>(TR010037/APP/6.1)</b> . The Guidelines for Landscape and Visual Impact Assessment (GLVIA3, 2013) advocate using a viewer height of between 1.5 to 1.7m above ground level as the basis for ZTV mapping based on the midpoint for average heights for men and women. The relevant up to date DMRB standard (LA107) does not specify a height (referring instead to GLVIA3). A reference to 1.8m in an earlier version of DMRB has now been superseded by GLVIA3. The use of 1.6m is therefore consistent with the DMRB standard and with relevant professional guidance.
<p><i>Ref 18</i> <i>Para 7.7.1 – 7.1.16</i> <i>Potential effects</i></p>	To support a robust assessment of likely significant effects, the ES should include plans and visualisations of the Proposed Development which highlight the specific elements that would impact on landscape character and be visually prominent to visual and amenity receptors (for example the new link roads, bridges, cuttings and embankments). Cross-sections and photomontages should be included for this purpose.	The further information referred to in the Inspectorate's comments is included in the ES text <b>(TR010037/APP/6.1)</b> , ES figures and photomontages <b>(TR010037/APP/6.2)</b> and Proposed Scheme plans <b>(TR010037/APP/2.1 to 2.12)</b>



Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<p><i>Ref 19</i> <i>Para 7.7.1 – 7.7.16</i> <i>- Mitigation</i></p>	<p>Mitigation planting and landscape mitigation are referred to in order to reduce the operational effects of the Proposed Development. The Applicant should discuss and make effort to agree the planting specification/species mix with the relevant local planning authorities. An appropriate aftercare period for the proposed landscaping should also be discussed and ideally agreed. It should be clear how the proposed landscaping would mitigate the effects to landscape and visual receptors, and how these effects would change as the proposed planting matures. Interactions with other ES aspects, for example beneficial impacts on local ecology, should be assessed and explained.</p>	<p>The principles and processes referred to in the Inspectorate's comments have been included within the LVIA ES Chapter 7 (<b>TR010037/APP/6.1</b>) and Environmental Masterplan (<b>TR010037/APP/6.8</b>). The Environmental Masterplan explains the function of different areas of proposed planting. A management and maintenance plan will be produced at detailed design. Compliance with the Environmental Masterplan is secured through the EMP. The EMP is in turn secured through requirement 4 of the DCO (<b>TR010038/APP/3.1</b>),</p>
<p><i>Ref 20</i> <i>Appendix C</i> <i>Lighting</i> <i>methodology</i></p>	<p>Appendix C to the Scoping Report does not explain the methodology proposed for determining the significance of effects from obtrusive light but does provide the framework for establishing a baseline. The ES should specify the assessment methodology to be applied and the criteria used to determine the significance of effects.</p>	<p>Further detail on the methodology for the assessment of lighting effects is included in Appendix 7.7 of the ES (<b>TR010037/APP/6.3</b>).</p>
<p><b>4.4 Biodiversity (Scoping Report section 8)</b></p>		
<p><i>Ref 21</i> <i>Para 8.8.11</i> <i>No further surveys are proposed for aquatic invertebrates, hedgerows, reptiles, great crested newts, terrestrial</i></p>	<p>The information provided in the Scoping Report to support this decision lacks detail and fails to explain the extent of data collection carried out to-date. In the absence of this detail and sufficient justification to demonstrate no likely significant effects, the Inspectorate is unable to confirm that no further assessment is required of these features. The extent to which further survey effort is required should be discussed and ideally agreed with relevant statutory consultees. The ES should either include such assessments, or the evidence that supports the conclusion that no further assessment is required, together with any evidence of agreement with the relevant consultees that significant effects are not likely to occur.</p>	<p>No polecats were found during the survey.</p> <p>Support for the decisions on inclusion or non-inclusion of surveys is detailed within the ES Chapter 8 Biodiversity (<b>TR010037/APP/6.1</b>) Section 8.7 and within ES Appendices 8.1 to 8.11 (<b>TR010037/APP/6.3</b>).</p> <p>Jan 2021 - All these species surveys were updated in 2020 as previous surveys were out of</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<i>invertebrates and polecat.</i>		date. These are reported in the Chapter 8, Biodiversity of the ES <b>(TR010037/APP/6.1)</b> Section 8.7 and within ES Appendices 8.1 to 8.11 <b>(TR010037/APP/6.3)</b> .
<p><i>Ref 22</i> <i>Para 8.3.19 and 8.1.1</i> <i>Assessment – Phase 2 botanical surveys</i></p>	<p>Paragraph 8.3.19 of the Scoping Report confirms the likely presence of scarce flora and the potential for rare/scarce flora to be present in suitable woodland, grassland and wetland habitats. However, paragraph 8.8.11 of the Scoping Report contradicts this finding by proposing to scope out further botanical surveys on the basis of 'limited flora communities, of low to Moderate ecological value only'. The extent to which further survey effort is required should be discussed and ideally agreed with relevant statutory consultees. The ES should either include such assessments, or the evidence that supports the conclusion that no further assessment is required, together with any evidence of agreement with the relevant consultees that significant effects are not likely to occur.</p>	<p>There was potential for the site to support rare/scarce flora and therefore further surveys were undertaken for hedgerows and scarce arable flora surveys. Survey data from 2017 show that the site hosts flora communities of low to moderate value only. Due to a lack of outstanding flora communities, further botanical surveys are not required.</p> <p>The ES provides detail on rationale for level of botanical surveys conducted in Chapter 8, Biodiversity of the ES <b>(TR010037/APP/6.1)</b>, Section 8.7 and within ES Appendix 8.1 <b>(TR010037/APP/6.3)</b>.</p> <p>Further surveys were undertaken in 2020 as previous data was out of date. This is reported in Chapter 8, Biodiversity of the ES <b>(TR010037/APP/6.1)</b>, Section 8.7 and within ES Appendix 8.1 <b>(TR010037/APP/6.3)</b>.</p>
<p><i>Ref 23</i> <i>Table 8.3</i> <i>Location of breeding bird surveys</i></p>	<p>Table 8.3 states that breeding bird surveys will be carried out "within the footprint of the Proposed Scheme, plus a 100m buffer". However, the Inspectorate notes that barn owl populations within 1.5km of road boundaries are at risk of collision mortality. If barn owls are likely to be present, within a 1.5km study area then the assessment should include</p>	<p>Surveys for barn owls have been extended to 1.5km around key identified areas where access allows. Assessment methodology is detailed in the ES Chapter 8 <b>(TR010037/APP6.1)</b> Section 8.7 and within ES Appendix 8.3 <b>(TR010037/APP/6.3)</b>.</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
	consideration of impacts to this species. The Applicant should liaise with NE to ensure the assessment appropriately addresses the collision risk to barn owls.	Natural England were consulted as part of the assessment as noted in ES Chapter 8, Biodiversity <b>(TR010037/APP/6.1)</b> , Section 8.4..
Ref 24 Para 8.4.2 Field surveys - access	The Scoping Report states that ecological surveys undertaken to date were confined to locations where landowner permission was obtained. The Applicant should ensure that the ES is accompanied by an appropriate and comprehensive set of ecological surveys sufficient to inform the assessment of likely significant effects.	Noted. Surveys are included in the ES Chapter 8, Biodiversity <b>(TR010037/APP/6.1)</b> and corresponding survey reports within the appendices <b>(TR010037/APP/6.3)</b> .
Ref 25 Para 8.7.1 – 8.7.30 Potential effects – mortality / injury and pollution	The Scoping Report does not identify mortality/ injury of protected and/ or priority species as a potential impact arising from the construction and operation of the project. It does not identify impacts from air pollution or operational impacts arising from noise and vibration and lighting. The Inspectorate considers that these should all be assessed in the ES, during both the construction and operational phases of the Proposed Development. These assessments should be informed by the findings reported in other relevant ES aspect chapters, for example, air quality, noise and vibration.	Data from Envis (Environmental Information System) for current levels of road kill has been sought to inform the ES. All risks arising from noise, air quality and vibration have been assessed as well as increased rates of mortality. Jan 2021 - Impacts from AQ, noise and vibration were unknown at the time of writing the scoping report. These have now been assessed in relevant chapters and in the Biodiversity Chapter 8 of the ES <b>(TR010037/APP/6.1)</b> .
Ref 26 Para 8.8.11	Assessment – aquatic invertebrates, hedgerows, reptiles, great crested newts, terrestrial invertebrates, polecat	Jan 2021 -IAN 130-10 has been replaced with LA 108 which has been used in the ES <b>(TR010037/APP/6.1)</b> as a standard for assessment.
Ref 27 Para 8.7.1 – 8.7.30 Potential mitigation measures and enhancement	The Inspectorate recommends that any proposed mitigation and monitoring measures are agreed where possible with relevant consultees including NE and the local planning authorities. The ES should detail all proposed mitigation measures and demonstrate how they will be secured.	Jan 2021 - All mitigation measures and enhancement has been agreed and detailed in the ES <b>(TR010037/APP/6.1)</b> and secured in the Record of Environmental Actions and Commitments (REAC) within the Environmental Management Plan

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
		(TR010037/APP/7.4). Licences for bat and water vole will be sent to Natural England for consultation.
<p>Ref 28 Para 8.7.1 – 8.7.30 Significance of effects</p>	<p>Significance is described in terms of 'medium minor negative, or 'high intermediate negative', etc. This does not reflect the categorisation of effects as set out in Table 8.6 of the Scoping Report. The Applicant should ensure that the methodology is applied and described consistently throughout the ES and each aspect chapter (where relevant), so that the significance of the potential effects can be clearly understood.</p>	<p>Assessment in the ES (TR010037/APP/6.1) has following the LA 108 standard.</p>
<p>Ref 29 Ecological receptors</p>	<p>The Inspectorate notes that a number of ecological receptors are shown on Figure B.2, the environmental constraints plan to the Scoping Report yet are not identified in the baseline information in the aspect chapter. It is also apparent that other features, such as locally designated nature conservation sites are not shown on the constraints plans within the Scoping Report. The Applicant should ensure that all ecological receptors that could be significantly affected by the Proposed Development are considered in the assessment and identified on corresponding plans in the ES. The Applicant is also referred to NE's consultation comments in this regard, contained in Appendix 2 of this Opinion.</p>	<p>Ecological receptors are shown on the figures of the ES (TR010037/APP/6.2).</p> <p>Natural England's response has been read and taken into consideration for the production of the ES.</p> <p>Jan 2021 - All ecological receptors have been identified in the ES (TR010037/APP/6.1).</p>
<p><b>4.5 Geology and Soils (Scoping Report Section 9)</b></p>		
<p>Ref 30 Para 9.10.2 Impacts on geology and soils during the operational phase</p>	<p>The Applicant has not provided any information to justify scoping out an assessment of effects on geology and soils during operation. For example, no reference is made to a soil assessment. The ES should provide an assessment of all relevant likely significant effects. If evidence becomes available that justifies scoping this matter out from the ES, for example, following detailed drainage design, this should be explained in the ES.</p>	<p>Scoping in/out is discussed in the ES Chapter 9 Geology and soils Sections 9.3 and 9.5 (TR010037/APP/6.1).</p> <p>Long term impacts of the drainage have been considered within the Road Drainage and the Water Environment Chapter 13 of the ES (TR010037/APP/6.1).</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<p><i>Ref 31</i> <i>Para 9.2.1</i> <i>Study area</i></p>	<p>Although the Scoping Report states that the study area will include a 1km boundary from the Proposed Development this has not yet been clearly defined because areas 'where physical works and ground disturbances would take place' are not explicitly stated or precisely defined. The study area makes no reference to soils or hydrogeology and has not included a justification for this omission. Within the ES the study area should be clearly defined, justified and reflect the anticipated extent of all potential impacts that may affect geology, soils and hydrogeology.</p>	<p>Detail on study area and permanent and temporary land take have been discussed.s</p>
<p><i>Ref 32</i> <i>Table 9.1</i> <i>Baseline data</i></p>	<p>Table 9.1 of the Scoping Report uses chainages to located and identify where changes in superficial deposits along the route occur. No chainage sections or plans are provided within the Scoping Report. The ES should clearly describe the locations where changes in superficial deposits occur and make reference to clearly labelled plans as necessary.</p>	<p>. Establishment of the baseline environment has involved reference to existing data sources, consultation and fieldwork surveys including detailed intrusive ground investigation. The results of ground conditions are presented in ES Chapter 9 Geology and soils, Section 9.4 <b>(TR010037/APP/6.1)</b> as localities from the investigation reporting and shown on corresponding ES Figures <b>(TR010037/APP/6.2)</b>.</p>
<p><i>Ref 33</i> <i>Para 9.6.1</i> <i>Receptors - minerals</i></p>	<p>The Inspectorate has had regard to the consultation response from Norfolk County Council that the Proposed Development is situated within a mineral safeguarding area. The extent to which the Proposed Development would impact mineral reserves should be assessed in the ES. The Applicant should seek to agree the approach to the assessment with relevant consultees including Norfolk County Council.</p>	<p>This is assessed within the Material assets and waste ES Chapter 10, Sections 10.8 and 10.10 <b>(TR010037/APP/6.1)</b> and within ES Appendix 10.4 <b>(TR010037/APP/6.3)</b>.</p>
<p><i>Ref 34</i> <i>Para 9.7.5</i> <i>Potential effects</i></p>	<p>The ES should include the findings of the environmental risk assessment along with any required remediation strategy options to manage, remove/dispose of or treat contaminated material. The remediation strategy should address the regulatory requirements for managing previously unknown contamination which may be encountered during the construction of the Proposed Development.</p>	<p>All potential impacts have been discussed in the ES Chapter 9 Geology and soils Section 9.5 with mitigation measures provided in Section 9.6 <b>(TR010037/APP/6.1)</b>.</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<p><i>Ref 35</i> <i>Table 9.1 and</i> <i>Section 9.7</i> <i>Potential effects</i></p>	<p>The Scoping Report suggests that only potential impacts that could arise from the interaction of the Proposed Development with the Cantley Lane landfill site are to be considered. All potential impacts that could result in a significant effect on a receptor should be assessed.</p>	<p>Potential impacts have been discussed for four potential sources of contamination including the Cantley Lane landfill site in ES Chapter 9 Geology and soils Section 9.5 <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 36</i> <i>Table 9.4</i> <i>Magnitude of impact</i></p>	<p>The Inspectorate considers that changes in groundwater flow should also be considered when determining magnitude of impacts, as recommended by the EA in their scoping consultation response (contained in Appendix 2 of this Opinion), in addition to the criteria presented in Table 9.4.</p>	<p>This has been included within the Road Drainage and the Water Environment ES Chapter 13 Sections 13.7 and 13.8 <b>(TR010037/APP/6.1)</b>.</p>
<p><b>4.6 Materials (Scoping Report Section 10)</b></p>		
<p><i>Ref 37</i> <i>Para 10.8.2</i> <i>Operational effects from material resource and waste generation</i></p>	<p>The Inspectorate agrees that the Proposed Development will generate only minimal requirements for materials and generation of waste during operation and that significant effects are unlikely and therefore that this matter can be scoped out of the ES.</p>	<p>This was noted. Consideration of materials and generation of waste during operation was scoped out.</p>
<p><i>Ref 38</i> <i>Para 10.2.1</i> <i>Study area</i></p>	<p>The Scoping Report has not defined the study area. It is noted that the Applicant states that the study area will be determined by 'the influence of the Proposed Scheme' but no information is provided on the methodology that will be applied to determine this. The Applicant should ensure that the study area is clearly defined and justified within the ES and encompasses the anticipated extent of potential impacts.</p>	<p>This is more specifically defined in the ES Chapter 10 Material assets and waste, Section 10.6 <b>(TR010037/APP/6.1)</b> which includes reference to the footprint of the Project where materials are to be used and materials generated, as well as a consideration of waste management facilities in the region.</p>
<p><i>Ref 39 and 40</i> <i>Section 10.3</i> <i>Baseline</i></p>	<p>Assessment should additionally be made against a future baseline from the first year of construction and should be reported in the ES.</p>	<p>A forecast of the likely estimates is included in the ES Chapter 10 Material assets and waste, Section 10.7 <b>(TR010037/APP/6.1)</b> based on the preliminary design information at this stage. The Principal</p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
		Contractor will be required to provide volumes used and generated as part of the contract.
Ref 41 Para 10.3.1 Baseline	Estimates of material resources required for and waste arising from the construction and operation of the Proposed Development should be included within the ES.	These are included in the ES Chapter 10 Material assets and waste, Section 10.7 <b>(TR010037/APP/6.1)</b> and within ES Appendix 10.2 <b>(TR010037/APP/6.3)</b> .
Ref 42 Para 10.3.3 Baseline	According to HA Interim Advice Note 153/11 the ES should contain a list of the locations and spare capacity of each waste infrastructure receptor in order to comprehensively assess the effects the generation of waste may have on the environment.	List of landfills and remaining capacities within east of England region has been included in the assessment and is presented in Chapter 10 Material assets and waste, Section 10.7 <b>(TR010037/APP/6.1)</b> and within ES Appendix 10.2 <b>(TR010037/APP/6.3)</b> .
<b>4.7 Noise and vibration (Scoping Report Section 11)</b>		
Ref 43 Table 11.1 receptors	Only designated sites are identified as sensitive receptors within the Scoping Report. The Applicant should additionally consider and assess, as required, non-designated sites and species that could be significantly affected by the Proposed Development. The Inspectorate recommends that the relevant ecological receptors to be included in the assessment are agreed with NE and SNDC. The assessment should be informed by the ecological assessment and cross-reference made to relevant information in the ES ecology chapter.	No noise sensitive ecological receptors were identified within the noise study area during consultation with ecology team.
Ref 44 Para 11.3.10 Surveys	The Scoping Report states that noise surveys to be undertaken will be 'broadly in accordance with' 'The Calculation of Road Traffic Noise' (CRTN) (HMSO, 1988) methodology. The methodology that is applied should be clearly described in the ES, including where there is any departure from standard methodologies.	Survey methodology is fully described in the ES appendices 11.1 to 11.5 <b>(TR010037/APP/6.3)</b> .

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<p><i>Ref 45</i> <i>Para 11.7.1</i> <i>Mitigation</i></p>	<p>It is anticipated that construction impacts would be mitigated through measures included within a CEMP. The potential impacts during all phases of the Proposed Development and the mitigation measures proposed to address them should be described in the ES. A clear cross-reference should be made to such measures within other application documents and to where they are secured. Any residual effects should be identified.</p> <p>The Inspectorate notes that it is stated that no significant direct effects are predicted.</p> <p>The Applicant is reminded that the potential for significant indirect effects must also be considered.</p>	<p>ES Chapter 11 (<b>TR010037/APP/6.1</b>) identifies all potential significant effect due to each construction phase, proposes suitable mitigations and assess residual effects.</p> <p>The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and any other mitigation required is set out in the record of environmental actions and commitments contained within the Environmental Management Plan (EMP) (<b>TR010038/APP/7.4</b>) which will be secured by requirement 4 of the DCO (<b>TR010038/APP/3.1</b>).</p>
<p><i>Ref 46</i> <i>Section 11.9</i> <i>Methodology</i></p>	<p>The methodologies applied to the assessment must be fully explained in the ES, rather than simply providing references to where they may be found in documents that are outside of the ES.</p>	<p>A summary of relevant guidance has been included in the ES Appendices 11.1 to 11.5 (<b>TR010037/APP/6.3</b>).</p>
<p><i>Ref 47</i> <i>Para 11.9.9</i> <i>Methodology</i></p>	<p>The Scoping Report does not explain what is meant by the 'future assessment year' in relation to the assessment of operational noise. This should be defined in the overarching ES methodology chapter.</p>	<p>This has been defined in the ES Chapter 11 Noise and vibration, Sections 11.4 (<b>TR010037/APP/6.1</b>)</p>
<p><i>Ref 48</i> <i>Para 11.9.14 and</i> <i>Table 11.2</i> <i>Assessment</i> <i>Criteria</i></p>	<p>The Inspectorate expects the ES to set out the criteria used to determine the magnitude of an impact, sensitivity of a receptor, and the significance levels. The 'Lowest Observed Adverse Effect Level' (LOAEL) and 'Significant Observed Adverse Effect Level' (SOAEL) values applied to the assessment must be fully justified.</p>	<p>LOAEL and SOAEL follows DMRB LA111 guidance.</p>
<p><i>Ref 49</i> <i>Plans</i></p>	<p>The figures contained in the Scoping Report that depict the Proposed Development do not identify all the roads and other infrastructure, such as the Round House roundabout, that are referenced in the Report. The Inspectorate expects plans contained in the ES to clearly identify features discussed within it.</p>	<p>Noted.</p>



Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<b>4.8 Population and Human Health (formally People and Communities)</b>		
<p><i>Ref 50</i> <i>Para 12.2.1 – 12.2.4</i> <i>Study area</i></p>	<p>The ES should include a clear justification in support of the study areas especially given that they are to be established using professional judgement. The ES should also ensure they are depicted on corresponding figures to aid understanding. The Inspectorate considers that the Wider Impact Area for assessing effects on the local economy should be broadened to include Norwich City, and given that the Proposed Development is one of several along the A47, the cumulative impacts of these developments on the local economy should be assessed at the County level.</p> <p>The Inspectorate notes that DMRB Volume 11, Section 3, Part 8, Para 2.2, states that community facilities “and their catchment areas” should be addressed by the assessment. The ES should clearly explain how this requirement has been taken into account in the selection of appropriate study areas.</p>	<p>The study areas chosen are:</p> <ul style="list-style-type: none"> <li>- 500m for land-use and accessibility (as per DMRB LA 112)</li> <li>- The wards/ communities affected by the project for human health, which consists of the wards of Hethersett, Cringleford, and Mulbarton and Stoke Holy Cross.</li> <li>- The study areas are shown on figure 12.1: Population and human health constraints plan.</li> </ul> <p>The community ‘catchment areas’ have been included in the assessment of access to community and commercial facilities. This is detailed in paragraph 12.7.11 of ES Chapter 12 <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 51</i> <i>Table 12.1</i> <i>Baseline information</i></p>	<p>Descriptions of the baseline environment and receptors such as PROW are unclear in the absence of corresponding figures. These should be included in the ES, with footpaths labelled to allow for crossreference to the main body of the ES.</p>	<p>All public rights of way (PRoW) have been added to and are labelled on the Figure 12.1: Population and human health constraints plan <b>(TR010037/APP/6.2)</b> of Chapter 12 of the ES <b>(TR010037/APP/6.1)</b>.</p>
<p><i>Ref 52</i> <i>Table 12.1</i> <i>Baseline information</i></p>	<p>No baseline information is provided for the assessment of community severance. The ES must include a description of the baseline conditions, against which impacts of the Proposed Development are to be assessed.</p>	<p>12.7 Baseline section of ES Chapter 12 <b>(TR010037/APP/6.1)</b> provides baseline information on community severance.</p>
<p><i>Ref 53</i> <i>Para 12.9.12</i></p>	<p>Agricultural land classification (ALC) surveys are proposed, which would follow the Ministry of Agriculture, Fisheries and Food (MAFF) guidelines. The Inspectorate advises that the guidance within NE’s TIN04913 should also be followed.</p>	<p>Permanent and temporary land take areas are included in Section 9.7 of ES Chapter 9 <b>(TR010037/APP/6.1)</b></p>

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<i>Baseline information – agricultural land</i>	The ES should quantify the temporary and permanent agricultural land-take by ALC grade and assess any likely significant effects.	
<i>Ref 54 Para 12.7.1 – 12.7.25 Construction impacts</i>	Adverse impacts from construction (eg on community severance, land-take, etc) have been identified as temporary. The ES should explain the duration of impacts and what constitutes a temporary impact.	Permanent construction impacts have also been identified. Impacts have been marked as temporary or permanent throughout assessment.
<i>Ref 55 Para 12.9.27 Methodology – view from the road</i>	The Report states that only views from the new road in operation will be assessed, and “therefore, value, magnitude and significance of effects” will not be taken into account. The Inspectorate does not agree with this approach, and requires that the ES must consider the baseline conditions, and assess the impacts of the Proposed Development against this baseline for all phases of development (including construction).	‘Views from the road’ is no longer a requirement of DMRB, therefore has not been assessed as part of Chapter 12 of the ES <b>(TR010037/APP/6.1)</b> .
<b>4.9 Road Drainage and the Water Environment (Scoping Report Section 13)</b>		
<i>Ref 56 Para 13.2.1 Study Area</i>	The Applicant states that a ‘number of water features within 1km’ and features that may be impacted downstream will be included within the assessment ‘as appropriate’; but has not stated which water features will be included or defined which features are ‘appropriate’. Within the ES the study area should be clearly defined, justified and reflect the anticipated extent of potential impacts.	This was noted and the study area is defined in ES Chapter 13 Road drainage and water environment Section 13.6 <b>(TR010037/APP/6.1)</b> .
<i>Ref 57 Para 13.2.1 Study Area</i>	The Inspectorate notes that the Applicant has not stated a study area for the assessment of groundwater. This should be clearly set out in the ES and reflect the anticipated extent of potential impacts.	The surface water and groundwater study areas are shown in ES Figures 13.1 to 13.8 <b>(TR010037/APP/6.2)</b> .
<i>Ref 58 Para 13.4.3, 13.4.4, 13.4.5</i>	The Inspectorate notes that there are currently no details of the drainage design for the Proposed Development. This information is required to inform the assessment of effects on water features, soils and ecological receptors.	A drainage strategy has been included as ES Appendix 13.2 <b>(TR010037/APP/6.2)</b> and the detailed design must be submitted prior to

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<i>Assumptions and limitations</i>		commencing development pursuant to requirement 8 of the DCO ( <b>TR010037/APP/3.1</b> ).
<i>Ref 59 Section 13.7 Mitigation</i>	The Inspectorate notes that the Scoping Report refers to 'appropriate mitigation' and states that 'mitigation measures will be set out in the CEMP'. Required mitigation measures must be described in the ES and an assessment of their efficacy included, and cross-reference made to where they are secured.	This comment has been noted, mitigation measures are described in the ES Chapter 13 Road drainage and water environment Section 13.9 ( <b>TR010037/APP/6.1</b> ).  The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and any other mitigation required is set out in the Environmental Management Plan (EMP) ( <b>TR010038/APP/7.4</b> ) which will be secured by requirement 4 of the DCO ( <b>TR010038/APP/3.1</b> ).
<i>Ref 60 13.7.2 Potential impacts during construction</i>	The ES should provide the information used to establish the baseline for groundwater receptors to ensure that groundwater quality can be remediated to pre- construction levels if contamination occurs during the construction phase.	This comment was noted. Groundwater quality information presented in the baseline was based on water quality sampling conducted as part of the ground investigation.
<i>Ref 61 Para 13.8.2 Scope of assessment</i>	The Applicant may wish to consider whether it would be more appropriate for the assessment of aquatic ecology to be undertaken within the Biodiversity aspect chapter rather than this aspect chapter.	This comment was noted. The impact assessment in the Road Drainage and Water Environment Chapter 13 of the ES ( <b>TR010037/APP/6.1</b> ) only considers impacts on water receptors, which may be hydrologically linked.
<b>4.10 Climate (Scoping Report section 14)</b>		
<i>Ref 62 Section 14.2</i>	The extent of the study area for this aspect assessment is not included in the Scoping Report. It should be described and justified in the ES.	This is provided within the ES Chapter 14 Climate Section 14.6 ( <b>TR010037/APP/6.1</b> ).

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<i>Study area</i>		
Ref 63 Para 14.2.3 <i>Inter-relationships with other aspects</i>	The Scoping Report states that there may be inter-relationships between this aspect and other aspects to be assessed. The ES should describe the nature of the inter- relationships and make clear cross- reference to the location of the information in the relevant aspect chapters.	This is provided within the ES Chapter 15, Cumulative Effects Assessment <b>(TR010037/APP/6.1)</b> .
Ref 64 Para 14.3.1 <i>Baseline data</i>	Norwich City Council (Norwich CC) and Norfolk County Council (Norfolk CC) are identified as sources of information on existing carbon emissions in the Local Authority area considered relevant to the Proposed Development. However, Chapter 5, paragraphs 5.3.3 – 5.3.4 of the Scoping Report states that automatic air quality monitors operated by Norwich CC are not considered representative of air quality at the Proposed Development site as they are located in urban areas approximately 5km to the north east and refer to air quality monitoring data provided by SNDC. The Applicant should ensure that the baseline information relied upon for the purpose of the assessments is consistently reflected in the aspect chapters.	The update to DMRB LA 114 requests the baseline data to "include current operational maintenance GHG emissions and operational user GHG emissions". This baseline data is presented within the ES Chapter 14 Climate Section 14.7 <b>(TR010037/APP/6.1)</b> .
Ref 65 Para 14.5.1 <i>Climate projections</i>	As set out in the NPSNN, the Applicant should take into account the potential impacts of climate change using the latest UK climate projections. This should include the anticipated UKCP18 projections where appropriate.	UKCP18 data has been applied and reported on in the ES Climate Chapter 14 Section 14.7 <b>(TR010037/APP/6.1)</b> .
Ref 66 Para 14.8.1 <i>Mitigation</i>	The Inspectorate notes that mitigation intended to address the effects of the Proposed Development during construction including its vulnerability to climate change would be contained in a CEMP. The Inspectorate expects the ES to identify the potential impacts and the specific mitigation measures, and to provide clear cross- reference to their location in the CEMP and where they are secured.	This is provided within the ES Chapter 14 Section 14.9 <b>(TR010037/APP/6.1)</b> .  The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and any other mitigation required is set out in the Environmental Management Plan (EMP) <b>(TR010038/APP/7.4)</b> which will be secured by requirement 4 of the DCO <b>(TR010038/APP/3.1)</b> .
Ref 67 Para 14.10.2	The Inspectorate notes that the Applicant intends to use the 'Mott MacDonald Carbon Portal' to predict the CO2 and greenhouse gases emissions of the Proposed Development.	The use of the Mott MacDonald Carbon Portal was not carried out in the final assessment as Sweco

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
<i>Modelling</i>	The methodology applied to the assessment should be clearly set out in the ES and include details of any models used to inform the assessment and how they relate to relevant national policy, guidance and standards.	did not have access to this tool. We used the Highways England tool only, the methodology is provided within the ES Chapter 14 Section 14.4 <b>(TR010037/APP/6.1)</b> and associated ES appendix 14.1 <b>(TR010037/APP6.3)</b> .
<i>Ref 68 Section 14.10 Methodology</i>	It is not explained in the Scoping Report how the significance of effects resulting from the Proposed Development will be determined and what would constitute a significant effect. This should be included in the description of the methodology in the ES.	This is provided within the ES Chapter 14 Climate Section 14.4 <b>(TR010037/APP/6.1)</b> .
<b>4.11 Combined and cumulative effects (Scoping Report Section 15)</b>		
<i>Ref 69 Para 15.2.2 Study area</i>	The rationale for selecting a 2km ZOI for the CEA is unclear, as it is stated that this is considered large enough 'to cover the proposed developments likely to contribute to cumulative effects', although it is subsequently indicated under 'Assumptions and Limitations' that the other developments to be included in the CEA have not yet been identified. The Applicant should ensure that the study area is sufficient to encompass all developments that together with the Proposed Development could generate significant cumulative effects, and must justify the approach in the ES. The study area and the list of developments to be included in the CEA should be discussed and ideally agreed with SNDC, Norwich City Council and Norfolk County Council.	Justification for the study area has been provided in the ES <b>(TR010037/APP/6.1)</b> , under Section 15.3 of Chapter 15. All developments have now been identified, therefore comment removed from 'assumptions and limitations' section. The list of developments has been discussed with representatives from South Norfolk District Council, Norwich City Council and Norfolk County Council, detailed under 'Section 15.3 of the ES Chapter 15 <b>(TR010037/APP/6.1)</b> and amendments or additions have been made where required.
<i>Ref 70 Section 15.7 Mitigation</i>	In addition to identifying the combined and cumulative residual effects following the implementation of any required mitigation, the ES should identify the potential effects prior to mitigation and the measures proposed to address them, together with cross-reference to their location and where they are secured.	Potential effects prior to mitigation and the mitigation proposed is included in' section15.4 of the ES Chapter 15.  The embedded mitigation is secured through Schedule 1 of the DCO and the Works Plans and

Topic or aspect and Scoping Opinion paragraph reference	Scoping Response	Where Addressed in the ES
		any other mitigation required is set out in the Environmental Management Plan (EMP) ( <b>TR010038/APP/7.4</b> ) which will be secured by requirement 4 of the DCO ( <b>TR010038/APP/3.1</b> ).
<i>Ref 71</i> <i>Section 15.9</i> <i>Methodology</i>	It is unclear what is meant by the reference to determining the significance of combined effects upon environmental receptors based upon 'the balance of scores'. Reference is made to the information on significance criteria contained in Section 1.6 of the Scoping Report. The Applicant is referred to the Inspectorate's comments on this point in Section 3.2 of this Opinion. The methodology used for the assessment should be comprehensive, clearly explained and justified in the ES.	The terminology 'balance of scores' removed. The methodology used for this assessment is clearly defined in section 15.3 of the ES Chapter 15 ( <b>TR010037/APP/6.1</b> ).