

A47/A11 Thickthorn Junction

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9.3 Applicant's Response to the Examining Authority's First Written Questions (ExQ1s)

The Infrastructure Planning (Examination Procedure) Rules 2010
Rule 8(1)(c)

Planning Act 2008

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Infrastructure Planning

Planning Act 2008

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

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

**APPLICANT'S RESPONSE TO THE EXAMINING AUTHORITY'S FIRST
WRITTEN QUESTIONS (ExAQ1s)**

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1. INTRODUCTION

- 1.1.1 The Development Consent Order (DCO) application for the A47/A11 Thickthorn Junction was submitted on 31 March 2021 and accepted for examination on 28 April 2021.
- 1.1.2 The purpose of this document is to set out Highways England's (the Applicant) response to the Examining Authority's First Written Questions 1 (ExQ1) issued 23 September 2021.

2. KEY ABBREVIATIONS

2.1.1 The following abbreviations have been used in the Applicant's responses to the First Written Questions:

- dDCO = draft Development Consent Order
- DMRB = Design Manual for Roads and Bridges
- EMP = Environmental Management Plan
- ES = Environmental Statement
- ExA = Examining Authority
- NPSNN = National Policy Statement for National Networks 2014
- NWL = Norwich Western Link
- the Scheme = the A47/A11 Thickthorn Junction
- LOAEL – Lowest Observed Adverse Effect Level
- SOAEL – Significant Observed Adverse Effect Level

3. GENERAL AND CROSS-TOPIC QUESTIONS

Ref	ExQ1 Question	Applicant's Comment
GC.1.1	<p>The construction programme set out in ES Chapter 2 [APP-039] paragraph 2.6.8 indicates a duration of 23 months. Can the Applicant:</p> <p>i) Confirm if there is any change to the anticipated programme inclusive of start dates, and, provide reasons for any changes.</p> <p>ii) Will any change acknowledged affect any of the assumptions in the ES particularly with respect to in-combination cumulative effects (and HRA in-combination effects)?</p>	<p>No change to the construction programme is anticipated at present.</p>
GC.1.2	<p>Provide an update of any planning applications that have been submitted, or consents that have been granted, since the Application was submitted that could either effect the proposed route or that would be affected by the Proposed Development and whether this would affect the conclusions reached in ES Chapter 15 [APP-052] or associated Appendices 15.1 and 15.2 [APP-117] and [APP118].</p> <p>Provide a response alongside question DE.1.6.</p>	<p>No consents or licences have been granted since the DCO application was submitted. The Applicant will begin the process of obtaining consents and licences by the start of 2022.</p> <p>A review of planning applications on the relevant planning portals of South Norfolk District Council, Norfolk County Council, Norwich City Council and the Planning Inspectorate between 1 February and 21 October 2021 was undertaken.</p> <p>One planning application has been submitted to South Norfolk District Council on 31 March 2021 for a residential development of 200 homes, approximately 1.5km northwest of the Scheme on the outskirts of Hethersett. A review of available documentation for the planning application against the Cumulative Effects Assessment in ES Chapter 15 (APP-052) did not find any cumulative effects with the Scheme.</p> <p>The planning application for the residential development will be added to the Cumulative Effects Stage 2 Screening, ES Appendix 15.1 (APP-117) by Deadline 4, however this addition does not change the outcome of the cumulative effects assessment therefore, no further changes to ES Chapter 15 (APP-052) are required.</p>
GC.1.3	<p>The ExA observed on an Unaccompanied Site Inspection [EV-001] that a housing scheme at Cringleford to the east of the A47 Thickthorn Junction is currently under construction and is aware the provision of potential public open space is anticipated as part of extant housing development close to the Thickthorn road improvement scheme.</p> <p>Can the Applicant:</p> <p>(i) Further clarify why there is scope to not use public open space or land planned to be used as such.</p> <p>(ii) The stage by which any agreement to formalise planned public open space provision is expected to serve the extant housing development at Cringleford.</p> <p>(iii) The stage by which any existing formal amendment committing areas of land to public open space is to be subject to any revised/fresh legal agreement if applicable.</p> <p>You may wish to combine the answer to this question with the answer to question CA.1.7.</p> <p>Relevant Planning Authority:</p> <p>Are there adequate provisions in place to ensure that the use of designated or potential planned public open space will not occur? Explain your reasons.</p>	<p>i) The Cringleford residential development which lies directly to the east of and adjoining the A47 was granted planning permission on 7 January 2016 by the Secretary of State on appeal. As part of the appeal a completed Section 106 Agreement dated 6 July 2015 was submitted to and accepted by the Planning Inspectorate (S106). This document binds the development site and sets out various planning obligations, including laying out and provision of sports pitches and recreational areas. The S106 was varied by a deed of variation on 10 January 2018.</p> <p>Part of the development land which is allocated in the S106 to be provided as sports pitches and recreational areas comes within the Order limits and is required in order to be able to deliver the Scheme. As set out in the Statement of Reasons (APP-020) an area of this land measuring 13,656 square metres at plot/s 6/9a, 6/10a, 7/7c and 7/7/e is needed temporarily for a construction laydown area. A further area measuring 20,542 square metres comprising plots 6/9b, 7/7b and 7/7/d is required for permanent new rights, including for the diversion of utility services. The area comprised in plots 6/9c and 7/7/a measuring 18,617 square metres is required permanently for the Scheme. The permanent land take is needed for the A11-A47 connector road and associated earthworks, drainage and environmental bunding. The alignment of the connector road has been designed to minimise landtake within the constraints by the required design standards to provide a safe compliant design. Public access cannot be permitted for safety reasons due to proximity to the highway.</p> <p>Under sections 131 and 132 of the PA 2008 (relating to compulsory acquisition of land and rights over land for commons and open spaces) open space has the same meaning as in section 19 of the Acquisition of Land Act 1981. This is "any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground".</p> <p>As the sports pitches and recreational areas within the Order limits have not yet been laid out, they are not currently classed as open space and so are to be treated in the same way as any other "ordinary" land which is required for the Scheme.</p>

		<p>ii) The relevant S106 obligations are in Part 1 and 3 of Schedule 1:</p> <p>Paragraph 1 of Part 1 of Schedule 1 requires the developer to agree in writing with the planning officer and the play and amenities technical manager a scheme (including timetable) for the laying out and equipping of the play area, recreational space and amenity areas within each phase of the development, as well as a scheme for the future management and maintenance of the play area, recreational spaces, amenity areas, prior to the commencement of the relevant phase.</p> <p>Paragraph 2 requires the developer to provide, layout and equip the play area, recreational space and amenity areas within each phase of the land in accordance with the approved plans and timetable. There is no trigger in the S106 for this to be done, and it is not clear when the rest of the land will be laid out, although the Applicant understands that the final part of the Cringleford housing development will not be completed until 2024/2025.</p> <p>Part 3 of Schedule 1 relates to the sport/formal recreational provision. The developer must not commence the development until the sport/formal recreational provision site (Sports Pitches) have been identified on a plan which has been submitted to and approved by the planning officer.</p> <p>There are then restrictions on occupation of the housing within the development connected with delivery of the Sports Pitches. The developer must not complete more than 375 dwellings until the plans, specifications and the timetable for delivery of the Sports Pitches have been submitted to the play manager, and must not complete more than 500 dwellings until the Sports Pitches have been completed and are open for public use.</p> <p>iii) The developer of the Cringleford housing development (Big Sky) has agreed to submit an application to vary its planning permission, which will secure an alternative design for the open space layout. The Applicant understands that Big Sky intends to submit this application shortly. As part of the application South Norfolk Council will consider whether a commuted sum will be payable (and, if so, the level of such commuted sum) to mitigate the impact of the Scheme on the residential development and its on-site open space provision.</p> <p>This commuted sum can be considered as part of the developer's compensation claim and could be delivered via a deed of variation to the S106 Agreement or via a separate section 106 agreement. The Applicant is in discussions with Big Sky in relation to this.</p>
<p>GC.1.4</p>	<p>The ExA notes the Consents and Agreements Position Statement [APP-019].</p> <p>What other consents and permits (if any) would be required by the Proposed Development? If further consents and permits are required can you:</p> <p>i) Provide an update on progress with obtaining these consents/ licences.</p> <p>ii) Include a section providing an update on these consents/ licences in any emerging Statements of Common Ground (SoCG) that are being drafted with the relevant consenting authorities listed.</p> <p>You may wish to combine the answer to this question with the answer to question BIO.2.6.</p>	<p>The Applicant confirms no changes to the Consents and Agreements Position Statement (APP-019) are required.</p> <p>i) The above document sets out the current position and will be updated throughout the examination as required.</p> <p>ii) Statements of common ground are currently being reviewed with the relevant consenting bodies and will be updated as required.</p>
<p>GC.1.5</p>	<p>i) When considering alternatives to the scheme clarify/explain to what extent was the strategic use of expanding the existing park and ride facility considered?</p> <p>ii) Explain what scope remains for the scheme to further complement the existing park and ride facility, any potential planned expansion of the facility, and its subsequent future use? If it wasn't considered, provide an update on these matters.</p> <p>You may wish to combine the answer to this question with the answer to question CI.1.3</p>	<p>i) The Applicant has engaged with NCC and their design team for the expansion of the Park and Ride throughout the development of the preliminary design, to ensure it can be accommodated and will continue to do so through the detailed design, with collaboration on such items as drainage and landscape design.</p> <p>The option of incorporating a free flow link to and from the Park and ride facility from the A11 Northbound carriageway was considered during the preliminary design process for the Scheme but was discounted as it would not be compliant with the current DMRB design standards. The Applicant engaged with Norfolk County at the time and are satisfied that no additional routes for vehicular access to the Park</p>

		<p>and Ride are required.</p> <p>ii) The Scheme has been designed to accommodate the extension to the Park and Ride and the planned increased capacity of the Thickthorn Park and Ride has been allowed for in the NATS traffic model, details of which can be found in the Case for the Scheme Chapter 4 (APP-023).</p> <p>The traffic flows forecasted by the NATS model have been used in the ARCADY junction modelling assessment which evaluates the operation of the B1172/McDonald's roundabout junction, with respect to queuing and delays, in the 2040 DS scenario. The modelling shows that all arms of the roundabout will remain well within capacity for both the AM and PM peak hours, with the B1172 westbound being the only exception during the AM peak with a ratio of flow to capacity (RFC) of 0.91. While this exceeds the 0.85 threshold, the arm remains within capacity, recording queues of less than 10 vehicles. Overall, the modelling shows that the B1172/McDonald's roundabout junction operates without any large excess queues building on the roundabout or its approach arms in the 2040 Do Something scenario.</p> <p>In addition, the Scheme design incorporates an access to the boundary of the Park and Ride facility for pedestrians and cyclists from the Cantley Lane Link Road shared Cycleway/footway which will be delivered as part of the Scheme.</p>
<p>GC.1.6</p>	<p>Application document [APP-127], The Scheme Design Report. Paragraph 4.2.9 indicates that the new link road would require the existing Cantley Stream to be realigned by approximately 550m. The adjacent access track would also be diverted south of the Cantley Stream realignment, but within the same land parcel. With further details found on the General Arrangement Plans (TR010037/APP/2.2).</p> <p>Provide clarification of the details setting out the design of the Cantley stream realignment indicating how the works are to be undertaken allowing for consultation and the mechanism by which that will be secured.</p>	<p>The Environmental Masterplan (APP-123) shows the proposed realignment of Cantley Stream and the proposed mitigation for the proposed realignment is described in ES Chapter 8 (APP-045) and 13 (APP-050). Part of the existing stream will be retained downstream of the Cantley Lane South culvert to provide mitigation for the loss of riparian habitat and to provide additional water vole habitat. Apart from this reach, the rest of the existing watercourse to be realigned will be filled. The detailed design and the construction method statement to show how the proposed stream realignment will be constructed (including the works on the old watercourse to be filled) will be undertaken at detailed design stage. The requirement to comply with the Environmental Masterplan and other mitigation measures are set out in the Record of Environmental Actions and Commitments (REAC) which forms Table 3-1 in the Environmental Management Plan (APP-128). Delivery of these commitments, including consultation with the Environment Agency, will be secured through dDCO (APP-017) Requirement 4 'Environmental Management Plan'.</p> <p>The actual construction is a relatively straight forward offline construction with breakthroughs either end, with use of silt curtains to protect downstream water. Cofferdams will potentially be used to divert the stream, but the precise construction method and details will be further defined once the detailed design of the diversion has been complete. Requirement 3 of the dDCO (APP-017) deals with the mechanism for the approval of the detailed design.</p>
<p>GC.1.7</p>	<p>A summary of principal earthwork volumes is given in Table 9.3 of the Scheme Design Report [APP-127]. It identifies Surplus topsoil from stripping which will need to be retained and stockpiled pending incorporation into Scheme (if possible) or held pending alternative use at estimated volume of 26,000 m³; the volume of site won material which may not be suitable for direct placement at estimated volume of 49,000 m³; the volume of surplus general earthworks (non-topsoil) material which will require stockpiling pending alternative use at estimated volume of 79,000 m³. The areas identified for materials storage, management and processing provide in total an estimated functional working area of 40,000m².</p> <p>i) Clarify what provisions would be in place to ensure dust mitigation, debris management and transportation of the material alongside protecting the visual appearance of the area specifically arising from short/medium and long-term stockpiling anticipated will not erode from the local environment?</p> <p>ii) Clarify to what extent has scope for earth bunding/reprofiling or landscape recontouring using displaced material cut from the</p>	<p>i) Measures to minimise impacts on air quality during construction (e.g. dust, vehicle emissions) would be delivered through draft Development Consent Order (APP-017) Requirement 4 'Environmental Management Plan' (EMP) (APP-128), which requires an EMP to be approved by the Secretary of State following consultation with various consultees including the relevant planning authority and Environment Agency.</p> <p>The EMP (APP-128) includes action AQ1 in Table 3-1 (REAC) and Annex B.3 'Construction Noise and Dust Management Plan' in the EMP (APP-128) to manage the risks to air quality and limit and control emissions to air during construction on sensitive receptors. The EMP (APP-128) will be supported by controls on construction traffic movements through the traffic management plan, secured through Requirement 10 'Traffic Management' of the draft Development Consent Order (APP-017).</p> <p>ii) As shown on the Environmental Masterplan (APP-123) Displaced material from the Scheme construction is being used for bunding/landscaping recontouring in the following locations within the Scheme's overall layout:</p> <ul style="list-style-type: none"> • Bunding along the extents of the A11-A47 Connector Road cutting on to the east of the existing A47 to provide visual screening from the Cringleford Housing development and area of potential open space. • Bunding between the rear of the residential properties on Cantley Lane South and the A11-A47 Connector Road to provide visual screening

	<p>application site to provide natural planted barriers within the scheme's overall layout.</p> <p>iii) What other possible options are there for displaced material not needed for re-use on site? And is there a rough estimation of the amount of residual material likely to be left over that can be given?</p> <p>iv) Provide an estimate of the length of time displaced material from the scheme would be stored on land referred to in the application in the event it cannot be reused within the scheme improvement work areas proposed. If any of the above information is already provided, signpost that. You may wish to combine the answer to this question with the answers to question DE.1.4 and DE.1.5.</p>	<ul style="list-style-type: none"> • Bunding between the A11-A47 Connector Road and the Thickthorn Junction. • Bunding and landscape recontouring between the Cantley Lane Link Road and the A11-A47 Connector road south of the Thickthorn Park and Ride. <p>iii) Appendix 10.4, Minerals Impact Assessment (APP-108) section 10.5.11 notes that at the time the environmental assessment was undertaken, approximately 215,000m³ of excavated material will be generated, excluding topsoil. Item GS3 in Table 3-1(REAC) of the EMP (APP-128) details the proposed management of materials, including reference to the use of excess materials outside of the Scheme and in accordance with the Materials Management Plan (Appendix B.1) of the EMP (APP-128). The EMP (APP-128) is secured via Requirement 4 of the dDCO. The final quantity of excess materials will be determined during detailed design, as secured via Requirement 3 of the dDCO.</p> <p>iv) Surplus materials will be removed from the site as soon as practicable. If material is designated as surplus this will either be removed straight from site on road wagons, or stockpiled at one of the soil storage locations to be removed from site at.. Item M3 of Table 3-1 (REAC) in the EMP (APP-128) sets out the considerations for reuse of materials outside of the Scheme that will be undertaken in compliance with the Materials Management Plan (Appendix B.1 of the EMP) to be produced during detailed design. The EMP is secured via Requirement 4 of the dDCO.</p>
GC.1.8	<p>The ExA is aware that Vattenfall's Norfolk Boreas and Norfolk Vanguard proposes new offshore wind farms off the north Norfolk coast, with onshore cabling crossing the A47 west of Dereham and a new substation connecting into the A478 west of Dereham. Construction programmes were expected to overlap during 2022 to 2024. Vattenfall were anticipated to import material from overseas via ports in Great Yarmouth or Lowestoft, and the materials will pass through the Scheme. Some of these loads were anticipated to include large abnormal deliveries, such as 80m long low loaders with new electricity substation transformers. Vattenfall refer to scope for regular meetings and exchange of information with the applicant during the respective detailed design and construction stages.</p> <p>Provide:</p> <p>i) An update on any discussions and overlaps.</p> <p>ii) Suggested wording within the dDCO or otherwise to deal with traffic management issues. Can the Applicant also:</p> <p>iii) Clarify Construction Traffic Management Plans/other Traffic Management Plans applicable and indicate when they will be finalised and submitted to the examination.</p>	<p>i) As part of the planning process for the two schemes the Applicant has agreed a Statement of Common Ground with the Vattenfall Norfolk Boreas and Norfolk Vanguard projects and has agreed to cooperate with Vattenfall to manage the implications of our respective detailed construction programmes as they develop.</p> <p>ii) and iii) An Outline traffic management plan (APP-129) was submitted as part of DCO documents. Requirement 10 secures the preparation of a detailed traffic management plan prior to the commencement of Work No. 24 (the new A11/A47 Connector Road). Therefore, no changes to the dDCO (APP-017) are proposed by the Applicant. The Traffic Management Plan will be prepared and updated as the detailed design is taken forward. There are various conversations ongoing with local traffic experts within NCC to identify the most appropriate diversion routes and those with the least impact on the populous using these routes.</p>
GC.1.9	<p>Relevant Representations received [RR-009, RR-012, RR-013] refer to the traffic currently using the B1172 increasing due to development occurring at Wymondham.</p> <p>i) Detail the surveys have been undertaken or information gathering exercises to gauge any potential uplift in traffic on the B1172.</p> <p>ii) Can the applicant provide clarification and further justification of the basis for a T-junction design proposed for the link between B1172 and Cantley Lane South (Work No.1 and Work No.2).</p> <p>iii) What evidence is available that the proposed junction design is sufficient to deal with existing traffic and any potential uplift in traffic. Please signpost analysis of junction capacity measurements and if these have considered new development occurring. If there is no such information detail, what are</p>	<p>i) The NATS traffic model has been developed based on a range of traffic surveys undertaken along the A47 and A11 around Thickthorn Junction as well as across the surrounding network in 2015 and 2016. The 2015 and 2016 surveys were used to calibrate the model based on a matrix estimation (ME) procedure. The ME process adjusts the prior trip matrix based on the strategic traffic assignment and the observed count data. This process utilises the data referred to in Section 4 of this Case for the Scheme, and traffic data collect across the wider NATS model study area. A variety of checks were undertaken to ascertain that ME has not altered the integrity and profile of the trip matrix. Subsequent to the ME process, the model has been validated against independent data sets based on the following criteria:</p> <ul style="list-style-type: none"> • flows across screenlines • individual link flows • journey time comparison • model convergence. <p>The base model was developed in accordance with the DfT's TAG Unit M3.1: Highway Assignment Modelling (2020). The strategic base</p>

<p>the reasons?</p> <p>iv) Is there flexibility in the design of the scheme to increase junction capacity using an alternative junction design upgrade such as a roundabout system if that is required? If so, detail that.</p> <p>v) If alternatives have already been considered please signpost those or provide information to the extent of junction provision considered?</p> <p>Interested Parties: Provide comments on these points you wish to make if you have not already done so.</p>	<p>year model development process is outlined in Figure 4.8 (APP-125)</p> <p>Overall, it is considered that the updated NATS base year model demonstrates a good representation of traffic behaviour in the Scheme study area as well as Norwich and the surrounding wider area. Therefore, the model forms a robust basis for the future year forecast assessment of the Scheme.</p> <p>The NATs future year forecasts have been developed in line with TAG guidelines including DfT economic parameters (value of time, operating cost) and wider area national growth in car trips is derived from the DfT National Trip End Model (NTEM 7.2). The NATS model traffic forecasts are dependent on demand growth forecasts and highway scheme assumptions. The local growth forecasts consider the local authority growth projections and the national growth forecasts take wider anticipated growth into account. The uncertainty log details the local authority development schemes in regions which are both nearby and significant to the model. This includes assumptions on local uncertainty, which is dependent on whether developments or other planned transport schemes close to the Scheme area are proposed.</p> <p>The core scenario represents the most unbiased and realistic set of assumptions. It is intended to provide a sound basis for decision-making given current evidence. It must be robust and evidence-based taking on board various factors and noting uncertainties affecting travel demand in the future. In accordance with TAG guidance, the uncertainty log includes the management of the uncertainties required for formulating the core scenario.</p> <p>As detailed in section 4 of the Case for Scheme Table 4.2 (APP-125) in total eleven identified development sites are situated in the local area, with six in Cringleford, two in Hethersett and three in Wymondham. As discussed above in the Traffic Growth Forecasts section, the DfT National Trip End Model (NTEM 7.2) is used to accommodate for development growth in the wider area not defined in the uncertainty log.</p> <p>In summary the NATS model future year 2025 and 2040 year assessments provide forecasts of the traffic flows along the B1172 as well as the wider area network in accordance with TAG guidance. These forecasts take into account the planned development growth, provided by NCC, occurring in Wymondham as well as across the wider area.</p> <p>ii) As part of the operational assessment of the Scheme, a local area VISSIM micro-simulation model has been developed. The principal purpose of the micro-simulation model is to undertake a detailed operational assessment of the Scheme designs. This assessment is then used to inform and refine the Scheme layout.</p> <p>The traffic demand used in the VISSIM model has been derived from the wider area NATS model via an interface which considers the local observed 2019 traffic count data.</p> <p>Thus, the VISSIM model provides a suitable basis for the operational assessment of the Cantley Lane/B1172 junction in the 2040 design year. As discussed above these demand forecasts, derived from the NATS model, take into account the planned developments included along the B1172.</p> <p>As discussed in Section 4.9 of the Case for the Scheme (APP-125), maximum queue results and vehicle delays were extracted from the VISSIM model at the Cantley Lane approach to the junction. Queue results predict that maximum queues do not exceed 25m through the AM peak hour, indicating queues do not exceed six vehicles. Predicted average delay per vehicle for right-turners on the Cantley Lane approach is 12 seconds. These results indicate that the proposed junction is operating satisfactorily without significant queues or delay in the 2040 design scenario.</p> <p>iii) As discussed above, Section 4.4 and 4.9 of the Case for the Scheme (APP-125), provides details of the operational modelling assessment. Section 4.3 of the Case for the Scheme discusses the development of the NATS 2040 future year traffic forecasts, which does take into account future development.</p> <p>In summary the traffic modelling assessment provides traffic forecasts which consider both the existing level of traffic along the B1172 as well as the future year traffic growth. These traffic forecasts have been used as the basis of the VISSIM operational modelling assessment. The future year VISSIM assessment shows that the proposed Cantley Lane/B1172 junction is operating satisfactorily without significant queues or delay in the 2040 design scenario.</p> <p>Based on this analysis the T-junction design proposed for the link between B1172 and Cantley Lane South will operate satisfactorily with</p>
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		<p>the forecasted traffic in the 2040 design scenario.</p> <p>iv) There is no flexibility at present. The Applicant believes that the proposed ghost island junction is the most appropriate solution for this junction. As detailed in the response to question GC1.3 iii, the layout performs satisfactorily for the level of expected traffic. It also keeps land take to a minimum, and reduces ongoing maintenance liabilities that would be associated with a signal controlled junction. As such, the Applicant has not included additional land within the DCO boundary to accommodate an alternative layout such as a roundabout or considered these alternatives in detail, as such consideration is unnecessary.</p> <p>v) See response to GC1.3 iv).</p>
GC.1.10	<p>In terms of forthcoming Traffic Management Plan formulation and updating explain the extent to which new development in the area and potential for increased traffic levels arising from that has been/can be considered.</p> <p>Interested parties: Provide any comments on this issue you wish to make if you have not already done so.</p>	<p>The Traffic Management Plan (APP-129) will ensure that the construction of the Scheme is delivered safely, whilst preserving the capacity within the network.</p>
GC.1.11	<p>Relevant Representations received [RR-011] questions the extent of land take in so far as sections of public highway should not be acquired permanently.</p> <p>Provide justification (or provide further clarification) for your views on this issue giving reasons for the favoured approach.</p>	<p>As a matter of law, the extent of the depth of a public highway is not defined. Therefore, where works are required to existing highway land, permanent acquisition powers have been applied for to ensure the Scheme can be delivered. Whilst there is a rebuttable presumption that an adjoining landowner may own the subsoil of the highway, the Applicant needs to ensure it acquires all necessary interests in the highway to be able to deliver the Scheme. All acquisition is subject to the payment of compensation for valid claims.</p>
GC.1.12	<p>The ExA notes the Environmental Management Plan (First Iteration) [APP-128] and the content of the Explanatory Memorandum [APP-018].</p> <p>The dDCO relies upon mechanisms to relating to first, second and third iterations of the Environmental Management Plan.</p> <p>The ExA notes that a streamlined two step approach in terms of an Outline and Final Environmental Plan in substantial accordance with the outline could be opted for. Justify why such a revised streamlined approach cannot be implemented taken and read alongside the REAC.</p>	<p>The production of the EMP (APP-128) has followed DMRB LA 120, in which the EMP is updated at three stages: firstly during the design stage, secondly before construction to ensure detail is provided to inform environmental management during construction activities, and thirdly after construction, to support monitoring, future management and operation of the scheme. There may be activities during construction that inform the third iteration, therefore the EMP would need to be updated during this phase to ensure it is up to date. As the current EMP needs to be updated during construction, three iterations will now be required to ensure the EMP contains all required information.</p>
GC.2.1	<p>i) Confirm whether the Proposed Development would result in any severance issues for farms and if it does how would this be addressed?</p> <p>ii) Explain if/ how short and long-term breaches of Agri-Environment schemes potentially caused by the Proposed Development, would be dealt with and who would take responsibility for dealing with any breaches – the applicant or the signatory of the scheme? If it is the signatory, is the Applicant proposing to provide any support/advice?</p> <p>iii) If this information has been provided, signpost where in the Application documents it can be found.</p>	<p>i) As detailed in Sections 12.10.41- 12.10.44 of ES Chapter 12 (APP-049) which refers to the potential impacts of the Scheme on agricultural holdings, there are no severance issues for farms identified during the environmental assessment. General Arrangement Plan Sheet 3 of 7 (APP-005) shows the proposed design of access to agricultural land to the north and south of the A11.</p> <p>ii) The Applicant is unable to respond to this question, and the answer will depend on what is in the agreement. No information has been provided by agricultural landowners on the potential impact of the Scheme on any agri-environment scheme. As a result, the assessment was based on desk research. Section 12.10.42 of ES Chapter 12 (APP-072) relates to Holding 2, which was the only holding found to have an existing agri-environment agreement. If the relevant information is provided to the Examination or directly to the Applicant, the Applicant will review and comment further.</p> <p>iii) Figure 12.3 (APP-072) shows the agricultural land holdings and General Arrangement Plan Sheet 3 of 7 (APP-005) shows the Scheme design in the area of Holding 2 (extension to the existing bridge and existing path) in relation to point i).</p>
GC.3.1	<p>In response to the Environment Agency's comments [RR-04] on paragraph 10.1.29 Appendix 10.3 Outline site Waste Management Plan (SWMP) [APP-107].</p>	<p>i) Construction of the Scheme may require excavation into, and subsequent disposal of landfilled/infilled wastes. Under current waste legislation, generated excavation arisings will be considered to</p>

	<p>i) Further clarify how waste management practices will be implemented (including hazardous waste) for managing excavated waste from the Cantley Lane landfilled waste area and the infilled gravel pit east of Cantley Lane South.</p> <p>ii) Advise what further waste assessments or details are to be advanced on the landfilled/infilled waste identified in Table 1 of Appendix 10.2 Waste Disposal Assessment, and how this activity will be managed to protect the environment and prevent harm to human health? Clarify the approach to be taken.</p> <p>iii) Regarding paragraph 10.1.39 of the outline SWMP, it is recommended by the Environment Agency that the final SWMP refers to an accurate description of the waste when referring to Duty of care documentation, such as transfer, or consignment notes rather than the type of waste. The SWMP is documented to be included as part of the Second Iteration of the EMP. Confirm when such details are to be firmed up.</p> <p>iv) Confirm whether the Environment Agency will be included as a named consultee in respect of Requirement 4.</p> <p>Interested Parties: Provide your comments on land contamination or waste matters if you have not already done so.</p> <p>The ExA acknowledges that this may be covered by a SoCG. If the answer to these questions is be covered by a SoCG please indicate that accordingly</p>	<p>constitute waste unless it can be demonstrated that there is no requirement or intention to discard and could remain a waste until demonstrated they cease to be such. It is a legal requirement to assess such arisings potentially to be discarded i.e. waste for disposal off-site.</p> <p>The EMP (APP-128) will contain a Site Waste Management Plan which will detail the methods for management or disposal of waste. This is committed to in the dDCO at Requirement 4. The Applicant is aware of the possible presence of inert, industrial, household and commercial waste (as noted in Section 4.9 of Appendix 9.3 Part 1 PSSR (APP-103) at the former Cantley Lane landfill site and infilled gravel pit. The next iteration of the EMP (APP-128) will be updated to ensure such wastes (including the presence of hazardous waste) are managed correctly</p> <p>ii) Representative samples of the infilled materials have been retrieved during the supplementary ground investigation (GI) and scheduled for chemical analysis to provide an indicative up-front disposal classification of potential waste's generated during construction. Upon receiving the GI data, waste classification will include a hazardous properties assessment (Environment Agency (EA) Technical Guidance WM3, Guidance on the classification and assessment of waste, 1st Edition v1.1.GB (Jan 2021)) using the industry recognised HazWasteOnline™ screening tool; a web-based software for classifying waste that follows the latest EA guidance and European regulations.</p> <p>Procedures for the management of any contaminated materials encountered during the GI (including asbestos if present), were included within the GI contractors Environmental Management Plan (EMP). This included a 'stop works' requirement in the vicinity of any unexpected contamination, prior to inspection of the contamination by a suitably qualified geoenvironmental practitioner or the Scheme's Environmental Clerk of Works (ECoW). Mitigation measures protective of human health and controlled waters were managed during the GI by the Principal Contractor.</p> <p>iii) The SWMP will be developed during the detailed design process. The SWMP forms part of the EMP (APP-128), which is committed to as part of the draft DCO in Requirement 4 and must be submitted to the Secretary of State for approval prior to commencement of development.</p> <p>iv) The Environment Agency has been added as a named consultee under dDCO (APP-017) Requirement 4 'Environmental Management Plan' (EMP) and will be consulted on the Second Iteration of EMP.</p>
GC.4.1	<p>The ExA recognises that some of the baseline survey information included within the ES is of some age. There are also circumstances which have arisen from the COVID 19 pandemic which may or may not had an effect to using the baseline data and any conclusions/assumptions to be drawn from that.</p> <p>Can the Applicant set out in a single schedule (with reference to the relevant chapters) any additional baseline data gathering that has taken place or is ongoing, or otherwise set out the reasons why that existing baseline data remains fit for purpose.</p> <p>Can the Applicant also set out their response to any potential impact on any baseline position and their views as to the overall reliability of submitted information taking into that particular change of circumstance and any other material change of circumstances anticipated.</p> <p>With respect to cumulative effects related information. Confirm any updates to that.</p>	<p>The Applicant does not intend to undertake any further baseline surveys. This is because the baseline survey data used in the assessment in ES Chapter 8 (APP-045) is appropriate as CIEEM (2019) guidelines for Ecological Impact Assessment (EclA) require ecological data to have been collected within one or two years prior to an Ecological Impact Assessment (EclA) being written. Table 8-3 in ES Chapter 8 Biodiversity (APP-045) demonstrates the most recent surveys were completed in 2019 or 2020, which is within 2 years of the EclA being written at the end of 2020/early 2021. Additional desktop data is not required as field surveys have been completed since 2017, which provide a more accurate record of ecology baseline within the DCO boundary. Baseline surveys were undertaken in 2019 and 2020 in order to inform the environmental assessment.</p> <p>As the environmental assessments have been carried out, there is no requirement to gather or assess further baseline data. Instead, as set out in [DOC REF], confirmatory surveys are scheduled to be completed pre-construction in 2022. An outline schedule of preconstruction surveys will be produced for Deadline 4.</p> <p>There are no changes to ES Chapter 15 (cumulative effects assessment) (APP-052) currently anticipated by the Applicant.</p>
GC.4.2	<p>Provide an update on the geoarchaeological monitoring proposed for Spring 2021 in the area of the proposed Cantley Stream diversion, as indicated in Chapter 6 [APP-043], and confirm when the results, and any revised assessment as necessary, will be</p>	<p>A supplementary ground investigation was undertaken between 19 April 2021 and 18 July 2021. Geoarchaeological monitoring was undertaken between 19 April and 14 May 2021 and 22 to 23 June 2021.</p> <p>The monitoring report has been submitted at Deadline 2. The results</p>

	made available to the Examination.	of the geoarchaeological monitoring determined that no archaeological features or deposits were seen, no finds were recovered and no environmental samples were taken. Therefore, no revisions to the Cultural Heritage assessment in ES Chapter 6 (APP-043) are required.
GC.4.3	<p>ES Chapter 8 (Biodiversity) [APP-045] paragraph 8.5.3 and ES Appendix 8.4 (Great Crested Newt Survey Report) paragraph 3.5.2 highlight that there are ecological surveys to be completed in 2021 owing to Covid-19 and access restrictions, including eDNA surveys, to establish the presence or absence of great crested newts.</p> <p>Provide an update on these surveys and confirm when the results, and any revised assessment as necessary, will be made available to the Examination.</p>	<p>See response to GC.4.1.</p> <p>As noted in Section 8.5 of ES Chapter 8 (APP-045) there were limitations to the completion of GCN eDNA surveys in April to June 2020 due to COVID-19 pandemic restrictions in place nationally at the time. The confirmatory GCN eDNA surveys are seasonally constrained and are scheduled to be undertaken between April and June 2022, so the results will not be available during the Examination.</p> <p>The environmental assessment considers the worst case scenario. Should GCN be discovered on site once the above confirmatory surveys are complete, ES Chapter 8 (APP-045) Tables 8-7, 8-8, and 8-9 and Items B14 and B16 of Table 3-1 (REAC) of the EMP (APP-128) provide information on the proposed mitigation. Should mitigation be necessary, then the survey results will provide the most up to date information to inform a European Protected Species (EPS) license should this be required from Natural England.</p>
GC.4.4	Provide an update on the supplementary ground investigations indicated in ES Chapters 9 and 10 [APP-046 & APP-047] to be completed in Spring 2021, indicate when the results and any revised assessments as necessary, will be made available to the Examination.	<p>In preparation for the detailed design of the Scheme, supplementary ground investigation (GI) has been carried out to focus on collection of additional information to inform groundworks and detailed design. The supplementary GI was completed between 19 April 2021 and 18 July 2021.</p> <p>The results are being processed and the Applicant will be able to provide these at Deadline 4. The Supplementary GI is confirmatory and the Applicant does not anticipate any changes to the assessment being required.</p>
GC.4.5	<p>i) ES Chapter 13 – Road Drainage and the Water Environment [APP-050] paragraph 13.5.2 notes that supplementary ground investigations and surveys are required to confirm construction and operation risks, particularly in relation to the Wards Wood underpass, works adjacent to the Cantley Stream (including the proposed diversion), and the use of unlined road drainage. Can the Applicant provide an update on these surveys and investigations and confirm when the results and any revised assessment as necessary, will be made available to the Examination.</p> <p>ii) ES Chapter 13 paragraph 13.5.6 highlights that a drainage survey to verify locations of the existing discharge locations identified on the Highways Agency Drainage Data Management System (DDMS) in 2020 is yet to be completed. Please can the Applicant confirm when the results of this survey will be made available to the Examination.</p>	<p>i) The supplementary ground investigation is complete and the results are being processed. There is ongoing water monitoring on site and the data will be reviewed monthly for 12 months. This will provide a full understanding of ground water levels over a 12 month period. Additional groundwater level monitoring is also ongoing. Updated geotechnical design will be undertaken during the detailed design stage, in order to also identify any refinements to the design. The geotechnical designs undertaken to date are considered appropriate as these consider a worst-case scenario.</p> <p>ii) The Highways Agency Drainage Data Management System (HADDMS) shows the presence of existing assets and this is documented in paragraph 13.7.56 to 13.7.58 of ES Chapter 13 (APP-050). A drainage survey is required to confirm the information on DDMS is correct. A drainage survey was undertaken during the spring and summer of 2021. A review of the survey will be completed at the start of the detailed design stage, but the Applicant was not intending to submit the results into Examination.</p> <p>The principal uncertainties are the confirmation of the location of surface water outfalls and the confirmation of presence of soakaways and their contributing areas. However, the preliminary drainage design has considered that all of the existing and proposed highway drainage would discharge, via attenuation, into Cantley Stream; further details can be found in the Drainage Strategy (APP-112). The assessment therefore considers the worst case scenario in terms of drainage area. Should existing soakaways be found during the drainage survey, these would likely be decommissioned as part of the Scheme.</p>
GC.4.6	<p>i) ES Appendix 8.8 [APP-094]– Bat Roost and Crossing Point Survey Report paragraphs 3.6.3 – 3.6.4 note that due to delays and access issues, it was not possible to undertake dusk emergence or dawn re-entry surveys of all potential bat roost trees or to carry out all preliminary ground level roost assessments, and that further survey work is required in 2021.</p> <p>Can the Applicant provide an update on these surveys and confirm when the results and any revised assessment as necessary, will be made available to the Examination.</p>	<p>i) Although the bat roost and crossing point survey report recommends further survey on trees for bat roost potential in 2021, it was decided to do the updated preliminary roost inspection in trees in the winter of 2021/22 to ensure the most recent information on the status of bat roost potential in trees is achieved for planned surveys in 2022 to provide adequate data for any protected species licence that may be required. The survey of bat roost potential in surveys is constrained during the spring summer and autumn months by leaves on the trees, so planning to do them this winter ensures they will be done at the optimal time. The survey results may be available before the end of the Examination, in which case these can be submitted at Deadline 9. The Applicant does not anticipate any changes to the assessment being required</p>

		<p>2021. The plan outlines a number of commitments by the Government to remove all emissions from road transport to achieve net zero target by 2050. Commitments that will have a direct impact on road user emissions from the Scheme will include:</p> <ul style="list-style-type: none"> • An end to the sale of new petrol and diesel cars and vans by 2030 • All new cars and vans to zero emissions at the tailpipe by 2035 • All new L-category vehicles to be fully zero emissions at the tailpipe by 2035 • The end of the sale of all non-zero emissions HGVs by 2040 <p>In addition, the Government is providing support for at least 4,000 zero emission buses and has committed to holding a consultation on a date to end the sale of new non-zero emissions motorbikes.</p> <p>On 20 July 2021, Highways England published its own 2030/2040/2050 net zero highways plan: [REDACTED]</p> <p>This plan includes commitments to ensure that Highways England's corporate emissions become net zero by 2030, its maintenance and construction activities will become net zero by 2040 and road user emissions on the strategic road network will become net zero by 2050.</p> <p>The Applicant recognises that it has a key role in the development and maintenance of a strategic road network that will facilitate the journey to net zero emissions. Highways England's roadmap to net zero by 2050 sets out commitments to: develop a blueprint for EV charging and energy storage by 2023; report to Government on global HGV technology trials; and set out proposals for trials in the UK in 2022.</p> <p>The Net zero highways 2030/2040/2050 plan recognises that:</p> <p><i>"Roads will be a vital part of zero carbon travel</i></p> <ul style="list-style-type: none"> • <i>Most journeys are made by road</i> • <i>Road travel will decarbonise fast, but there is more to do</i> • <i>A net zero Britain will still travel by road in 2050</i> • <i>Investment in Britain's roads supports a thriving net zero economy"</i> <p><i>"This plan is based on strong science and evidence. It aligns with:</i></p> <ul style="list-style-type: none"> • <i>The 1.5°C reduction goal of the Paris Agreement</i> • <i>The UK's commitment to be a net zero economy by 2050</i> • <i>Government's Decarbonising Transport: A Better, Greener Britain (2021) and Industrial Decarbonisation Strategy</i> • <i>The Committee on Climate Change's sixth carbon budget"</i> <p>Under the Climate Change Act 2008, UK carbon budgets are set by Government in response to recommendations from the UK Climate Change Committee. The latest Committee recommendations informed the development of the 6th Carbon Budget. In advising successive UK governments on carbon budget matters, the Climate Change Committee takes into account a range of considerations including progress made in respect of previous and current carbon budgets. As the seventh, eighth, ninth and subsequent carbon budgets have not yet been prepared, it is not possible to assess the Scheme against these. However, noting the fact that 99% of emissions during the period of unpublished carbon budgets (from 2037) will come from tail-end emissions and having regard to the DfT's Transport Decarbonisation Plan and Highways England's net zero plan, there is no basis on which to conclude that the Scheme, which will not have a material effect on government's ability to meet its published carbon budgets, could have a material effect on the ability to meet future carbon budgets.</p>
GC.4.8	<p>ES Chapter 14 [APP-051] – Climate paragraph 14.9.7 mentions an intrusive pavement survey expected to be undertaken in Spring 2021, the results of which would inform a pavement design that may result in a reduction in importation and movement of materials and associated construction activity. Can the Applicant provide an update on this survey and its implications for the assessment?</p>	<p>A confirmatory pavement survey was undertaken in August 2021. The results of this survey are expected to be released between Q4 2021 and Q1 2022. Results once received will be reviewed during the detailed design process, to determine if reductions in importation and movement of materials and associated construction activity can be achieved. The environmental assessment considers the worst case scenario of no reduction in importation and movement of materials associated with construction.</p>
GC.4.9	<p>A draft Environmental Management Plan - First Iteration (EMP) [APP-128] was submitted with the application, Table 3-1 of which</p>	<p>i) Compliance with the EMP including all the commitments in the REAC is secured by Requirement 4 of the dDCO (APP-017), so the Applicant considers that explicit references are not necessary.</p>

	<p>contains a 'Record of environmental actions and commitments' (REAC). The ES chapters cross-reference to the EMP. The REAC contained within the EMP does not identify the relevant requirements in the dDCO that secure the required mitigation measures.</p> <p>i) Update the REAC to provide explicit references.</p> <p>ii) The EMP refers to a number of management plans, including a Construction noise and dust management plan and a LEMP, that would only be prepared post-consent. Provide outline versions of each of these plans to the Examination.</p>	<p>ii) The individual Management Plans referenced in the EMP (APP-128) are produced during the detailed design and have not been produced. The commitment to produce the EMP is detailed in dDCO Requirement 4, with the commitment to the detailed design contained in dDCO Requirement 3. Reference is made to Appendix B.5, LEMP of the EMP (APP-128) which provides a summary of the information to be included in the LEMP once produced.</p>
GC.5.1	<p>With respect to any relevant updates or changes to Government Policy or Guidance that have occurred since the Application was submitted. Can the Applicant or Relevant Planning Authorities identify any relevant changes, and if so, what are the implications in your view?</p>	<p>The Applicant is aware of a number of updates and changes to Government Policy and Guidance that have occurred since the Application was submitted. However, other than the issues raised in 1WQ, the Applicant has not identified any relevant changes which have implications for the Scheme or its assessment.</p>

4. AIR QUALITY AND EMISSIONS

Ref	ExQ1 Question	Applicant's Comment
AQ.1.1	<p>ES Chapter 5 [APP-042] paragraph 5.7.22 states that 2017 background pollutant maps were used to provide estimates background concentrations for specific pollutants. However, the DEFRA Background Maps for years 2018 – 2030 are available for NOx, NO2, PM10 and PM2.5 (available at [REDACTED]).</p> <p>Can the Applicant explain why DEFRA Background Maps for years 2017-2030 were used and if the application of 2018 Background Maps would affect the conclusions reached in the Air Quality assessment?</p>	<p>At the time of undertaking the air quality assessment, the most recent background maps were downloaded for the assessment. At the time of undertaking the assessment these were the 2017 based background pollutant maps. There were no exceedances of the air quality objectives at any modelled receptor locations, therefore no significant effects found. The use of the 2018 based background maps would not have changed this conclusion</p>
AQ.1.2	<p>Can the Applicant provide further justification as to why 2015 baseline traffic data remains valid for the purposes of an application in 2021 and explain whether any sensitivity testing has been undertaken in respect of more recent traffic data?</p>	<p>The 2019 NATS model has not yet been approved by the Department for Transport. On that basis, NATS 2015 remains the approved model and so was used in the Applicant's assessment.</p> <p>However, the Applicant has undertaken a comparison between the NATS 2015 and 2019 traffic models based on the total annual average daily traffic (AADTs) summed across the major links around the Thickthorn Junction. In summary, the comparison indicates that there is a difference of 3.4% AADTs between the NATS 2015 model and the NATS 2019 model.</p> <p>An increase in traffic of 3.4% is broadly in line with the expected traffic growth over a four-year period (2015-2019). It follows that the comparison shows a good degree of consistency between the two models at an aggregate level</p>
AQ.1.3	<p>Paragraph 2.6.8, Chapter 2, ES [APP-039] states construction of the Proposed Development will take approximately 23 months. However, Table 2-3, Construction phasing push box-method has a total estimated programme of 27 months and Table 2-4 Construction phasing top-down method has a total estimated programme of 27.5 months.</p> <p>Can the Applicant explain the reason for this discrepancy and if this conflicts with the decision to exclude an assessment of air quality effects during construction of the Proposed Development based on the 2-year threshold advised in DMRB LA105?</p>	<p>Table 2-3 in ES Chapter 2 (APP-039) details the expected durations of each construction phase. These activities will not be undertaken consecutively, some activities will run concurrently, therefore the actual construction length for the Scheme remains 23 months.</p>

AQ.1.4	<p>Public Health England through relevant representation [RR-021] have identified that further clarification of the impacts to human health are needed before and after mitigation in the ES (Chapter 12 Population and Human Health) [APP-049]. They conclude that the construction year 2019 is also no longer applicable alongside a range of related matters which require updated information.</p> <p>i) Provide a response on the additional baseline data/adjustment/clarification and the justification for the approaches taken by the scheme with respect to the range of matters raised.</p> <p>ii) Confirm when the additional information referred to by Public Health England is to be submitted to the examination.</p>	<p>i) Please see response to AQ1.2 for baseline information. In addition, the relevant representation submitted to the ExA by Public Health England (PHE) has been responded to in the relevant representations submitted at Deadline 1. Reference is made to RR-021 for the responses provided.</p> <p>ii) The Applicant considers that no further information is required to be provided to Public Health England, based on the response to RR-021.</p>
AQ.1.5 WBD	<p>ES Chapter 5 [APP-042] Section 5.9 sets out the activities recommended to monitor the effectiveness of the proposed mitigation measures which will be included in the EMP. These include:</p> <ul style="list-style-type: none"> • Development of dust management plan with measures to monitor effectiveness of mitigation as part of the EMP; • Daily onsite and off-site inspections to be included in EMP; and • Record of complaints/exceptional dust events to be included in EMP. <p>There is no mention of further consultation requirements with regards to construction dust monitoring. However, there is stockpiling of material envisaged and therefore can the applicant explain how potential construction dust issues from stockpiling will be successfully monitored?</p> <p>Interested parties: If you have concerns provide comments on potential monitoring requirements dealing with construction dust from stock piling.</p>	<p>During the Construction phase of the works, the contractor shall follow all Health, Safety and Environmental regulations to ensure any impacts on sensitive receptors are kept to a minimum. This will include air monitoring and dust suppression techniques to both monitor and reduce construction dust issues as contained in Item AQ1 in Table 3-1 (REAC) of the EMP (APP-128).</p> <p>The Environmental Management Plan (APP-128) will be updated prior to construction to include Appendix B.4 Construction noise and dust management plan, which will set out how noise, air quality and lighting will be managed during construction. The EMP (APP-128) is secured through dDCO (APP-017) Requirement 4.</p>

5. BIODIVERSITY, ECOLOGY AND NATURAL ENVIRONMENT (INCLUDING HABITATS REGULATIONS ASSESSMENT (HRA))

Ref	ExQ1 Question	Applicant's Comment
BIO.1.1	<p>i) Confirm whether you are satisfied with the range of surveys for ES Chapter 8 Biodiversity [APP-045]; and</p> <p>ii) If you consider the baseline information presented to be a reasonable reflection of the current situation?</p> <p>iii) In respect of i) and ii) if not, why not and what would resolve any residual concerns?</p> <p><i>You may wish to combine the answer to this question with the answer to question BIO.3.6.</i></p>	
BIO.2.1	<p>The Environment Agency [RR-004] have identified that some additional detailed survey and modelling work is being undertaken by the Applicant for their approval.</p> <p>Can the Applicant and Environment Agency provide an update of when this information is to be agreed and submitted to the examination?</p>	<p>Following the collection of additional survey and modelling to better predict the flood risk impacts in the vicinity of Intwood Road, the Applicant can confirm that the updated flood modelling predicts the impact is negligible at this property. The revised model and the updated hydraulic modelling report (Annex B of APP-111) was reissued to the Environment Agency on 15 July 2021. The Flood Risk Assessment (APP-111) will be updated to reflect the revised modelling output and will be sent to Norfolk County Council and the Environment Agency for review and comment. A revised Flood Risk Assessment (APP-111) is being prepared and will be submitted to the ExA at Deadline 4.</p>
BIO.2.2	<p>Document 6.1 Environmental Statement Chapter 9 – Geology and Soils [APP-046] sets out the rationale for the classifications regarding the sensitivity of receptors and magnitude of impacts presented in Table 9-4 and 9-5 (and repeated in Table 13.1 & 13.2 of Chapter 13 Road Drainage and the Water</p>	<p>A supplementary ground investigation (GI) has been undertaken between 19 April 2021 and 18 July 2021. This GI included an assessment of the ground conditions within the infilled gravel pit and the landfill. The findings of the investigation are expected to be available Q4 2021 and will be reviewed against the current environmental assessment.</p>

	<p>Environment [APP-050]).</p> <p>The Environment Agency have indicated, it will be essential for the project to apply the principle that no private drinking water supplies can be derogated, even temporarily, without the prior consent of the owner and the provision of mitigation measures. It is also advised locating a drainage pond over an infilled gravel pit would not be appropriate unless the fill can be proved to be inert. A full investigation of the landfill and infilled pit, to better inform Tables 9-10 (Determination of magnitude of potential impact), 9-12 (Determination of residual effects significance) and the Materials Management Plan.</p> <p>Further assessments of linkages and mitigation for potential on-site and off-site contaminated land sources proposed in Section 6.11 of ES Appendix 9.3 – Preliminary Sources Study Report Part 1 of 2 are indicated to be required in tandem with the above.</p> <p>Provide an update on those information matters for the purposes of informing the Examination.</p>	<p>Assessment of linkages and mitigation for potential on-site and off-site contaminated land sources identified in Section 6.11 of the PSSR (APP-102 and APP 103) have been discussed in ES Chapter 9 - Geology and Soils section 9.5.2 (APP-046). The findings of the assessment are based on ground conditions recorded during the 2018 GI and considered whether further investigation of the potential on site sources (Cantley Lane Landfill and the infilled gravel pit) was required, but because the potential off-site source identified in the PSSR (active fuel filling station) presented a low risk and it was determined that no further assessment was required.</p>
<p>BIO.2.3 WBD</p>	<p>i) When water is planned to be diverted into the new channel at Cantley Stream for the first time, explain what measures will be in place to prevent silt and sediment from being flushed downstream from the new channel and by what mechanism?</p> <p>ii) Confirm and detail what provision during water diversion would ensure there would be appropriate oxygen levels for fish and other aquatic life and by what route will this be secured.</p> <p>iii) Clarify how the new re-aligned section of channel will be colonised with aquatic and marginal plants and the route by this will be secured.</p>	<p>i) During construction of the realigned section of Cantley stream, the Applicant proposes to:</p> <ul style="list-style-type: none"> • construct the new channel alignment offline, • use silt curtains to prevent downstream flushing of silt and sediment • undertake works in times of low flow, use fish friendly pumps, • have channel filled with water before final breakthrough. • Have marginal planting installed by specialist contractor. <p>ii) Accepted best practice will be followed during watercourse diversion works to ensure no detriment to aquatic life. Works will be undertaken in line with the necessary consents or permits (contained in Table 4-1 of the EMP (APP-128) issued by the relevant authorities. In addition, Item RD1 in Table 3-1 (REAC) within the EMP (APP-128) details adherence to CIRIA guidelines on control of water pollution on linear construction sites (C648) and environmental best practice on site (C741</p> <p>iii) The realigned section of channel will be colonised through appropriate planting and management. The planting regime will be detailed within the LEMP for the project, and ongoing maintenance secured through the LEMP (Appendix B of the EMP (APP-128), secured through dDCO Requirement 4(APP-017)</p>
<p>BIO.2.4</p>	<p>Applicant: ES Chapter 13 [APP-050] Paragraph 13.9.44 states that for the Cantley Stream realignment, the detailed design including water vole enhancements will be agreed in consultation with the Environment Agency, Norfolk County Council and other stakeholders.</p> <p>i) Justify why such an approach can or should be undertaken post potential confirmation of any DCO, also acknowledging that the realignment works may also require provision for water resource licences, integration with other works for potential species benefit.</p> <p>ii) In respect of groundwater resources and quality explain what mechanisms are/will be in place to ensure that no private water</p>	<p>i) The dDCO does not override the need for these consents, permits and licenses and the Applicant acknowledges the requirement to apply for, and have in place, all necessary permits prior to any works commencing.</p> <p>The Applicant will begin this process by start of 2022 and will consult with the appropriate stakeholders on the permit, consent or license requirements.</p> <p>ii) Although details of private water supplies were received from the local authorities, locations provided were only approximate due to GDPR Regulations. A water features survey is to be undertaken at detailed design stage (secured via Requirement 3 of the dDCO) in an attempt to confirm exact private water supply locations, and risk assessments will be updated based on the findings. Baseline groundwater level and quality monitoring will be undertaken prior to and during construction enable early identification of any</p>

	<p>supply can be derogated because of the works or operation of the scheme, even temporarily, without the prior written consent of the owner and the provision of mitigation measures?</p> <p>iii) Regarding potential impacts during construction and any proposed horizontal directional drilling(HDD) activity. Clarify what investigations, assessments, mechanisms, and consultation requirements are to be secured to ensure HDD works will not pose a risk to groundwater resources.</p> <p>iv) Explain what scope is available to coordinate stream realignment works with other engineering and new landscaping works to enable ecological corridors the earliest chance of re-establishment prior to completion of all works. Also explain how such potential provision could be secured.</p> <p>Norfolk County Council/Interested Parties: Provide any comments you wish to make on the above.</p>	<p>potential issues and allow mitigation measures to be implemented where appropriate. Item RD10 in Table 3-1 (REAC) of the EMP (APP-128) provides detail on the protection of water supplies via inspections, audits, reporting of the effectiveness of control measures during construction and licence requirements.</p> <p>iii) There will be no directional drilling in or around the Cantley Stream realignment.</p> <p>iv) The Applicant's contractor will review the detailed design and programme to identify the most appropriate time seasonally, to carry out the alignment works giving the stream the relevant period to embed and re-establish prior to completion of all works.</p>
<p>BIO.2.5</p>	<p>Environmental Management Plan (First Iteration) (EMP) [APP-128] under paragraphs 1.1.5 and 1.1.6 indicates that there is no reference to a Temporary Surface Water Drainage Plan being prepared as part of the EMP. However, it is listed as a plan to be prepared in the dDCO under Requirement 4, and is referred to elsewhere within the EMP.</p> <p>Provide clarification on the plan being part of the EMP and the plans status within the Examination.</p>	<p>Section 1.1.6 of the EMP (APP-128) will be updated to include Appendix B.9 Temporary Surface Water Drainage Strategy.</p> <p>The temporary drainage design strategy will be provided as part of the Environmental Management Plan (APP-128) and will be produced during detailed design which is secured via Requirement 3 of the dDCO (APP-017). The Temporary Surface Water Drainage Strategy will detail the plans for dealing with surface water and drainage of the construction site and compound areas during the temporary construction works.</p>
<p>BIO.2.6</p>	<p>The ExA acknowledges that the Environment Agency highlights that works to realign Cantley Stream may require a transfer licence. An impoundment licence may also be necessary if a structure is required that restricts flow. An Environmental Permit is advised to be required for the importation and treatment of waste material falling outside the scope or limits detailed in either a Regulatory Position Statement or a waste exemption.</p> <p>With respect to 'Waste Materials', the consenting authority for certain mobile plant permits such as concrete crushers is the relevant local authority, and therefore they should be listed along with the Environment Agency within the dDCO.</p> <p>Provide clarification and an update on these matters.</p> <p><i>You may wish to combine your answer with question GC.1.4.</i></p>	<p>See response to GC.1.4.</p> <p>In addition, the item referring to provision of mobile plant licences in Table 4-1 of the EMP (APP-128) will be updated by Deadline 4 to reflect the requirement to list the relevant local authority alongside the Environment Agency. No update to the dDCO is considered necessary.</p>
<p>BIO.3.1</p>	<p>The ExA at Site Inspection [EV-001] noticed a significant group of trees near the boundary shared with the A11 (Hethersett Bypass) close to where the new connector road is proposed. In terms of any expected tree loss arising from the scheme as a whole can the applicant expand on the following points:-</p> <p>i) Clarify how many trees would be removed or are likely to be removed or damaged as a result of the scheme overall.</p> <p> i) Clarify the position of all trees that are likely to be lost or damaged. Provide a plan showing the location of the trees that would be affected.</p> <p>ii) Are the trees that would be lost, damaged or likely to be damaged protected? and if so how?</p>	<p>i) The proposed Scheme design has been through an iterative process and delivery of the required modern highway standards has necessitated the unavoidable removal of all the trees within group G24 and the majority of those within group G25. The majority of trees within group G17 will be retained. A detailed Tree Retention and Removal Plan will be produced as part of an Arboricultural Method Statement that would be produced prior to construction. The total number of trees to be removed will be determined during detailed design, secured as Requirement 3 of the dDCO.</p> <p>The Applicant has shown those trees / tree groups that are proposed to be removed in Appendix 2 of the Arboricultural Impact Assessment Plans (APP-085).</p> <p>ii) Those trees that are retained will be protected by adequate tree protection barriers so as to prevent them being damaged during the construction phase. An Arboricultural Method Statement will be produced as stated in Item LV2 of Table 3-1 (REAC) in the EMP (APP-128)</p>

	<p>iii) Are any of the trees noble or veteran trees?</p> <p>iv) Could the loss of trees be mitigated and if so how?</p> <p>v) Has any engagement with Natural England or the Forestry Commission taken place with respect to potential tree removal or other impacts for Cantley Wood which may entail ancient woodland? If it has not taken place, can you explain the approach to potential ancient woodland considerations and tree impacts as a whole with an update.</p>	<p>secured via Requirement 4 of the dDCO.</p> <p>iii) There are two veteran trees which are proposed for removal (T13 and T14). These are shown on Appendix 2 of the Arboricultural Impact Assessment (APP-085) which shows the trees to be removed as a part of the Scheme</p> <p>The Applicant has carried out a search of South Norfolk Council's interactive mapping facility, My South Norfolk, that revealed the footprint of the current design does not fall within a Conservation Area. A TPO (reference SN0539), is present at / close to 126 Cantley Lane, and affects trees at the edges of groups G80 and G81 and woodland W2. These trees will not be affected by the current design. This information has been detailed in the Arboricultural Impact Assessment section 2.5.1 (APP-085). The Multi Agency Geographic Information for the Countryside (MAGIC) website, which is managed by Natural England, does not show any ancient woodland within the boundary of the proposed Scheme design.</p> <p>iv) item B10 of Table 3-1 (REAC) in the Environmental Management Plan (APP-128) notes that all veteran and mature trees to be retained that are within close proximity to the works will be protected with a suitable buffer zone to ensure they are not damaged during the construction phase. This buffer zone will be protected by the use of tree protection barriers. The Arboricultural Method Statement will also be adhered to during construction.</p> <p>The same item B10 also notes that any trees removed as part of the works will be relocated to nearby suitable woodland parcels to provide suitable habitat for invertebrates.</p> <p>The Applicant has designed the proposed Scheme to minimise the loss and impact on trees as much as possible, and therefore mitigate the loss at the design stage.</p> <p>Item B10 of Table 3.1 (REAC) contained in the EMP (APP-128) also notes that any {veteran} trees removed as part of the works will be relocated to nearby suitable woodland parcels to provide suitable habitat for invertebrates.</p> <p>As part of the Scheme design, an extensive Landscaping planting plan is proposed as shown on the Environmental Masterplan (APP-123)</p> <p>v) The Multi Agency Geographic Information for the Countryside (MAGIC) website, which is managed by Natural England (and the Forestry Commission is a partner organisation), does not show Cantley Wood (referenced as W2 in the Arboricultural Impact Assessment) as being ancient woodland.</p> <p>Natural England and the Forestry Commission have both been consulted on the Scheme and have not raised any concerns about ancient woodland to date. The Applicant is committed to continued engagement with statutory bodies regarding the veteran trees.</p>
<p>BIO.3.2</p>	<p>Clarify tree planting proposed via APP-123 Environmental Masterplan by the scheme and any scope to increase capacity for that provision including the following points:</p> <p>i) Have all relevant spaces in the vicinity of the junction improvement been considered for further additional new planting, as well as for replacement planting? If not, why not?</p> <p>ii) How would any potential tree planting/ related landscaping un referenced in the dDCO be secured?</p> <p>iii) Has tree planting (or other related landscaping) been considered to further complement local informal nature corridors on the ground? If not, why not?</p> <p>iv) Explain if planting/ landscaping schemes can be coordinated in a way to ensure they establish and provide positive links with existing wildlife corridors whilst construction activity takes place.</p>	<p>i) All of the tree planting proposed as part of the Scheme is set out in the Environmental Masterplan (APP-123). The amount or extent of new tree planting shown by the Environmental Masterplan (APP-123) is considered to represent the optimum quantum of new tree planting within the DCO boundary taking account of a full range of considerations including the landscape character context; gradients associated with the earthworks; health and safety in regard to future management; and other ecological objectives (for example the value in some locations of retaining some areas of habitat mosaic and open grassland).</p> <p>All relevant spaces in the vicinity of the junction have been considered for their suitability for tree and/or woodland planting. Areas within the DCO boundary which were considered but rejected for woodland or tree planting include (i) areas deemed too close to the highway infrastructure or providing sightlines (ii) land temporarily used for construction purposes that will be returned to agricultural use (iii) areas where woodland or tree planting is constrained by the presence of boundary fencing (requiring access for maintenance) or underground services (iv) areas required to be maintained open for flood attenuation purposes (v) minimisation of the amount of tree planting on steep</p>

	<p>Relevant Planning Authorities/Interested Parties: Do you have any further comments on tree planting or landscaping provision?</p> <p><i>You may wish to combine the answer to this question with the answer to question BIO.3.5</i></p>	<p>embankments or smaller 'islands' between carriageways where maintenance access would be problematic and potentially unsafe (tree planting has only been proposed in such areas where a specific requirement for visual screening has been identified) (vi) maintenance of open views towards heritage features (for example, towards the northern barrow at Cantley Wood) (vii) a response to the specific landscape character context (for example, the more open setting with only occasional trees of the northern section of the Cantley Lane Link Road as it approaches Norwich Road through a former parkland with retained specimen trees) (viii) the reptile habitat enhancement area which required a predominantly open character with only dispersed trees and scrub (ix) personal safety considerations (for example, retaining some openness on the inner curve of the ramp approaching the all user 'footbridge') (x) general integration with the surrounding landscape character and pattern.</p> <p>ii) All landscaping is shown on the Environmental Masterplan (APP-123) and G8 of the REAC Table included in the Environmental Management Plan (APP-128) requires construction to take place in accordance with the Environmental Masterplan. This is secured by Requirement 4 of the dDCO (APP-017).</p> <p>iii) The structure of the proposed tree and woodland planting has been developed in response to the existing landscape framework to maximise opportunities for informal nature corridors and green infrastructure connectivity. (APP-123) shows areas of existing vegetation to be retained to help illustrate how these have been tied together with new areas and linear belts of proposed tree and woodland planting. For example, all opportunities to restore the continuity of tree planting along the A11 corridor have been taken and new planting complements the retained areas of woodland at Cantley Wood.</p> <p>iv) The programming of the implementation of proposed landscaping will be carefully considered to identify opportunities to, wherever possible, maintain wildlife corridor connectivity throughout all stages of the construction period. Opportunities to do this will be considered further at detailed design.</p>
<p>BIO.3.3</p>	<p>Are there any trees that would be affected protected by either a Tree Preservation Order (TPO) or by virtue of being located in a Conservation Area? If they are, provide details of where these trees are located and extracts from the relevant TPO citations. If the information has already been provided, please signpost that.</p> <p><i>You may wish to combine the answer to this question with the answer to question BIO.3.4.</i></p>	<p>Please see response to BIO 3.1</p>
<p>BIO.3.4</p>	<p>Confirm/clarify the following:-</p> <p>i) For the avoidance of any doubt confirm where pre-commencement tree and vegetation clearance works are proposed. Clarify any changes to pre-commencement tree and vegetation clearance works proposed. If there are changes, where would those occur and what trees/areas would be affected? Provide a plan in giving your response. ii) When would this clearance occur?</p> <p>iii) Under what legislation would the works be undertaken. If the information has already been provided signpost that.</p>	<p>i) and ii) The definition of "commence" in the dDCO (APP-017) excludes site clearance, so it is conceivable that tree and vegetation clearance works could be carried out before certain pre-commencement requirements are discharged. Precise details of clearance works and timings will be finalised during the detailed design process.</p> <p>iii) As the DCO will have been granted, the clearance works will be carried out pursuant to the development consent order granted under the Planning Act 2008.</p>
<p>BIO.3.5</p>	<p>Both Norfolk County Council and Anglian Water have expressed encouragement for biodiversity net gains to be provided by the scheme.</p> <p>The ExA notes that the application includes some measures to for habitat re-creation and enhancement. Please could the Applicant</p>	<p>i) The Scheme seeks to maximise biodiversity delivery in accordance with the current statutory and policy requirements. The Scheme has aligned with Best Practice Principles, specifically those published by <u>CIEEM</u>, in developing its landscaping and biodiversity proposals. These incorporate high biodiversity (or priority habitats) including</p>

	<p>explain/clarify:</p> <p>i) Confirm to what extent have options to deliver a biodiversity net gain been considered. If it has not been considered, explain why not.</p> <p>ii) If a biodiversity net gain is to be achieved, by how much, and what measures will be taken to achieve this. If not, why not?</p>	<p>grasslands, hedgerows and woodland as shown in the Environmental Masterplan (APP-123).</p> <p>Please see RR-011.9 for further information.</p> <p>ii) There is currently no mandated framework for calculating and reporting on biodiversity net gain (BNG). Any such calculation is subject to the commencement of the Environment Act and its associated secondary legislation, which is expected to set out the SoS biodiversity metric and methodology. Any calculation using existing Biodiversity Metric approaches is still subject to variation. For this reason, the Applicant cannot commit to providing overall BNG or indicate the extent of BNG.</p>
<p>BIO.3.6</p>	<p>Relevant representations [including RR-029 and RR-010] have referred to the presence of <i>Barbastelle Bats and owls</i> in the vicinity of the proposed development.</p> <p>i) Clarify and detail whether there is adequate baseline survey information to confirm or discount the potential presence of Barbastelle Bats as a relevant consideration at this location (inclusive of considerations of their status is as a protected species).</p> <p>ii) Confirm details of migration where would the bats/owls be traveling to/from?</p> <p>iii) Can the Applicant provide further details as to what mitigation measures would be included if Barbastelle Bats/owls not anticipated by relevant survey or likely to be present?</p> <p>iv) Can the applicant also clarify if there is a need for a separate Barbastelle Bats/owl mitigation plan?</p> <p>Natural England/Interested Parties: Are there any comments/ concerns you wish to raise with respect to the above matters?</p> <p><i>You may wish to combine the answer to this question with the answer to question BIO.1.1.</i></p>	<p>i) Bat surveys undertaken in 2020, which specifically targeted barbastelle, confirmed presence of this species with a single pass during the crossing point survey of crossing point one (22.07.2020). Barbastelle calls were also recorded during a dusk emergence survey on 05August 2020, though it was not recorded as emerging from a roost (Appendix 8.8 Bat roost and crossing point survey report (APP-094)). The low number of recordings from targeted survey effort following guidance would indicate limited use of this area by barbastelle though they are present. Barbastelle have a CSZ of 6km and a maximum home range of 20km (Zeale, M., Davidson-Watts, I., and Jones, H. (2012) Home range use and habitat selection by barbastelle bats (<i>Barbastella barbastellus</i>): Implications for conservation. Journal of Mammalogy. 93(4) pp. 1110-1118). The large barbastelle colony at Lenwade, Norfolk is within this 20km range at a distance of ~14km therefore barbastelle passing through the site could be from this colony, though at 14km distance it is unlikely that significant number from this colony will be using the area. Paston Great Barn SAC which is designated for its barbastelle colony is located ~32 km from the site, so it is unlikely that barbastelle from this colony will pass through the site.</p> <p>ii) Barbastelle will commute nightly across a home range of up to 20km from the roost. Known large colonies in Norfolk are those at Lenswade and at Paston Great Barn, the latter of which is within 20km so may be the roost from which recorded barbastelle are commuting, or alternatively the recorded barbastelle could be individuals from smaller roosts located elsewhere. Without undertaking radio tracking or GPS tracking of bats from site back to their roosts, which is considered to be impractical and excessive for the number of barbastelle recorded on site, it is not possible to accurately ascertain the commuting route and roost location.</p> <p>Similarly, the breeding bird survey undertook a specific survey to check for roosting barn owls, which identified four potential roosting sites within 1.5km of the site including one which was a confirmed historic nesting site. Barn owl passing through the site may be using these roosting sites, or others that are outside the survey area. Without undertaking radio tracking or GPS tracking of barn owl, which would be impractical and not considered to provide information that would affect mitigation recommendations, it is not possible to accurately ascertain the roost locations of barn owl flying through the site</p> <p>iii) The Applicant has committed to having Ecological Clerk of Works (ECoW) present during all vegetation clearance as detailed in Item B2 of Table 3-1 (REAC) in the EMP (APP-128)</p> <p>With regards to bats, any trees to be felled which are not already subject to a bat mitigation licence and have been assigned a bat roosting potential above negligible will be pre-inspected by a licensed ECoW to rule out presence of bats on the same day. If any bats are found then works will halt and a licence will be sought from Natural England.</p> <p>With regard to barn owls, the buildings that have been surveyed and show evidence of use by barn owls have been identified and mitigation put in place, with the main remaining risk being collision during the operational phase of</p>

		<p>the scheme. No other buildings are present within the site which may support barn owl. If barn owl are found to be using any tree roost by the ECoW during the construction phase, the ECoW will halt the work and advise on how to proceed.</p> <p>Any actions taken, or notable findings made, will be recorded by the ECoW.</p> <p>iv) There will be an Landscape and Ecology Management Plan (LEMP) produced for the scheme as part of the EMP (APP-128), secured via dDCO Requirement 5(APP-017). Mitigation for bats, including barbastelle, and for barn owl will be included in this document.</p>
<p>BIO.3.7</p>	<p>Clarify what provision and by what mechanisms will ensure there would be a suitable alternative habitat for displaced water voles during and after construction.</p>	<p>As detailed in Table 4-1 of the EMP (APP-128), the Applicant is committed to obtaining the necessary European Protected Species (EPS) licences for water voles. The conditions of the water vole licence (CL31) to be submitted to Natural England will include a provision for ensuring that <i>"the unaffected habitat must be sufficient in terms of both quantity and quality to accommodate the displaced animals and those outside the footprint of the works"</i> (condition 9); and ensuring that there is a <i>"demonstrable net conservation gain for water voles. This means that suitable habitat must be created or existing habitat enhanced within the range of the affected population. The result of this must be the reasonable expectation that there will be a significantly greater extent of good quality water vole habitat after the completion of the works than there was before the works began"</i> (condition 21). Therefore the actions undertaken will be bound by conditions of the licence to ensure suitable habitat is present for displaced water vole.</p> <p>The habitats created for water vole as part of the mitigation licence process will be included and incorporated into the LEMP (Appendix B of the EMP (APP-128) secured via Requirement 5 of the dDCO (APP-017).</p> <p>Please see RR-004.49 for further information.</p>
<p>BIO.3.8</p>	<p>ES Chapter 8 - Biodiversity 3.1 [APP-045] highlights that ecological enhancements are to be incorporated as part of the realignment of Cantley Stream, including the provision of additional habitat suitable for water voles. The ExA notes that mitigation will be detailed and implemented as part of the Record of Environmental Actions and Commitments (REAC) within the Environmental Management Plan (EMP). The EMP falls under Requirement 4, which is to be consulted upon with relevant parties.</p> <p>i) Explain the attributes of the wetland habitat to be provided/created inclusive of physical parameters (indicative or otherwise).</p> <p>ii) To what extent will the habitat be complementary to other existing local wildlife habitats for other mammals and species and what adaptations are to be made to ensure there is integration?</p> <p><i>You may wish to combine the response to this question with your response to question BIO.3.5</i></p>	<p>i) A length of the Cantley Stream downstream of the main works will be enhanced for water voles as compensation for the temporary loss of existing habitat during the works and the subsequent regrowth periods. The length will be determined during detailed design, secured through Requirement 3 of the dDCO (APP-017). Enhancement of the proposed receptor area will entail scrub removal and planting up of any bare areas of bank. Riparian corridor management, including removal of scrub, shrubs and potentially small trees, will be undertaken to increase light availability within the receptor site, encourage in-channel and riparian zone growth, and improve wetland habitat diversity along the length of the river corridor enhanced for water vole.</p> <p>The realigned stretch of stream where works take place will be reinstated to improve on its pre-construction condition and enhanced to increase biodiversity. This will be achieved by seeding with a wet meadow seed mix or similar to recreate the ground layer vegetation, with established specimen of the same species from the seed mix planted along with sedges to provide immediate cover and food sources for water vole.</p> <p>ii) Post-construction habitat management will ensure that the new habitats created for water vole are maintained and do not "over-vegetate", which in the long term would reduce habitat suitability and variability within the enhanced zone.</p> <p>The habitat creation and management required to support the necessary water vole mitigation will see a more varied structure of habitats created along the working length of the Cantley Stream. The appropriate management of habitats that are created will be detailed in the LEMP, Appendix B.5. of the EMP (APP-128) secured via Requirement 4 of the dDCO and will ensure that these habitats are managed to achieve the best possible outcome. Creation of a more open river channel structure for the realigned section of Cantley Stream increases the mosaic of habitats available for use by a wide variety of species, including a range of invertebrates (including charismatic species such as dragonfly), which increases the range of species able to utilise this stretch of</p>

		stream. Planting of riparian vegetation as noted on the Environmental Masterplan (APP-123) will also improve availability of fish spawning habitat, which again will be managed through the LEMP. Integration of the proposed wetland habitats will occur naturally as the proposed wetland creation matches similar habitats found commonly on Norfolk rivers.
BIO.3.9	<p>At the ExA's Unaccompanied Site Inspection [EV-001] the probable existence of informal wildlife corridors within nearby surrounding areas was observed which could be potentially used by a wide variety of species.</p> <p>Applicant: i) Clarify if the effect of the proposed development on potential informal wildlife corridors has been considered and also ii) provide further clarification to the extent of integration with those and how integration could be secured either through the Environmental Masterplan APP123 or any other appropriate means/mechanisms available.</p>	<p>i) The landscaping shown on the Environmental Masterplan (APP-123) is expected to maintain habitat corridors and connectivity as far as is practicable within the realms of the scheme's requirements.</p> <p>ii) The LEMP contained in Appendix B of the EMP (APP-128) and secured via Requirement 4 of the dDCO (APP-017) will continue to be developed to reflect such a maintenance of informal corridors</p>
BIO.3.10	<p>The proposed new culvert to carry the diverted Cantley Stream beneath the existing Cantley Lane South carriageway is described in the Report to inform HRA [AS-005] (hereafter referred to as the No Significant Effects Report, NSER) as 1.1m high, whereas in Chapter 2 of the ES [APP-039] and Appendix 13.5 it is described as 2.35m high. Can the Applicant confirm the proposed height of the culvert and the height that was used for the purposes of the HRA. If it was incorrect, and that the worst-case scenario was not assessed, please provide an updated version of the NSER that contains an assessment of potential effects of the new culvert on the European sites considered in the report.</p>	<p>The Applicant confirms that the proposed height of the culvert at Cantley Lane South is 1.1m. The NSER (AS-005) was based on the hydrological modelling undertaken, using a culvert height of 1.1m so the assessment remains valid. ES Chapter 2 section 2.4.31 (APP-039) will be revised and submitted for Deadline 4.</p>
BIO.3.11	<p>Paragraph 2.2.9 of the NSER states that additional European sites should be subject to screening where the existence of ecological connectivity between the Proposed Development and European sites is identified beyond the screening criteria set out in paragraph 2.2.8.</p> <p>Can the Applicant explain how such ecological connectivity would be determined?</p>	<p>The Applicant has committed to the presence of an Ecological Clerk of Works (ECoW) as noted in Item B2 of Table 3-1 (REAC) in the EMP (APP-128) secured via Requirement 4 of the dDCO (APP-017). If an assemblage species previously unidentified was recorded on site, ecological connectivity would be determined dependent on its habitat requirements and the availability of these habitats either on site or within the local area. A review of what potential impacts may affect these habitats would then follow reviewing visual, acoustic, hydrological and air quality pathways.</p>
BIO.3.12	<p>The ExA notes that at the end of each DMRB 'Conclusion Table', contained in Section 4 of the NSER, it is stated that 'All information on the assessment process and data used is set out in the full assessment report.' It is unclear if this refers to the NSER [AS-005] or another report. Please could the Applicant clarify the meaning of this statement and identify the location of the relevant report within the application documents, if applicable.</p>	<p>All information on the assessment methodology and data used is set out in within the NSER (AS-005) and ES chapter 8, Biodiversity (APP-045)</p>
BIO.3.13	<p>The assessment provided in the NSER [AS-005] of in combination effects of the Proposed Development is very limited and relies heavily on the information provided in ES Chapter 15 [APP052]. The location of relevant information is not identified, and Chapter 15 does not explicitly consider in combination effects on European sites. In addition, the wording of the evidence notes relating to in combination effects for the matrices contained in NSER Appendix C is confused and its meaning is unclear.</p> <p>Can the Applicant update the NSER to address these issues.</p>	<p>As no likely significant effects (LSE) have been found or identified during the course of completing the NSER (AS-005), there can be no cumulative effects as the proposed development does not have any effect. An update to the NSER (AS-005), to include a review of local development and potential impacts along with a summary screening conclusion can be added to the document. Appendix C can be reviewed to highlight phases of works that may cause impacts. This update will be completed by Deadline 4.</p>

BIO.3.14	Can the Applicant confirm if the developments considered in the HRA in combination assessment are those listed in ES Appendix 15.2? Justify and explain the approach taken.	<p>Cumulative impacts are considered in ES Chapter 15 'Cumulative Effects Assessment' (APP-085) in accordance with the requirements of the Infrastructure Planning EIA Regulations 2017 and Planning Inspectorate Advice Note Seventeen. Other developments were included as part of the cumulative assessment methodology and this is detailed in section 15.3 of ES Chapter 15 and associated appendices 15.1 (APP-117) and 15.2 (APP-118)</p> <p>The Applicant will provide an update to the NSER (AS-005) to reference the relevant cumulative effects assessment appendices by Deadline 4.</p>
BIO.3.15	Noting that otters are a qualifying feature of the Broads SAC and that they are known to occupy large territories and range over large distances (<35km), can the Applicant explain what evidence has been used to exclude the possibility that otters commuting along Cantley Stream originate from the SAC.	<p>Section 3.3.7 of the NSER (AS-005) notes otters being a qualifying feature for the Broads SAC and Broadlands SPA, Ramsar and have been included in the environmental assessment for the Scheme.</p> <p>Section 4.2.2 of Appendix 8.9 (Otter and water vole report) (APP-095) notes that Cantley Stream is an important commuting route and foraging corridor for otter species. Camera trap surveys did not identify otters being present within the Order Limits.</p> <p>Surveys will be undertaken in 2022 to provide the most up to date information pre-construction.</p> <p>The Applicant makes reference to Appendix F of the NSER (AS-005) where Natural England agree with the conclusion of the report that there will be no likely significant effects from the Scheme on the Broads SAC and Broadland SPA, Ramsar (and therefore the otters as a qualifying feature)</p>
BIO.3.16	In relation to otters, it is proposed that the realignment of Cantley Steam would be constructed and ecologically matured to optimum condition prior to its connection to the existing Cantley Stream and the decommissioning of the existing stretch. It is not specified in the NSER [AS-005] where and how the timing of this measure is secured and there does not appear to be a reference to it in the EMP. Can the Applicant please explain where and how it is secured.	<p>The Cantley Stream realignment is currently being reviewed in line with the overall construction phasing and programme to ensure that prior to decommissioning of the existing stretch, the new realigned section of Stream is at its optimum condition. As shown in RD4 and B6 of Table 3-1 (REAC) (APP-128) the realignment will be constructed within the first phase of the construction programme. Also included as part of Item B6 in Table 3-1 (REAC) riparian planting in water vole receptor areas will be undertaken at least one growing season before the water voles are dispersed or translocated.</p>
BIO.3.17	It is stated in the DMRB Broads SAC screening matrix (Table A.1) that the lighting design for the Proposed Development is ongoing, only outline information is known at present, and the assessment will be updated when final information about the lighting design has been provided. Can the Applicant indicate when the final information will be made available and when an updated version of the NSER [AS-005] will be provided?	<p>A Lighting Assessment has been submitted as part of Chapter 7 of the Environmental Statement (Landscape and Visual) (APP-044).</p> <p>The lighting design will be in accordance with British Standard BS 5489-1:2020 and the Institution of Lighting Professional's GN01:2021. Through the application of the British Standards and industry guidance, lighting will be designed to ensure that light with the potential to adversely affect sensitive receptors complies with the relevant Environmental Zone criteria.</p> <p>Item G2 of Table 3-1 of the REAC contained within the EMP (APP-128) sets out how lighting during construction will be reduced to avoid disturbance to sensitive receptors.</p>
BIO.3.18	<p>The ExA notes that it is stated that the screening does not take into account mitigation measures introduced to avoid harm to the European sites or avoid LSEs but does include "legally required elements of design and construction to comply with statutory standards set out by the EA and contained in the WFD."</p> <p>Reference is also made throughout the NSER [AS-005] to best practice measures that would be implemented. A statement is made in Appendix B that potential impacts arising from an increase in pollutant loads in highway runoff would be "mitigated" through the use of filter drains and attenuation basins. NE, in the correspondence contained in Appendix F, state that they agreed with the conclusion in the draft NSER that there would be no LSE on the European sites subject to implementation of the proposed "avoidance and mitigation measures". Can the Applicant confirm:</p>	<p>i) Whilst the Applicant does refer in the NSER to certain legally required and proposed best practice measures, as detailed in our response to (ii) below, we are confident that these measures do not need to be relied on in order to conclude that an assessment of the effects of the Scheme on the integrity of the European sites is not required.</p> <p>ii) In the NSER (AS-005) paragraphs 4.16, 4.17, 4.18 and in several places in Tables 4.1 Tables 4.2 and 4.3 on risks of water pollution during construction in reference to The Broads SAC and Broadlands SPA and Ramsar, the Applicant notes that during construction, best practice construction measures for pollution prevention and water management will be implemented as part of the Environmental Management Plan (APP-128).</p> <p>However, the tables go on to state that "despite these best practice construction measures being place, the large</p>

	<p>i) whether they are confident that the legally required and proposed best practice measures do not constitute mitigation and that therefore an assessment of the effects of the Proposed Development on the integrity of the European sites is not required;</p> <p>ii) whether they consider that there could be a LSE on the European sites in the absence of the best practice measures; and</p> <p>iii) respond to NE's description of the proposed measures as mitigation.</p> <p>Natural England</p> <p>Can NE provide their view on whether an assessment of the effects of the Proposed Development on the integrity of the European sites is required, on the basis of their description of the proposed measures as mitigation.</p>	<p>distance (11.5km) from the Scheme and the designated sites means that any pollutions would have sufficiently diluted such that there will be no likely significant effects" upon the SAC, SPA or Ramsar or its qualifying features during construction.</p> <p>As such, we can confirm that there will be no LSE in the absence of these best practice measures referred to in the Tables. We would also refer the ExA to the planning inspectorate screening matrices in Appendix C which again make it clear that the best practice measures are not relied on by the Applicant to conclude no LSE. In particular the ExA is referred to note A for the Broads SAC on page 65 of the NSER (AS-005).</p> <p>iii) The Applicant notes that in their response (dated 25 November 2020), Natural England refers to proposed avoidance and mitigation measures outlined within Chapter 4 of the report [to Inform Habitat Regulations Assessment]. The Applicant's position is that reliance on the measures referred to by NE as 'mitigation measures' is not required in order to conclude no LSE on The Broads SAC and Broadlands SPA, Ramsar.</p>
<p>BIO.3.19</p>	<p>The information on potential effects of the Proposed Development is not consistent throughout the NSER [AS-005], and there are discrepancies and omissions within and between the information presented in both the DMRB and the Inspectorate matrices. Can the Applicant provide an updated NSER that addresses these inconsistencies.</p> <p>The updated NSER should address the following points:</p> <ul style="list-style-type: none"> the effect of the spread of invasive non-native species is identified in the DMRB Broads SAC and Broadlands SPA screening matrices (Tables A.1 and A.2) (Pages 36 and 41, respectively) as a vulnerability, however it is not subsequently mentioned within those matrices. Conversely, air quality is not identified as a vulnerability but is subsequently discussed in those matrices. reference is included in the DMRB Broadlands SPA screening matrix (Table A.2) to effects on barbastelle bats, which are not a qualifying feature of this SPA. the effects considered in the Conclusion Tables (Tables 4.1, 4.2 and 4.3) (noise and vibration disturbance, light disturbance, air pollution and water pollution) are not presented consistently with and differ to those listed in the Inspectorate screening matrices (Tables C.2, C.3 and C.4). Additional effects are considered in the Inspectorate screening matrices, e.g., mortality through traffic collision and mortality as a result of reduced food sources; while other effects included in the Conclusion Tables and the DMRB screening matrices, e.g., light disturbance, are not. Noise disturbance is included in the DMRB matrices for all three European sites and in the Inspectorate matrices for the SPA and Ramsar site but not in the Inspectorate Broads SAC matrix (Table C.2). Neither is it included in Table C.1 in Appendix C, which identifies the potential effects to be included in each of the three Inspectorate screening matrices. 	<p>The Applicant will provide updated screening matrices NSER (AS-005) by Deadline 4.</p>

	<ul style="list-style-type: none"> the effects that are considered in the Inspectorate matrices are not consistent with those identified in Table C.1, e.g., severance of commuting routes is not identified as a potential effect in Table C.1 but is included in the Inspectorate Broads SAC screening matrix (Table C.2). In addition, 'Reduced breeding success - noise disturbance' is listed three times and 'Mortality – reduced food sources' is listed twice in the Ramsar site matrix. <p>Provide Word versions of the updated Inspectorate screening matrices.</p>	
BIO.3.20	<p>The narrow-mouthed whorl snail is described in paragraph 3.3.9 of the NSER [AS-005] as a qualifying feature of the Broadlands Ramsar site, however it is not included in the qualifying features identified in either the DMRB or matrices (Tables A.3 and C.4, respectively), and it is not listed in the Broadlands RIS. Please can the Applicant clarify whether it was included in error and remove the reference from the updated NSER. The Broadlands RIS notes under Ramsar Criterion 2 that the site supports outstanding assemblages of rare plants and invertebrates including nine British Red Data Book plants and 136 British Red Data Book invertebrates. This is not included in the Inspectorate Broadlands Ramsar site screening matrix (C.4) although it is stated in the DMRB Broadlands Ramsar site screening matrix (A.3) that the site "supports a number of rare species and habitats."</p> <p>Provide an assessment of effects on these features and update the matrices accordingly.</p>	<p>The narrow -mouthed whorl snail is not a qualifying feature of the Broadlands Ramsar site and was included in paragraph 3.3.9 of the NSER (AS-005) in error. The reference will be removed from the updated NSER (AS-005) to be submitted at Deadline 4.</p> <p>The Applicant will provide an updated screening matrix (Table A.3) to the NSER (AS-005) to include the invertebrate assemblage by Deadline 4. The Applicant notes that summary text at the bottom of the Table A.3. notes No Likely Significant Effects (LSE) to habitats.</p>
BIO.3.21	<p>The ExA notes that Section 3.6 of the NSER [AS-005] states that consultations were carried out with NE in 2019 and the conclusions of the screening exercise undertaken in February 2020 were discussed with them.</p> <p>However, there is no additional relevant information on NE's position in the Consultation Report (Doc 5.1) or ES Chapter 8: Biodiversity [APP-045].</p> <p>Confirm whether the correct features were considered in the HRA and whether they are satisfied with the scope and conclusions of the HRA, including in respect of the in-combination assessment.</p>	<p>Please see response to BIO 3.18 for agreement from Natural England regarding the NSER (AS-005).</p>
BIO.3.22	<p>Paragraph 3.3.13 states that Figure 1 in Appendix D of the NSER [AS-005] contains a plan showing the presence of qualifying features of the European sites that were recorded during all of the study area surveys (full details of which are set out in ES Chapter 8). However, no such plan is identified in the Table of Contents and Figure 1 in Appendix D contains a 'Designated sites map'. Can the Applicant include a copy of the relevant plan in an updated NSER.</p>	<p>The Applicant acknowledges this comment and will provide an updated plan to the NSER (AS-005) by Deadline 4</p>
BIO.3.23	<p>It is stated within the DMRB Screening Matrix for The Broads SAC that full descriptions of the vulnerabilities of each feature of the SAC (and Broadlands Ramsar site) can be found in Section</p>	<p>The Applicant acknowledges this comment and will provide an updated NSER for Deadline 4.</p>

	<p>2.4.5 however there is no such section within the NSER [AS-005] so it is unclear to which document this refers.</p> <p>Clarify and provide any omitted information as necessary in an updated NSER.</p> <p>The ExA notes that:</p> <ul style="list-style-type: none"> • The cross-references to the ES chapters simply state the chapter title and do not identify the location of the relevant information within the chapters (or their associated figures and appendices). 	
BIO.3.24	<p>Figure 1 in NSER Appendix D [AS-005] depicts the location of a SAC and a Ramsar site but does not identify them by name. They appear to be considerably further away than the European sites considered in the assessment and on the other side of Norwich to the Proposed Development site. The figure also shows the location of the Norfolk Valley Fens SAC and the legend indicates that it was 'scoped in' to the assessment although it is explained in the NSER that it was screened out. NSER paragraph 3.2.3 states that the closest part of the SAC is over 6km south of the Proposed Development site, however the SAC appears to be considerably further away than the European sites that were screened in (11.5km away) and is shown as to the west/northwest.</p> <p>Clarify the information and provide a corrected Figure 1 in the updated NSER.</p>	The Applicant acknowledges this comment and will provide an updated NSER (AS-005) for Deadline 4.

6. CLIMATE CHANGE

Ref	ExQ1 Question	Applicant's Comment
CC.1.1	<p>Applicant:</p> <p>Chapter 14 Climate of the ES [APP-051] discusses how the proposed Scheme considered manages its effects on the climate (i.e., carbon emissions) and potential vulnerability to climate change (i.e., resilience to projected climate changes). Is there any more detail or reasoning on likely climate change effects to be submitted taking into account other planned schemes and any changes that may have occurred?</p> <p>ES Appendix 14.1 Embodied Carbon Report [APP-116] specifies that embodied Carbon emissions for the Scheme have been calculated for the design using the Highways England Carbon Tool. Have there been any changes to the baseline information? If not, is the present information being relied upon an accurate best estimate?</p> <p>What are the potential implications arising from any future estimated increases in electric vehicles using public roads in the overall planning of the scheme?</p>	<p>Cumulative impacts for all the disciplines considered in the environmental impact assessment, including biodiversity, ecology, air quality, noise and carbon emissions, are considered in ES Chapter 15: Cumulative Effects Assessment (APP-052). Chapter 15 has been completed in accordance with the requirements of the Infrastructure Planning (EIA) Regulations 2017 and Planning Inspectorate Advice Note Seventeen. Other developments were included as part of the cumulative assessment methodology and this is detailed in section 15.3 of the chapter.</p> <p>As per Table 15.1, in section 15.3, the construction and operational phase traffic data includes traffic associated with other developments, so the greenhouse gas emissions assessment reported within the Chapter 14 Climate is inherently cumulative. In accordance with Department for Transport (DfT) Transport Appraisal Guidance, the uncertainty log includes the management of the uncertainties required for formulating the core scenario. The uncertainty log contains the significant local authority and Highways England network schemes. Based on Transport Appraisal Guidance, the schemes included in the Do-Minimum (DM) scenario have a likelihood of at least 'near certain' or 'more than likely'. Therefore other schemes, such as the other A47 schemes and the NWL, are listed in the uncertainty log as near certain' or 'more than likely' and as such it is included in the core scenario.</p> <p>The Scheme is also assessed against legislated carbon budgets in Chapter 14 (APP-051), which are also inherently cumulative as they consider emissions across sectors in the economy.</p> <p>ES Chapter 14 Climate (APP-051) considers the effects on climate from the Scheme and also the vulnerability of the Scheme to climate change in accordance with the requirements of the Infrastructure Planning (EIA) Regulations 2017, the National Networks National Policy Statement (NNNPS) 2014, and Design Manual for Roads and</p>

	<p>Interested Parties:</p> <p>Do interested parties have any further comments on the information presently being considered with respect to climate change matters. If so, clarify if you have not done so already.</p>	<p>Bridges LA 114 Climate (DMRB LA 114). This includes carbon emissions associated with the Scheme which are presented in relation to the UK's legally binding carbon budgets.</p> <p>The Carbon Budget Order 2021, which provides for the Sixth Carbon Budget, took effect on 24 June 2021. The Applicant can only undertake an assessment of the likely significant effect of carbon against published Government policy. The Applicant is not responsible for producing the UK carbon budgets, which are set by the Government in response to recommendations from the UK Climate Change Committee. The Committee's recommendations informed the development of the Sixth Carbon Budget.</p> <p>In response to the release of the Sixth Carbon Budget (https://www.theccc.org.uk/publication/sixth-carbon-budget/) and number of relevant representations on this matter, the Applicant will provide an updated ES Chapter 14 (APP-051) for Deadline 4.</p>
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7. CONSTRUCTION IMPACTS

Ref	ExQ1 Question	Applicant's Comment
CI.1.1	<p>Application document APP-129, the Outline Traffic Management Plan.</p> <p>i) Clarify the provisions which would be made to allow essential vehicle access or emergency vehicle access on B1172 (Norwich Road), Hethersett Bypass, the A47, Cantley Lane South and Station Lane during construction stages?</p> <p>ii) Clarify the provisions to be contained within the Outline Traffic Management Plan responding to relevant representation concerns from uplifts in traffic movements (for example as a result of new development in Wymondham and Cringleford areas). In doing so further clarify details of monitoring, consultation, and the safeguards for appropriate management mechanisms available to deal with potential uplifts in traffic.</p> <p>iii) Confirm if a separate Construction Traffic Management Plan is to be formulated.</p>	<p>i) During construction, there will be access provided to emergency vehicles at all times. The B1172 will only have minimal periods of TM as we create the new tie in for the Cantley Lane Link and also the compound entrance. Full details still to be reviewed though detail design.</p> <p>ii) Volume 7.5 Traffic Management Plan, this will be refined as detailed design progresses and as understanding of increased traffic flows from new developments is understood.</p> <p>iii) A separate CTMP will be formulated as the programme and detailed design are progressed.</p>
CI.1.2	<p>In your relevant representation(s) you indicate a range of concerns where it is possible ongoing discussions with the Applicant regarding the formulation of Traffic Management Plans.</p> <p>Provide an update on any discussions and set out any outstanding concerns in this respect or highlight how the Applicant could address your concerns, if you have not already done so.</p>	
CI.1.3	<p>Existing obligations for securing land to expand the existing Park and Ride Site and for the construction of a new slip road from the A11 to reduce traffic at the Thickthorn Junction are referred to in Relevant Representation [RR-011].</p> <p>Applicant:</p> <p>i) Explain if the Proposed Development inclusive of construction phases will or will not render any part of those works undeliverable, and if so, what are the specific reasons for that?</p> <p>To what extent would the scheme compliment any planned improvements to the Park and Ride Car Park Site having regard to any existing obligations entered into?</p> <p>CM Watt Residual Trust:</p>	<p>i) The Park and Ride extension is still deliverable, but the Scheme renders the new slip road undeliverable. However, there is a question as to whether a suitable slip road could have been provided from the A11 in a no scheme world and in any event, the effects of the Scheme on traffic flow negate the need for a slip road.</p> <p>Please see the response to GC.1.5 for more detail.</p> <p>iv) The Applicant has been provided with a copy of a section 106 agreement dated 20 May 2014 between South Norfolk District Council (1), Norfolk County Council (2) Lloyds Bank Plc (3), William David Winslow Barr, Kate Alice Paul and David Edward Brown (4), Simon Henry Back (5), Carl Andrew Soames Baker and David John Soames Baker (6), Nicholas Evans-Lombe, Giles Richard Lovell Spackman and James Peter Needham Learmond (7), KB Interests Limited (8) and Charles Jonathan Watt, The Right Honourable John Clive Third Viscount Mackintosh of Halifax, The Honourable Graham Charkes Mackintosh and Susan Mark Shenkman (9) (S106 Agreement). The S106 Agreement is linked to planning application reference 2011/1804/O for development of 1196 dwellings and associated uses, including primary school, local services comprising shops, small business units, community facilities/doctors surgeries, sports pitches, recreational</p>

	<p>iii) Explain and detail any aspect of the park and ride expansion or upgrade that would be rendered undeliverable clarifying the specific details of directly related benefits such as improvements to historic parkland if you have not already done so.</p> <p>Applicant, Highway Authority and Planning Authority, CM Watt Residual Trust:</p> <p>(iv) To what extent is any existing legal agreement covering the park and ride car park planned improvements potentially undermined by the proposed scheme and is proactive engagement forthcoming to resolve any aspect of obligation already entered, if necessary.</p> <p><i>You may wish to combine the response for this question with the answer to question GC.1.5.</i></p>	<p>spaces, equipped areas of play and informal recreation spaces, extension to the Thickthorn Park and Ride including a new dedicated slip road from the A11 (Development) at Hethersett, Norfolk and the Thickthorn Junction.</p> <p>Parties (4), (5), (6) and (7) to the S106 Agreement are together defined as the "Developer" for the purposes of the S106 Agreement. Party (9) is defined as "the Park and Ride Owners" and recital H states that the Park and Ride Owners are the registered proprietors of the "Park and Ride Site" and the "Slip Road" which are registered at the HM Land Registry under title number NK328721. The Park and Ride Site is defined as the land edged red on the plan numbered TR 001 Revision F. This is the land adjacent to the existing Thickthorn Park and Ride (along the western boundary), on which the extension is intended to be provided.</p> <p>The Slip Road is defined as "an access slip road to the Park & Ride Site to be dedicated by the Park and Ride Owners the extent of which shall be agreed with the County Council in consultation with the Highways Agency as necessary for the provision of proper access to the Park and Ride Site to the standards required by the Highways Agency". The Slip Road is therefore not defined by reference to a plan, although recital H makes clear that it is intended to come within the Park and Ride Owners' land and plan TR 001 Revision F (called "Indicative Slip Road Alignment and 250 spaces Car Park") does show an indicative location for the slip road edged in blue. The Scheme would render the Slip Road as undeliverable.</p> <p>The relevant obligations relating to the Slip Road in the S106 Agreement are:</p> <ul style="list-style-type: none"> • paragraph 2.6 of Part 9 (page 61), which requires no dwelling within the Development to be occupied until the Developer has secured the dedication of the Slip Road as highway to enable full access to the Park and Ride Site in accordance with NCC's requirements; and • paragraphs 1 and 2 of Part 15 (page 69) which require the Park and Ride Owners to agree the extent of the Slip Road with the County Council and provide evidence of title to the same and, at the request of NCC, to dedicate the agreed Slip Road as public highway. <p>As the Scheme renders the Slip Road undeliverable, then the above obligations cannot be complied with.</p> <p>However, the Applicant understands that the reason for these obligations was to reduce the impact on Thickthorn Junction of traffic arising as a result of the extension to the Thickthorn Park and Ride. The Applicant has engaged with NCC and its design team for the expansion of the Park and Ride and the Scheme has been designed to accommodate this. The planned increased capacity of the Thickthorn Park and Ride has been allowed for in the NATS traffic model, details of which can be found in the Case for the Scheme Chapter 4 (APP-023).</p> <p>The Applicant is considering whether a power could be included within the DCO in order to address the fact that these obligations can no longer be complied with.</p>
<p>CI.1.4</p>	<p>On the Unaccompanied Site Inspection [EV-001] the ExA observed that there is gas pipeline sign along Station Lane close to the junction shared with the A11. Can you confirm whether the use of this access by construction vehicles has been assessed acknowledging there is a pipeline, alongside comments as to whether it would cause damage to existing infrastructure.</p>	<p>The Applicant is aware of the Cadent gas main at Station Lane and will work with Cadent to ensure that any required protection slabs are constructed to enable access for the works.</p>
<p>CI.1.5</p>	<p>The ExA notes that Cringleford Rail Bridge is in close proximity to the scheme alongside associated railway line infrastructure. RR-008 sets out objections to the scheme having regard to protective measures and requirements.</p> <p>Clarify the measures to ensure the safe operation of the rail network, at all times, and the steps to be undertaken to resolve the objection.</p>	<p>The Scheme does not encroach onto the Network Rail asset and has been a pivotal design ethos through preliminary design phase to remove nay interface issues. A safe system of work will be reviewed with Network Rail as necessary.</p>

<p>Cl.1.6</p>	<p>ES Figure 2.1 (The Proposed Scheme) (TR010037/APP/6.2) [APP-054] indicates the areas of the proposed temporary construction compounds</p> <p>i) Provide further explanation for the need for the compounds of the scale proposed, in relatively close proximity to each other.</p> <p>ii) Further clarify the details of the need for the areas of land required for each of these compounds.</p>	<p>Whilst the compounds may be geographically close, they are separated by the major National Highways Road network and as such to provide adequate welfare provisions (as required under CDM regulations) that can be accessed within reasonable time periods without the need to cross a major highway. This project is not a typical linear project, the number of compounds also helps to minimise construction traffic movements to access compounds and welfare with the benefit of reducing impact to local road network.</p>
<p>Cl.1.7</p>	<p>At an Unaccompanied Site Inspection [EV-001] the ExA observed that surrounding local rural roads in and around the Thickthorn Junction are narrow, and some with bends. Further clarification is required on the following points:</p> <p>i) Signpost or give indication and further clarification of the volume, size and type of construction vehicles which would still use the local rural road network during construction as well as the nature of traffic re-routing likely to be experienced through displacement of any existing traffic presently using the A47/A11/B1172.</p> <p>ii) The likely frequency and time periods for movement of heavy vehicle movements.</p> <p>iii) Mitigation measures to prevent access of roads not suitable for use by heavy vehicles, or exacerbated traffic volumes and to ensure the safety of other road users, and how such measures can be secured in the dDCO.</p>	<p>Access using the local rural roads will only be required when doing works directly to Cantley Lane or Station Lane. The majority of movements will be off the major network.</p>
<p>Cl.1.8</p>	<p>Construction traffic would have the potential to damage the existing road network including drainage provision.</p> <p>i) Will an assessment of the effects on existing road and bridge condition (surface, drainage etc) be undertaken and secured?</p> <p>ii) What mitigation, for example: weight limits, agreed delivery routes are proposed to minimise any damage to the road network by construction traffic are to be secured through a Construction Traffic Management Plan (CTMP) if necessary?</p> <p>iii) Who would be liable for any damage to the road network and who would be responsible for any repairs?</p> <p>Relevant Planning/Highway Authority and Interested Parties: any comments on these issues you wish to make.</p>	<p>i) There will be an asset survey carried out prior to construction and also after completion to assess the impact of the works on the local network. This will be carried out jointly with NCC and HE</p> <p>ii) The construction traffic will use the Highways England road network and the B1172 Hethersett Rd. Minor access will be utilised on Cantley Lane, however this will only be for the works to the Cantley Lane itself and its new junction with the Cantley Lane link Rd. As the Construction Phase Plan is developed, agreed routes, weight limits, access only routes etc will be highlighted and a CTMP will be in place.</p> <p>iii) Any damage caused to the network as a result of construction traffic will be the responsibility of the project.</p>
<p>Cl.1.9</p>	<p>There are a range of impacts referred to in RR-038. Can the Applicant provide further clarification of the following:</p> <p>i) Phasing of the works for Cantley Stream with respect to holiday cottage occupation.</p> <p>ii) Farm access details including provision/specification, ownership and associated rights under consideration.</p> <p>iii) Retention of boundary treatments as well as new or additional boundary treatments envisaged</p> <p>iv) Phasing of drainage/"lagoon" works the RR refers.</p> <p>Relevant Planning/Highway Authority and Interested Parties: Provide any comments on these issues you wish to make.</p>	<p>i) The phasing plan of works is currently at high level draft and will become more detailed as the detailed design is developed. The contractor will liaise with the landowner to inform of works to the stream.</p> <p>ii) Further details will be forthcoming as the detailed design progresses and a better understanding of the phasing of the works is gained. Liaison will be held with all relevant landowners throughout the detailed design phase to ensure we can accommodate farm access</p> <p>iii) As shown on the Environmental Masterplan (APP-123) existing hedgerows and fencing will be retained along Cantley Lane South and new fencing will be provided to tie into these at the new access points. New accommodation works fencing will be provided along the south side of the new access track and around the drainage basin. The Applicant is aware of the landowner's requests for additional fencing and will endeavor to find a suitable solution with the landowner.</p> <p>iv) Phasing of the drainage/lagoon will be understood more as</p>

		the detailed design progresses and the programme is built.
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8. COMPULSORY ACQUISITION, TEMPORARY POSSESSION AND OTHER LAND OR RIGHTS CONSIDERATIONS

Ref	ExQ1 Question	Applicant's Comment
CA.1.1	<p>In their Rule 6 letter, the ExA requested to be regularly provided on the progress of negotiations for Compulsory Acquisition (CA) of the Freehold of land, of new rights over existing land and of Temporary Possession (TP) of land.</p> <p>Confirm acceptance of this request.</p>	<p>The Applicant has submitted at Deadline 2 a Compulsory Acquisition Schedule that details the progress of the ongoing negotiations with the relevant landowners.</p> <p>It is the Applicant's intention to acquire by agreement as far as is possible. However, as stated at paragraph 4.9.4 of the Statement of Reasons (APP-020), the Applicant is mindful that it is under a duty to acquire land at best value and that it is required to deliver the Scheme within a specified timescale. Whilst efforts will be made to acquire by agreement where possible, the Applicant has concluded that it may not be possible to acquire all land interests necessary to deliver the Scheme before the Secretary of State's decision on the Scheme.</p> <p>The Applicant will continue to regularly update the ExA on progress of the negotiations.</p>
CA.1.2	<p>The Book of Reference (BoR) [APP-022] includes a number of Statutory Undertakers with interests in land:</p> <p>i) Provide a progress report on negotiations with each of the Statutory Undertakers listed in the BoR, with an estimate of the timescale for securing agreement with them.</p> <p>ii) State whether there are any envisaged impediments to the securing of such agreements.</p> <p>iii) State whether any additional Statutory Undertakers have been identified since the submission of the BoR and whether the latest version of BoR includes any recently identified Statutory Undertakers.</p>	<p>Negotiations are ongoing with each of the Statutory Undertakers and it is expected that they will be concluded before the end of Examination. An update on the specific Statutory Undertakers is as follows:</p> <ul style="list-style-type: none"> • Anglian Water – The Applicant has responded to Anglian Water's proposed Protective Provisions and will be including revised Protective Provisions in the dDCO at Deadline 3. The Applicant has asked Anglian Water to confirm whether the Protective Provisions as updated are agreed. • National Grid Electricity Transmission Plc (NGET) - The Applicant is currently negotiating standard Protective Provisions and standard agreements with NGET. • Openreach – Have confirmed that they are content to rely on the Schedule 9 Part 2 Protective Provisions. • Vodafone – The Applicant is currently considering comments from Vodafone. • UKPN - have been notified of the Scheme by the Applicant but have not made a relevant representation. The Applicant has regularly met with UKPN in relation to the Scheme. and in any event, UKPN can rely on the standard Schedule 9 Part 1 Protective Provisions. • Cadent – Protective Provisions have been agreed and formal agreements are being put in place. The agreed Protective Provisions have been included in the dDCO submitted at Deadline 2. <p>Network Rail – discussions are ongoing with Network Rail's solicitors regarding draft protective provisions</p> <p>There are no envisaged impediments to the securing of the required agreements.</p> <p>No additional statutory undertakers have been identified since the submission of the Book of Reference (APP-022).</p>
CA.1.3	<p>Where a representation is made by a statutory undertaker under section 127 of the Planning Act 2008 (PA2008) and has not been withdrawn, the Secretary of State would be unable to authorise powers relating to the statutory undertaker land unless satisfied of specified matters set out in section 127. If the representation is not withdrawn by the end of the examination confirmation would be needed that the "expedience" test is met.</p> <p>The Secretary of State would also be unable to authorise removal or repositioning of apparatus unless satisfied that the extinguishment or removal would be necessary for the purpose of carrying out the development to which the Order relates in accordance with section 138 of the PA2008. Justification would be needed to show that extinguishment or removal would be necessary.</p>	<p>The Applicant is progressing discussions with all statutory undertakers and is hopeful that all objections will be withdrawn shortly. Nevertheless all works relating to statutory undertaker's apparatus listed within Schedule 1 of the dDCO are deemed essential to ensure the delivery of the Scheme.</p> <p>In the unlikely event that objections are not withdrawn, the Applicant is able to provide further information by Deadline 9 of the Examination.</p>

	<p>Indicate when, if the objections from Statutory Undertakers are not withdrawn, this information would be submitted into the Examination.</p>	
<p>CA.1.4</p>	<p>The Applicant is reminded that the Department for Communities and Local Government (as it then was) Guidance related to procedures for CA (September 2013) states that; <i>"Applicants should be able to demonstrate that adequate funding is likely to be available to enable compulsory acquisition within the statutory period following the Order being made, and that the resource implications of a possible acquisition resulting from blight notice has been taken account of"</i>.</p> <p>The Funding Statement [APP-021] identifies that the estimated scheme cost is £91.2m. Paragraph 3.1.5 also states that the funding commitment was reiterated in the Highways England Delivery plan 2020–2025 which was published in August 2021.</p> <p>i) Detail the CA costs separately from the overall land acquisition costs that resulted in this overall figure. ii) Clarify how the CA figure was arrived at, and how these costs would be met. Are there any updates with respect to any claims or potential claims for blight or other matters?</p>	<p>Paragraph 2.1.1 of the Funding Statement (APP-021) states that the most likely estimate of the Scheme is £91.2 million. This includes the land acquisition; compensation costs and claims associated with the Scheme; legal fees and land agent fees. The costs associated with land acquisition are integrated into the Scheme estimate and met through the sources of funding detailed in Section 3 of the Funding Statement. Paragraphs 3.1.2 to 3.1.5 refers to the government's commitment to fully fund the Scheme as part of the Road Investment Strategy 2020-2025.</p> <p>The Highways England Delivery Plan (2020-2025) sets out in detail how Highways England will deliver its strategic outcomes and measure success. Page 34 of this Delivery Plan lists the A47 Thickthorn junction as a 'Scheme open for traffic during RP2' along with a reference in Annex B on page 74 to the anticipated start of works and when the Scheme is expected to be open for traffic. Accordingly, Highways England has reaffirmed its commitment to the timely delivery of the scheme and the funding necessary to ensure this.</p> <p>The Scheme estimate which has been prepared in accordance with Highways England procedures and the HM Treasury Green Book includes an allowance for compensation payments relating to the Compulsory Acquisition of land interests in and over land and the temporary possession and use of land. It also takes account of potential claims under Part 1 of the Land Compensation Act 1973; Section 10 of the Compulsory Purchase Act 1965 and Section 152(3) of the 2008 Act.</p> <p>Estimates for compensation and land acquisition costs have been informed by land referencing activities; engagement of professional surveyors from the Valuation Office Agency (VOA) used regularly by the Applicant for surveying and valuation purposes and information received from consultation and engagement with parties who have interest in the land. The estimate was reached by appraising the compensation anticipated to be payable as a result of the Scheme (both permanent and temporary) including land value, loss and damage, disturbance, injurious affection (including Part 1 of the Land Compensation Act 1973), landowner fees and costs in line with the Compensation Code and the Department for Communities and Local Government published Guidance related to produces for Compulsory Acquisition.</p> <p>There are no updates with respect to any claims or potential claims for blight.</p>
<p>CA.1.5</p>	<p>The SoR [APP-020] states that there is a compelling case in the public interest for the CA.</p> <p>i) Set out what assessment, if any, has been made of the effect upon individual APs and their private loss that would result from the exercise of CA powers in each case. ii) Demonstrate within the application that the public benefits of the Proposed Development outweigh any residual adverse effects including private loss suffered by individual landowners and occupiers. Demonstrate how such a conclusion has been reached and how the balancing exercise between public benefit and private loss has been carried out.</p>	<p>The Applicant responds as follows:</p> <p>i) The Applicant's professional team has considered the nature and status of the principal parties affected and the likely application of the compensation code for each principal party.</p> <p>Paragraphs 5.1.6 and 5.1.10 of the SoR (APP-020) set out the consideration that has been given to the Affected Persons, balancing with the Applicant's ability to deliver the Scheme. Specifically, the Applicant's view is that there is a compelling case in the public interest for the compulsory acquisition of the land, as the benefits to the public of the compulsory acquisition of land would outweigh the private loss that would be suffered by those whose land is to be acquired.</p> <p>ii) The Applicant's SoR (APP-020) as a whole and in particular section 5 (The Case for Compulsory Acquisition) indicates that the public benefits of the Scheme outweigh any adverse effects including private loss suffered by individual owners and occupiers. In addition, the Applicant's Case for the Scheme (APP-125) sets out the relevant policies that support the Scheme, as well as the potential effects on the strategic road network if the Scheme were not to go ahead. The Applicant is a publicly owned company whose purpose is to plan, design, build, operate and maintain the strategic road network (SRN) for the benefit and safety of the wider public. The Applicant would not be proposing the Scheme if there were not significant benefits to the public in doing so, despite there being the potential for private loss to be suffered by individuals.</p> <p>In addition, the Scheme is supported by the Government's wider strategic policy objectives whilst specifically addressing a significant problem of traffic congestion on the strategic road network, providing additional capacity and facilitating long-term development. In addition, the Scheme supports the local transport policy objectives (see section 6.2 of the Case for the Scheme (APP-125)). The principles of the Compensation Code will apply when assessing compensation for the</p>

		<p>affected owners and occupiers. For all of these reasons the Applicant can be entitled to consider that public benefit outweighs private loss, and that there is a compelling case in the public interest for the Scheme to be delivered.</p> <p>iii) The balancing exercise was carried out on the basis of (legally privileged) advice provided by the Applicant's solicitors and the privileged advice of the Valuation Office provided to the Applicant in regard to the assessment of compensation and negotiations with landowners. Throughout the application process the Applicant has had in mind the need to balance public benefit and private loss and has prepared the application accordingly. Specifically, the Applicant considered the justification for the acquisition of each plot, on a plot-by-plot basis, and this supported the balancing exercise that is considered in section 5 of the SoR (APP-020). Chapter 7 of the Case for the Scheme (APP-125) summarises how the Case for the Scheme and accompanying NPS NN Accordance Tables (APP-126) set out the policy context against which the Scheme should be viewed. Together they demonstrate a clear justification for the Scheme grounded in national, regional and local planning and transport policy, and that the substantial and long-lasting transportation, economic and community benefits will outweigh the impacts. In particular, Section 7.4 discusses how the construction or operation of the Scheme, through careful and comprehensive assessment, complies with those NPS NN paragraphs that recommend the Secretary of State does not grant development without reasonable justification.</p>
<p>CA.1.6</p>	<p>The SoR [APP-020] includes a section on human rights. With respect to that:</p> <p>i) Explain and clarify how it is demonstrated that interference with human rights in this case would be proportionate and justified.</p> <p>Explain how the proportionality test has been undertaken and explain how this approach has been undertaken in relation to individual plots.</p>	<p>i) Interference with human rights is both proportionate and justified for the reasons given in the response to question CA. 1.5 above. In particular, the Scheme is supported by national and local policy. In preparing its application, the Applicant has sought to acquire only land or interests that are required to allow the Scheme to proceed and to cause as little interference with existing interests in land as possible. Particular examples are:</p> <ul style="list-style-type: none"> • The Applicant's decision to adopt a segregated left turn lane at the Thickthorn Gyratory instead of a connector road from the A47 westbound to the A11 southbound, reducing acquisition of land to the north of Cantley Lane South. • The use of powers other than for freehold acquisition (for instance the acquisition of new rights for the alteration and diversion of existing utilities apparatus) rather than seeking full freehold acquisition powers. • The Applicant has sought to use, wherever possible, land for compounds that will be acquired temporarily. <p>ii) The Applicant analysed the appropriate use of powers for each individual plot to decide whether powers other than for freehold acquisition could be deployed and has done so where this is appropriate without compromising the principles of the Scheme as supported by RIS2. The principles outlined in paragraph i) above demonstrate how the Applicant approached the consideration of the appropriateness of compulsory acquisition powers. In relation to most principal landowners, engagement with the owner, on both a formal and informal basis, has not indicated that the Applicant's decision regarding the use of compulsory acquisition powers is disproportionate and a compelling case in the public interest exists in relation to the powers sought in each plot.</p> <p>Where a landowner has raised a specific issue on the proposed compulsory acquisition of their land the Applicant is in continued dialogue with them.</p>
<p>CA.1.7</p>	<p>The DCO as drafted means that special parliamentary procedure should not apply in relation to the proposed CA of special category land. Is any change of circumstance probable or potentially probable that will prevent the relevant subsections in Section 131 or 132 of the PA2008 from being adhered to.</p> <p><i>You may wish to combine the answer to this question with the answer to question GC.1.3.</i></p>	<p>The Applicant is in discussions with Big Sky regarding appropriate mitigation for the loss of proposed open space which forms part of a new residential development in Cringleford.</p> <p>As the development has not yet been fully implemented, the land in question is not currently in use as open space, so cannot be considered as open space using the definition in the PA2008, so sections 131 and 132 of the PA 2008 are not engaged.</p> <p>The developer, Big Sky, has agreed to submit an application to vary its planning permission, which will secure an alternative design for the open space layout. As part of this application South Norfolk Council will consider whether a commuted sum will be payable to mitigate the impact of the Scheme on the residential development and its on site open space provision.</p> <p>This commuted sum could be considered as part of the developer's compensation claim.</p>
<p>CA.1.8</p>	<p>Consent is required for any other provision in the DCO which relates to Crown land or rights benefiting the Crown in accordance with</p>	<p>The Applicant is in discussions with the Government Legal Department about securing consent pursuant to section 135 for the relevant Crown</p>

	<p>s135(2) PA2008. Among other things this includes consent for any Temporary Possession sought over Crown land.</p> <p>The PA2008 does not authorise CA for Crown land. The SoS can only authorise the CA of these plots with the consent of the relevant Crown authorities.</p> <p>Indicate whether consent for any provisions affecting Crown land or rights is forthcoming.</p>	<p>Land plots.</p> <p>The current position is that the solicitors at GLD are reviewing the papers and information provided and will be taking instructions from their instructing officers .</p> <p>The Applicant is liaising with GLD on S135 consents for each of the A47 schemes and has advised GLD that the Thickthorn junction Examination closes on 23 March 2022 and that this is the last date for obtaining the consents and submitting as part of the Examination.</p>
CA.1.9	<p>It is stated in the respective RRs [RR-RR-008], [RR-003], [RR-004], [RR-007] that adequate Protective Provisions are required in the draft DCO [APP-015]. To date, these have not yet been agreed with the Applicant. The ExA requires a regular update to this position.</p> <p>If, by Deadline 5, Monday 20 December, Protective Provisions have not been agreed, the ExA requests the relevant Statutory Undertaker's preferred wording, clean and tracked changed, together with an explanation of where the difference(s) of opinion lie(s).</p>	
CA.1.10	<p>In their RR [RR- RR-034] Birketts LLP on behalf of members of the public raise concerns regarding the extent of the access serving their property as being inadequate, lawful means of access and rights for services as well as a range of interrelated amenity concerns.</p> <p>Can the applicant provide a response to those points and indicate if they are to be addressed through additional submissions for the Proposed Scheme explaining the approach to be taken.</p>	<p>The Applicant provided a response to RR-034 in its comments on the relevant representations [REP1-004] submitted at Deadline 1 and has now responded to the more detailed written representation at Deadline 2. As confirmed by Birketts LLP discussions with the landowners are ongoing to ensure adequate access and rights are provided.</p>

9. DESIGN

Ref	ExQ1 Question	Applicant's Comment
DE.1.1	<p>With respect to the replacement bridge (Cantley Lane footbridge, Cringleford) (Work No. 35) across the A47. Can the applicant provide:</p> <p>i) Indicative visuals of the type of footbridge infrastructure proposed.</p> <p>ii) A more detailed explanation of the design, function and locational criteria for the proposed footbridge having regard to its visual prominence. Confirm if a local formal Design Review is anticipated to be undertaken for this element, and if not why not? iii) How will the appearance of the footbridge inclusive of consultation measures.</p> <p>iv) Clarification of any mitigation proposed to reduce the visual impact of the bridge inclusive of any earth profiling/bunding and landscaping at its entry and exit points for visual integration.</p> <p>v) What consideration has been given/can be given to the replacement bridge complying to relevant cycle path standards in addition to carrying pedestrians and mobility vehicles, and how will such provisions be achieved?</p> <p>(vi) What consideration has been given/can be given for horse riders to also use the bridge safely, the final design meeting those functional requirements and how will this design function be secured?</p> <p>(vii) What considerations, and to what extent, have been given to potential bridge coverings on the top of the structure as well as the sides, for both mandatory safety</p>	<p>i) Indicative visuals of the structure are shown on Engineering drawing (APP-010) HE551492-GTY-LSI-000-DR-CH-36018.</p> <p>ii) The footbridge comprises of single span steel truss structure on steel piers, founded on concrete piles. The footbridge is located to maintain the public right of way that will be stopped up by the removal of the existing footbridge, providing connectivity for pedestrians, cyclists and horse riders between Cantley Lane South and Cantley Lane. See response to ExA DE 1.1 v) and vi) regarding user design requirements. No formal Local Design Reviews are anticipated to be undertaken for this structure. The structure has been designed in accordance with CD 353 Design criteria for footbridges, including Section 3 'Layout and Appearance' and has been subject to review by Highways England's Safety and Standards team to ensure that the bridge is in keeping with similar structures across the Strategic Road network.</p> <p>iii) A number of consultation comments raised concern about the length of approach ramps and the detour from the existing footpath/footbridge. These comments related to the previous location of the footbridge that was proposed at the time of consultation . The location of the footbridge in the submitted Scheme has significantly reduced the length of the ramps by moving the new footbridge closer to the existing location, whilst maintaining the appropriate gradients of the access ramps on approach to the bridge.</p> <p>iv) As shown on the Environmental Masterplan (APP-123), 2m high bunding is proposed on the east side of the bridge, with hedgerows planted on top of the bunding. This will provide visual screening to the bridge from the ongoing housing development (St Giles Gate) directly to the east to the Scheme. On the west of the A47, the embankments required for the approach ramps to the bridge will be planted with woodland planting, which will contribute to screening for properties on Cantley Lane South and soften the appearance of the embankments. Planting has sought to strike a balance between visual screening and integration of the infrastructure into the landscape context whilst also ensuring a degree of visual openness for users in the interests of public safety (for example, retaining sight lines from the curving western approach ramp to the bridge crossing). The planting scheme is also cognisant that an area of buffering public open space (likely to include</p>

	<p>purposes as well as future users feeling safe. If not, why not?</p>	<p>dispersed tree cover) is proposed on land immediately to the east of the bridge between the highway and housing development. The topographical form and slight fall to the east means that the new bridge would in any case not stand especially high in views from the east.</p> <p>v) The proposed bridge and its ramped approaches have been designed in accordance with CD 143 'Designing for Walking, Cycling and Horse Riding' and CD 353 Design criteria for footbridges. The design adopts a maximum gradient of 5% to facilitate those with mobility aids. The proposed cross section provides 3.5m clear width to facilitate users in both directions and in particular horses.</p> <p>vi) The proposed bridge and its ramped approaches have been designed in accordance with CD 143 'Designing for Walking, Cycling and Horse Riding' and CD 353 Design criteria for footbridges. The Applicant has also been cognisant of advice provided by the British Horse Society (BHS) in its leaflet 'Advice on Bridges, gradients and steps in England and Wales'. As shown on Engineering drawing (APP-010) HE551492-GTY-LSI-000-DR-CH-36018 the bridge will adopt 1800mm high minimum parapet with 1m solid infill with a minimum headroom clearance of 3.7m. The surfacing of the bridge will be a suitable rubber compound.</p> <p>https://www.bhs.org.uk/~media/documents/access/access-leaflets/bridges-1019.ashx?la=en</p> <p>vii) Risk of accidental debris dropping from the bridge deck on the road below has been considered and the risk is mitigated by providing a solid infill on parapet. The "BHS Advice in England and Wales Bridges Gradients and Steps" advice note does not stipulate that canopies on bridges are beneficial to equestrian users. DMRB standard "CD353 Design criteria for footbridges, section 7, page 19" provides advice in respect of consideration of providing an enclosed footbridge, namely:</p> <p><i>7.1 Footbridges shall be designed with full or partial enclosure where it is assessed that there is a particularly high risk of the following:</i></p> <ol style="list-style-type: none"> 1) objects being dropped or thrown from the footbridge; or 2) persons jumping onto the carriageway from the footbridge <p>No records identified from the collision data to suggest a problem with objects dropped from overbridges in the area, and the Suicide Prevention Strategy does not suggest a high suicide risk for the area.</p>
<p>DE.1.2</p>	<p>New underpasses (Work No. 10 and No. 19). Provide indicative visuals of the type of underpasses proposed and how they will integrate or complement their surroundings.</p>	<p>Indicative visuals of the structures are shown on Engineering drawing (APP-010) HE551492-GTY-LSI-000-DR-CH-36022 and HE551492-GTY-LSI-000-DR-CH-36023. The new bridges south of Thickthorn junction would comprise of a reinforced concrete box type structure, with either reinforced soil or concrete panel faced wingwalls.</p> <p>The topographical and well-wooded context of the Scheme, and the position of the two underpasses some distance away from surrounding visual receptors, means that views of the detailed appearance of the underpass structures (principally at their western entry points) would largely be limited to vehicular users heading east along the A11, through the cutting, and then south along the A47. The entrance to the underpasses would be experienced in deep cutting with very little wider landscape context visible. Woodland planting has been proposed on the northern side of the link road on the approach to both underpasses to soften their appearance. However, the extent of proposed woodland planting within the cutting has been moderated in the interests of maintaining a light and open character and preserving sight lines along the inner curve. Because the link road would be in deep cutting and does not require visual screening, the amount of tree planting proposed on its steep sided embankments and isolated 'islands' between carriageways has been moderated in the interests of future safe management.</p>
<p>DE.1.3</p>	<p>New overbridge(s) (Work No.44 and No. 31). The Cantley Wood overbridge would convey the new Cantley Lane Link Road over the A11 carriageway as part of the Scheme. Provide indicative visuals of the type of overbridge/ extension proposed and clarification of any measures proposed to reduce/improve the visual impact/appearance of the structures.</p>	<p>Indicative visuals of the structures are shown on Engineering drawing (APP-010) HE551492-GTY-LSI-000-DR-CH-36019 and HE551492-GTY-LSI-000-DR-CH-36020. The structures comprise of concrete prestressed beam, concrete deck supported on reinforcement concrete abutments, founded on reinforced concrete piles with concrete panel faced wingwalls.</p> <p>The structures are designed to have the minimum allowable headroom to reduce the height of the approach embankments as far as practicable, with no visually prominent features which protrude above the main structure. As shown on the Environmental Masterplan (APP-123), woodland planting and individual trees will be planted on the approach embankments to filter the views and soften the appearance of the new infrastructure. Representative Viewpoints 1 and 4 in the Environmental Statement (APP-59 and APP-060) provide photomontage visualisations of the proposed structures and approach</p>

		<p>embankments 1 year after construction and 15 years after construction, as well as the existing viewpoints. The Cantley Wood and Cantley Wood Link Road overbridges are located in a low position within its landscape context some distance away from surrounding visual receptors (there are no residential properties or footpaths nearby). Views of the detailed appearance of the bridge structure would therefore largely be limited to vehicular users of the A11 and along a section of the A11 which is enclosed by woodland on both sides.</p>
<p>DE.1.4</p>	<p>The Scheme Design Report [APP-127], Paragraph 3.4.3 indicates that fencing has been allowed for at the highway boundary to clearly delineate landownership and for safety and security. With the exception of where alternatives have been agreed with neighbouring landowners or been specified for environmental mitigation, timber post and rail fence would be provided in accordance with Manual of Contract Documents for Highway Works standard details.</p> <p>Provide the following further details of any proposed or anticipated fencing:</p> <p>i) Explanation of the design criteria for the fencing including heights/details of proposed colour. ii) Clarify the consideration given to natural boundary treatments over post and rail or other fencing. Advise whether the fencing anticipated could be replaced or combined/complemented with long term natural plantings throughout the scheme having regard to the current Environmental Masterplan submitted.</p>	<p>i) The proposed highway boundary fencing will be agreed with the adopting highway authority in accordance with the Highway Construction Details Series. Typically, these are treated timber post and rail high or timber post and wire fencing, 1.3m high. The design criteria is based on intended use, security, safety and maintenance requirements. New fencing will only have been proposed where there is an identified need, and existing fencing will be retained where possible.</p> <p>ii) Planting has been considered at all boundaries (whether woodland planting, hedgerows or individual scattered trees). A timber post and rail or timber post and wire fence is required to define all highway land boundaries whether defining the Applicant's land or land to be adopted by the local highway authority. During the development of the Environmental Masterplan (APP-123) consideration was given in all locations to the inclusion of planting at these boundaries. In this regard it should be noted that: (a) the Scheme context is characterised by woodland blocks, linear tree cover along the existing A11 and A47 highway corridors and scattered trees (i.e. the immediate landscape context is not one which is characterised by a geometric pattern of formal hedgerow field boundaries) (b) utility constraints and diversions have prevented planting close to boundary fencing in some locations (c) woodland planting is proposed on one or both sides of the proposed boundary fencing in many locations (albeit allowing for maintenance access) (d) at two locations where bunds are proposed (to the north of the reptile habitat enhancement area and to the east of the replacement footbridge) hedgerows are proposed on the top of the bund to maximise their visual effect rather than the toe of the bund where the highway boundary fence would run (e) a more open character (without hedgerows) in the vicinity of the new Cantley Lane link road (at its northern end towards Norwich Road and at its southern end at Cantley Lane South) was a conscious design decision reflecting local character. The approach to Norwich Road is through an area of former parkland with an open character with occasional trees - a hedgerow on both sides of this road was not considered preferable and scattered trees are instead proposed. The junction between the new link road and existing Cantley Lane South is located at the crossing of Cantley Stream. This low lying valley is characterised by scattered vegetation rather than linear hedgerows and open views across the valley pasture have been retained rather than enclosed by new hedgerows.</p>

<p>DE.1.5</p>	<p>i) Is a local Design Review process anticipated to be undertaken for any aspect of the scheme?</p> <p>ii) Explain how any non-material working change to the scheme as a result of local design considerations/representations could be accommodated if necessary.</p> <p><i>You may wish to consider giving your response alongside question NV.1.8.</i></p>	<p>i) No, Local Design Reviews are not anticipated for any aspect of the Scheme. The Scheme Design Report (SDR) (APP-127) sets out Highways England's 10 principles of 'good design'. They:</p> <ul style="list-style-type: none"> • make roads safe and useful • are inclusive • make roads understandable • fill in context • are restrained • are thorough • are environmentally sustainable • are innovative • are long lasting • are part of a collaborative process <p>These principles have been considered and incorporated throughout the option development, option selection and the preliminary design stages described in the Scheme Design Report (APP-127) in line with paragraph 4.28 of the NNNPS.</p> <p>The Scheme options were designed by a qualified team of highway engineers, advised by environmentalists, transportation consultants and town planners. A review of consultation responses and a number of other assessments (including environment, transport, engineering and economics) were undertaken before the preferred option was announced. The siting and design of the Scheme has taken account of the existing environment, landscape and historical context and includes embedded mitigation including planting, habitat creation, lighting, preservation of views, attenuation ponds and earth profiling.</p> <p>ii) There is inbuilt flexibility within the wording of dDCO Requirement 3, which secures the approval of the detailed design of the scheme. This would allow local design considerations to be accommodated if necessary.</p>
<p>DE.1.6</p>	<p>Have there been any changes to the built environment in the vicinity of the land subject to scheme improvement currently submitted? If so, please identify where, and consider if the plans and statements would need to be updated/ amended.</p> <p><i>Please provide a response alongside question GC.1.2.</i></p>	<p>The Applicant is not aware of any changes to the built environment in the vicinity of the Scheme other than those that have been previously considered in the current DCO submission. These include the proposed extension to the Thickthorn Park and Ride, the Cringleford residential development and the works proposed by Orsted as part of the Hornsea Project Three Offshore Wind Farm.</p>

10. DRAFT DEVELOPMENT CONSENT ORDER (DCO)

Ref	ExQ1 Question	Applicant's Comment
<p>DCO.1.1</p>	<p>Please note the dDCO should be:</p> <p>i) In the Statutory Instrument (SI) template;</p> <p>ii) follow guidance and best practice for SI drafting (for example avoiding "shall/ should") in accordance with the latest version of guidance from the Office of the Parliamentary Counsel;</p> <p>iii) follow best practice drafting guidance from the Planning Inspectorate and the Departments contained in Advice Note 15 – <i>drafting development consent orders</i> (and see specific references to Advice Note 15 below);</p> <p>iv) fully audited to ensure that there are no inconsistencies within the dDCO and its constituent parts such as definitions or expressions in the articles, requirements, protective provisions, other schedules and any book or reference, that all legislative references in the dDCO are to extant provisions and all schedules refer to the correct articles.</p>	<p>The Applicant has had regard to the latest Guidance and AN15.</p>

<p>DCO.1.2</p>	<p>Notwithstanding that drafting precedent has been set by previous DCOs or similar orders full justification should be provided for each power/ provision taking into account the facts of this particular DCO application.</p> <p>Where drafting precedents in previous made DCOs have been relied on, these should be checked to identify whether they have been subsequently refined or developed by more recent DCOs so that the DCO provisions reflect the Secretary of State's current policy preferences. If any general provisions (other than works descriptions and other drafting bespoke to the facts of this particular application and dDCO) actually differ in any way from corresponding provisions in the Secretary of State's most recent made DCOs, an explanation should be provided as to how and why they differ (including but not limited to changes to statutory provisions made by or related to the Housing and Planning Act 2016).</p> <p>Where necessary, provide a list any additional previous DCOs which have been used as a precedent for the drafting of this dDCO to expand on a particular point should it be warranted.</p>	<p>The dDCO is based on the latest DCO granted by the Secretary of State for Transport (A303 Sparkford to Ilchester Dualling Development Consent Order 2021). However, additional provisions have been included where necessary to ensure the Scheme is deliverable. The need for each provision is set out in the Explanatory Memorandum (APP-018)</p> <p>The Applicant has made reference to additional previous DCO precedents throughout the Explanatory Memorandum (APP-018) where relevant.</p>
<p>DCO.1.3</p>	<p>The purpose of and necessity for any provision which uses novel drafting, and which does not have precedent in a made DCO or similar statutory order should be explained. The drafting should:</p> <ul style="list-style-type: none"> • be unambiguous; • achieve what the Applicant wants it to achieve; • be consistent with any definitions or expressions in the provisions of the dDCO; and • identify the PA2008 power on which the provision is based. 	<p>The Applicant has not included any novel drafting in the dDCO (APP-017).</p>
<p>DCO.1.4</p>	<p>The extent of any flexibility provided by the DCO should be fully explained, such as the scope of maintenance works and ancillary works, limits of deviation and any proposed ability (through tailpieces) of discharging authorities to authorise subsequent amendments.</p> <p>The preferred approach to limiting this flexibility is to limit the works (or amendments) to those that would not give rise to any <u>materially new or materially different</u> environmental effects to those identified in the environmental statement. Also, further as to tailpieces, see section 17 of Advice Note 15.</p> <p>The drafting which gives rise to an element of flexibility (or alternatives) should provide clearly for unforeseen circumstances and define the scope of what is being authorised with sufficient precision. For example, the Secretary of State had to amend Article 6 (Benefit of Order) of the National Grid (Richborough Connection Project) Development Consent Order 2017 at decision stage to remove ambiguity (as later corrected by the National Grid (Richborough Connection Project) (Correction) Order 2018).</p> <p>In relation to the flexibility to carry out advance works, any "carve out" from the definition of "commencement" should be fully justified and it should be demonstrated that such works are de minimis and do not have environmental impacts which would need to be controlled by requirement. See section 21 of Advice Note 15. Pre-commencement</p>	<p>Article 2</p> <p>The Applicant has given the definition of "commence" further consideration and has deleted " the diversion and laying of underground apparatus" from the definition.</p> <p>The following preliminary works are themselves investigative works which have been considered and deemed necessary as part of the EIA. These works need to be done at an early stage in the development, to inform the detailed mitigation strategies, so have been carved out from the definition of commencement:</p> <ul style="list-style-type: none"> • Archaeological investigations and mitigation works • Ecological surveys and pre-construction ecological mitigation • Investigations for the purpose of assessing and monitoring ground conditions and levels • Remedial work in respect of contamination or other adverse ground conditions <p>The following preliminary works have been considered and assessed as part of the construction impacts Scheme (paragraph 2.7 of Chapter 2 of the Environmental Statement (APP-039)) and are deemed minor in nature, so will not cause any impacts which require mitigation.</p> <ul style="list-style-type: none"> • Erection of any temporary means of enclosure, receipt and erection of construction plant • Erection of any temporary means of enclosure • Welfare facilities and temporary buildings • Diversion and laying of underground apparatus and site clearance • Temporary display of site notices and advertisements <p>In any event the scope of the works is limited to those works listed in Schedule 1 of the dDCO (APP-017).</p>

	<p>requirements should also be assessed to ensure that the "carve out" from the definition of "commencement" does not allow works which defeat the purpose of the requirement.</p> <p>The ExA notes that the DCO should not permit works outside those that have been assessed in the ES.</p> <p>i) What scope is there to ensure the definition of commence to limit these preliminary carved out operations to those that have been assessed in the ES?</p> <p>ii) Limits of deviation (Art 8): explain and justify the need for additional flexibility to that already incorporated with the limits of the deviation. The ExA may also wish for the applicant to explain what process is in place for the SoS to determine whether exceeding the vertical limits would not give rise to any materially new or materially worse adverse environmental effects.</p>	<p>Article 8</p> <p>The Applicant confirms that the limits of deviation have been assessed within the Environmental Statement, as presented in Section 2.6, paragraphs 2.7.38 to 2.7.43, of Environmental Statement Chapter 2 The Proposed Scheme (AS-005).</p> <p>The additional flexibility, which is subject to Secretary of State approval, following consultation, is provided in case additional deviation is necessary to ensure that the Scheme can be constructed if, for instance, it is discovered that utility locations or connections require additional flexibility or ground conditions or drainage mean that small variations in excess of the stated limits are necessary. Given the topography of the area and the length of this Scheme it is considered unlikely that such additional tolerances will be necessary and if relied upon then the additional variations will be very limited in nature and extent. In the circumstances this additional flexibility is therefore considered appropriate to avoid the need to apply for a fresh development consent following detailed design and survey works. The flexibility is always subject to the control of the Secretary of State and falling within the outcomes of the Environmental Statement.</p>
DCO.1.5	<p>The intent of this article is to avoid inconsistency with other relevant statutory provisions applying in the vicinity, but, notwithstanding other precedents, as much information as possible should be provided about "any enactments" together with clarification about how far from the Order limits the provision might bite. Can the Applicant respond to those points?</p>	<p>The wording included is preceded in a number of other recently made Orders, including Article 4(2) of the A303 (Amesbury to Berwick Down) Development Consent Order 2020 (2020 No. 12097). It is standard wording to provide clarification regarding the relationship between the Order, if made, and existing local or private legislation. It is not provided with the intention of dealing with specific legislation enactments but instead is intended to provide clarification if local or private legislation does apply to the Order land.</p> <p>The provision only applies to land "within or adjacent to the Order limits", so only parcels of land within or sharing a boundary with the Order limits would be caught by this provision.</p>
DCO.1.6	<p>These provisions (and any relevant plans) should be drafted in accordance with the guidance in Advice Note 15, in particular sections 23 (extinguishment of rights) and 24 (restrictive covenants)</p> <p>The Secretary of State DfT's decision (paragraph 62 of the [REDACTED]) should be noted: <i>"to remove the power to impose restrictive covenants and related provisions as he does not consider that it is appropriate to give such a general power over any of the Order land as defined in article 2(1) in the absence of a specific and clear justification for conferring such a wide-ranging power in the circumstances of the proposed development and without an indication of how the power would be used"</i>. Other DfT decisions have included very similar positions, e.g. the A556 (Knutsford to Bowdon Improvement) DCO and the Lancashire County Council (Torrisholme to the M6 Link (A683 Completion of Heysham to M6 Link Road)) DCO.</p> <p>Where an applicant wishes to create and compulsorily acquire new rights over land, those rights should be fully, accurately, and precisely defined for each relevant plot and the compulsory acquisition should be limited to the rights described. This could be done by drafting which limits the compulsory acquisition of new rights to those described in a schedule in the DCO or to those described in the book of reference.</p> <p>The article is drafted to enable compulsory acquisition of new rights over all of the Order land, with a schedule which limits the compulsory acquisition power in defined plots</p>	<p>Article 27(1) only permits the undertaker to acquire such rights or impose restrictive covenants affecting land which may be acquired under Article 24. The power to compulsorily acquire land in Article 24 is subject to the restrictions in Article 27(2) and Article 34(8), which has the effect of only allowing permanent acquisition of those plots shaded pink on the Land Plans (APP-006).</p> <p>Article 27(2) limits the acquisition of rights and imposition of restrictive covenants for those plots listed in Schedule 5 ie those shown as blue on the Land Plans. Therefore, the ability to acquire undefined rights pursuant to Article 27(1) only applies to those plots shown pink on the Land Plans. This provision is included to allow flexibility and permit the undertaker to exercise lesser powers of compulsory acquisition where possible.</p> <p>As landowners have been consulted on the basis that their land will be acquired permanently, it is the Applicant's view that they have been consulted on the worst case scenario and it is justified to include such a provision.</p>

	<p>to the defined rights listed in that schedule, this approach (allowing undefined rights in land not listed in that Schedule) should be clearly identified and the need for it explained and justified in the Explanatory Memorandum and Statement of Reasons. It is likely to be difficult to justify. There must be evidence to show that persons with an interest in the Order land were aware that undefined new rights were being sought over all of the Order land and were consulted on that basis. The Secretary of State DfT has in at least three decisions (A585 Windy Harbour to Skippool Highway DCO, A30 Chiverton to Carland Cross DCO, Manston Airport DCO) limited the power to create undefined new rights by amending the temporary possession article (see below at 22).</p> <p>It should be noted that in the Manston Airport DCO the Secretary of State DfT removed the ability to create undefined new rights over land identified for temporary possession even though it was not an issue in examination. The reasons for this are set out at paragraph 121 of the DL: "The Secretary of State is concerned about the creation of new unidentified rights and is unclear whether affected landowners have been appropriately consulted".</p> <p>In all respects (including in relation to the book of reference), the applicant should follow <i>Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land</i> published by DCLG (now MHCLG) in September 2013.</p>	
DCO.1.7	<p>Where a representation is made by a statutory undertaker (or some other person) that engages section 127(1) of the Planning Act 2008 and has not been withdrawn, the Secretary of State will be unable to authorise compulsory acquisition powers relating to that statutory undertaker land unless satisfied of specified matters set out in section 127. If the representation is not withdrawn by the end of the examination, the ExA will need to reach a conclusion whether or not to recommend that the relevant statutory test has been met in accordance with s.127.</p> <p>The Secretary of State will be unable to authorise removal or repositioning of apparatus (or extinguishment of a right for it) unless satisfied that the extinguishment or removal is necessary for the purpose of carrying out the development to which the order relates in accordance with section 138 of the Planning Act 2008. Justification will be needed to show that extinguishment or removal is necessary.</p>	<p>This Article only deals with apparatus positioned underneath streets which have been stopped up as a direct result of the Scheme pursuant to Article 17. The affected streets are listed in Schedule 4. The reference to Article 16 in Article 37(2) has been corrected to refer to Article 17.</p> <p>It protects the rights of the statutory undertaker where a street is stopped up and allows them to retain their apparatus with the same rights. The Applicant may request that the apparatus is moved, but the statutory undertaker must only do so if it has the power to place it in another position, the Applicant must also pay all costs relating to relocation.</p>
DCO.1.8	<p>Provide clarification of which undertaker will be consulted upon for each requirement set out in the dDCO.</p>	<p>Each requirement lists the relevant bodies to be consulted and a summary of the consultees listed in the latest dDCO submitted at Deadline 2 is set out below:</p> <p>Requirement 3: the relevant planning authority</p> <p>Requirement 4: the relevant planning authority, the local highway authority, the Environment Agency and the lead local flood authority</p> <p>Requirement 5: the relevant planning authority</p> <p>Requirement 6: the relevant planning authority and the Environment Agency</p> <p>Requirement 7: Natural England</p> <p>Requirement 8: the lead local flood authority and the Environment Agency</p> <p>Requirement 9: the relevant planning authority, Norfolk County Council Historic Strategy and Advice Team and Historic England</p>

		Requirement 10: the relevant highway authority Requirement 12: the relevant planning authority
DCO.1.9	The Environment Agency through written submission [RR-004] has requested modification of Requirement 6 and that they are added as a named consultee to Requirements 4 and 8. Can an update of the revised wording to be used be given?	The Applicant has made the necessary amendments to the version of the dDCO submitted at Deadline 2.
DCO.1.10	The Royal Mail [RR-022] have requested the addition of two requirements to the dDCO to enable the delivery of mail services throughout the construction period: 1. the DCO includes specific requirements that during the construction phase Royal Mail is consulted by Highways England or its contractors at least one month in advance on any proposed road closures / diversions / alternative access arrangements, hours of working, and on the content of the final CTMP. 2. the final CTMP includes a mechanism to inform major road users (including Royal Mail) about works affecting the local highways network (with particular regard to Royal Mail's distribution facilities near the DCO application boundary as identified above). Comment as to whether you consider these requirements are to be included and secured?	Detailed traffic modelling has been undertaken to forecast the impact of the Scheme as described in sections 4.2 to 4.11 of the Case for the Scheme (APP-125). This includes a forecast of traffic flows and speeds during the construction period. The impact on individual journeys made during the construction period will vary by time of day and depend upon the route taken. However, the modelling forecasts that the increase in delays will be very small across the majority of links in the network, whether on the A47 itself or on the surrounding local road network. It is therefore disproportionate to seek the inclusion of a requirement in circumstances where the risk and potential for impact has been assessed as being very small. Royal Mail has only indicated that there is the potential for an impact and has not substantiated its position with evidence of its own assessment or had regard to where mitigation will be provided in the Outline Traffic Management Plan (TMP) (APP-129). The Applicant will be required to comply with the mitigation secured in the Outline TMP and as such it is inappropriate to seek further commitments. However, the Outline TMP (APP-129) will be updated to include a requirement to provide advance notification to major road users in the vicinity of the Scheme, including Royal Mail. The notice period must be no less than 7 working days. Compliance with this plan is secured by Requirement 10 of the dDCO (APP-017).
DCO.1.11	The ExA notes that Cadent in their RR [RR-003] refers to low and medium pressure gas pipelines and associated apparatus located within the order limits which are affected by works proposed and for which the dDCO proposes two diversions referenced as Work No's. 40 and 46. Cadent is not satisfied that the dDCO includes adequate land rights for Work No. 40 (the diversion of a low pressure main) over plots 7/1a, 7/7b and 7/7d. The Applicant: Provide an update as to what land rights are to be included in the DCO to ensure that Cadent's statutory obligations can be maintained. Cadent: Can you provide an update of any agreement reached with the applicant.	Cadent's comments are noted and the Applicant will initiate discussions with Cadent to resolve this issue.
DCO.1.12	The draft DCO wording describes the Environmental Management Plan in terms of First, Second and Third Iterations. The applicant is requested to consider the justifications for that approach rather than Outline Environmental Management Plan and Environmental Management Plan.	Please see the response to GC1.12
DCO.2.1	The extent of any flexibility provided by the dDCO should be fully explained, such as the scope of maintenance works and ancillary works, limits of deviation and the ability (through tailpieces in requirements) of discharging authorities to authorise subsequent amendments. The preferred approach to limiting this flexibility is to limit the works (or amendments)	The Applicant has had regard to AN 15. Please also see the response to DCO 1.4 in relation to the definition of commence.

	<p>to those that would not give rise to any <u>materially new or materially different</u> environmental effects to those identified in the ES.</p> <p>The drafting which gives rise to an element of flexibility (or alternatives) should provide for unforeseen circumstances and define the scope of what is being authorised with sufficient precision. For example, the Secretary of State had to amend article 6 (Benefit of Order) of the National Grid (Richborough Connection project) Development Consent Order 2017 at decision stage to remove ambiguity (as later corrected by Richborough connection correction order).</p> <p>In relation to the flexibility to carry out advance works, any "carve out" from the definition of "commencement" should be fully justified and it should be demonstrated that such works would be <i>de minimis</i> and would not have environmental impacts which would need to be controlled by a requirement (see section 21 of Advice Note 15).</p> <p>The drafting of requirements should reflect sections 17 and 19 of Advice Note 15.</p>	
DCO.2.2	<p>The effect of the definition proposed may permit some works before the discharge of the requirements.</p> <p>Confirm whether you are concerned with any particular works that could be carried out prior to the discharge of requirements giving reasons inclusive of regard to works which could, or are, controlled by a requirement.</p>	
DCO.2.3	<p>The guidance in section 25 of Advice Note 15 should be followed and, if not already provided, additional information sought such as</p> <ul style="list-style-type: none"> • the purpose of the legislation/statutory provision • the persons/body having the power being disapplied • an explanation as to the effect of disapplication and whether any protective provisions or requirements are required to prevent any adverse impact arising as a result of disapplying the legislative controls • (by reference to section 120 of and Schedule 5 to the Planning Act 2008) how each disapplied provision constitutes a matter for which provision may be made in the DCO. <p>Where the consent falls within a schedule to the Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015 evidence will be required that the regulator has consented to removing the need for the consent in accordance with s.150 Planning Act 2008.</p>	<p>The Applicant confirms that none of the consents contained within Article 3 fall within Schedule 2 of the Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015.</p>
DCO.2.4	<p>Ensures drainage provision falls to the appropriate undertaker. Do you have any comments to make on the scope and extent of that power.</p>	<p>Article 4 clarifies the position in relation to drainage and confirms that any drainage works carried out as part of the Scheme do not affect the existing allocation of responsibility for maintenance of those drainage works as set out at paragraph 4.15 of the Explanatory Memorandum (APP-018)</p>
DCO.2.5	<p>This article is intended to allow development not authorised by the DCO to be carried out within the Order limits pursuant to planning permission. This would appear to obviate the need, in such circumstances, to apply to</p>	<p>This is not the intention of the Applicant and is not anticipated.</p> <p>The article is provided to give clarity as to how subsequent chapters in the planning history of distinct parts of the Order lands should be considered. It is possible that the Applicant may need to secure</p>

	change the DCO (through section 153 of the Planning Act 2008). Provide clarification/justification of this article.	planning permission for works that are outside of its permitted development rights but do not qualify as nationally significant infrastructure projects in the future. It is also possible that beneficial owners of Order land used temporarily by the Applicant during the construction period might later seek planning permission for the benefit of their land when possession is returned to them.
DCO.2.6	<p>This article (see art 10 (11)) is drafted so as to allow any transfer of benefit by the applicant (undertaker) to any other named person or category of person without the need for the Secretary of State's consent.</p> <p>Provide full justification as to why a transfer to such person is appropriate. Where the purpose of the provision is to enable such person(s) to undertake specific works authorised by the DCO the transfer of benefit should be restricted to those works. If the provision seeks to permit transfer of compulsory acquisition powers the applicant should provide evidence to satisfy the Secretary of State that such person has sufficient funds to meet the compensation costs of the acquisition.</p> <p>See also references to arbitration in this article in relation to Written Question DCO.1.32.</p>	<p>Article 10(11), which provides the ability to transfer the benefit to the relevant named statutory undertakers, expressly limits this to specific works.</p> <p>The undertakers listed are those that have utilities that are affected by the Scheme and would benefit from the diverted services, and thus from the DCO. As this need and these parties are known from the outset, provision to transfer the benefit of the order can be established now rather than it being necessary to seek consent from the SoS at a later date. The companies listed all operate in highly regulated areas which will ensure that they comply with all relevant requirements. All works undertaken by the companies in connection with the Scheme will be funded by the Applicant. It is therefore not necessary to demonstrate that the companies have sufficient funds to meet any costs.</p>
DCO.2.7	Variation of the application of provisions in these articles is possible under any enactment and arguably this has the effect of disapplying section 153 which provides a procedure for changing a DCO. There may be precedent in other made DCOs for the same drafting, but it should be clear under which section 120 power these articles are made and if necessary, justification provided as to why the provisions are necessary or expedient to give full effect to any other provision of the DCO.	<p>This is not the intention of the Applicant and is not anticipated.</p> <p>Article 12 confirms that any highways altered or diverted under the dDCO which are not trunk roads will be maintained by the local highway authority.</p> <p>The wording in Article 13(5) and 19(4) is therefore included to provide clarity to the local highway authority. The wording confirms the local highway authority may subsequently vary or revoke the classifications and other traffic regulation measures imposed on these non-trunk roads by the dDCO if deemed necessary in the future.</p> <p>It would not be appropriate or proportionate for the local highway authority to have to seek a variation to the dDCO pursuant to section 153 in order to change the classification of a road or amend a traffic regulation measure, which forms part of the local highway network.</p>
DCO.2.8	<p>i) This is a wide power that can be applied to <i>any</i> street within the Order limits (albeit only with the consent of the street authority).</p> <p>Notwithstanding other precedents, provide justification as to why the power is appropriate and proportionate having regard to the impacts on pedestrians and others of authorising temporary working sites in these streets. Consideration should be given as to whether or not this power should be limited to identified streets.</p> <p>ii) With respect to authorising alteration etc. of <u>any</u> street within the Order limits and any street having a junction with any street within the order limits. It should be clear why this power is necessary, and consideration given to whether or not it should be limited to identified streets. Provide clarification.</p>	<p>i) As the detailed design of the Scheme has not yet been carried out, it is necessary to maintain a sufficient degree of flexibility so that the Scheme can proceed. The powers in Article 16 provide that flexibility. Article 16 broadly reflects the powers of a highway authority to make a temporary traffic regulation order under the Road Traffic Regulation Act 1984.</p> <p>The right to exercise these powers is not unfettered, as such changes must be "for the purposes of carrying out the authorised development". Moreover, where the undertaker is not the street authority of a street, the consent of the street authority is required before such changes are made, reasonable access must be provided for pedestrian access to affected premises and compensation can be claimed by any person suffering a loss of a private right of way.</p> <p>In light of the above, the power is therefore considered to be necessary, reasonable and proportionate, and the Applicant has not sought to limit the power to specified streets.</p> <p>ii) The Scheme is a highway NSIP and impacts a large number of streets in comparison to other types of NSIPs so the power is not restricted to a specific list of streets set out in a Schedule.</p> <p>As the detailed design of the Scheme has not yet been carried out, it is necessary to maintain a sufficient degree of flexibility so that the Scheme can proceed.</p> <p>Article 14 broadly reflects the very broad powers of a highway authority to make changes to a highway as they see fit and without consultation with third parties. For example Section 75 of the Highways Act 1980 allows a highway authority to vary the relative widths of the carriageway and footway; section 65 allows a highway authority to alter a cycle track; and section 77 allows a highway authority to raise or lower the level of a highway.</p>

		The right to exercise these powers is not unfettered, as such changes must be "for the purposes of constructing and maintaining the authorised development". Moreover, where the undertaker is not the street authority of a street the consent of the street authority is required before such changes are made. In light of the above, the power is therefore considered to be necessary, reasonable and proportionate, and the applicant has not sought to limit the power to specified streets.
DCO.2.9	Notwithstanding other precedents justify why this power is appropriate and proportionate having regard to the impacts on pedestrians and others of authorising temporary working sites in these streets.	<p>Due to the nature of the Scheme, some permanent alterations to existing highways and private means of access are required to deliver the Scheme. Without the permanent changes set out in Schedule 4 of the dDCO (APP-017) the Scheme cannot be delivered. Where possible the Applicant has provided a substitute for the highway or private means of access and this must be provided before the existing provision is stopped up. Where the provision of a substitute is not possible, Article 17(4) imposes certain conditions on the undertaker.</p> <p>Part 1 of Schedule 4 sets out the two highways which are being stopped up with no substitute; these sections of highway are no longer needed due to the design of the Scheme.</p> <p>Part 4 of Schedule 4 sets out the three private means of access which are being stopped up. These provide access to agricultural land which is required for the Scheme and will not be retained by the landowners.</p> <p>This power is essential for the delivery of the Scheme and is deemed to be proportionate.</p>
DCO.2.10	The applicant should be aware of and mindful of section 146 of the Planning Act 2008.	The Applicant notes section 146 of the Planning Act 2008.
DCO.2.11	Compulsory acquisition of an interest in land held <u>by</u> or on behalf of the Crown cannot not be authorised through the DCO. Consent under section 135 (1) and (2) should also be obtained from the Crown authority.	The Applicant is in discussions with the GLD regarding s135 consent.
DCO.2.12	<p>Temporary possession is not itself compulsory acquisition.</p> <p>Articles giving temporary possession powers should be considered carefully to check whether or not they allow temporary possession of any land within the Order limits, regardless of whether or not it is listed in any Schedule to the DCO which details specific plots over which temporary possession may be taken for specific purposes listed in that Schedule. If they do, then the applicant should justify why those wider powers (which also allow temporary possession of land not listed in that Schedule) are necessary and appropriate and explain what steps they have taken to alert all landowners, occupiers, etc. within the Order limits to this possibility.</p> <p>If not already present, consideration should also be given to adding in a provision obliging the applicant (undertaker) to remove from such land (on ceasing to occupy it temporarily) any equipment, vehicles or temporary works they carry out on it (save for rebuilding demolished buildings under powers given by the DCO), unless, before ceasing to occupy temporarily, they have implemented any separate power under the DCO to compulsorily acquire it.</p> <p>Given the parliamentary approval to the temporary possession regime under the Neighbourhood Planning Act 2017 ('NPA 2017'), which were subject to consultation and debate before being enacted, should any provisions relating to notices/counter notices which do not reflect the NPA 2017 proposed regime (not yet in force) be modified to more closely reflect the incoming statutory regime where possible? As examples:</p> <ul style="list-style-type: none"> The notice period that will be required under the NPA 2017 Act is 3 months, 	<p>This article provides that Highways England may take temporary possession of land within the Order limits, as required for the purpose of maintaining the authorised development, at any time within a period of five years from the date on which that part of the authorised development is first opened for use. It would be inappropriate in those circumstances to seek to acquire any interest permanently.</p> <p>This article was included as a model provision because it was deemed a necessary and proportionate power to ensure nationally significant projects once delivered can have any initial defects remedied and is distinct from the power in Article 34 for the construction of the development.</p> <p>These powers will only be exercised as a last resort where landowner consent for temporary access is not forthcoming.</p> <p>Article 35(6) requires the removal of temporary works and restoration of the land to the reasonable satisfaction of the owners.</p> <p>The 28 day period was included in the Model Provisions and numerous other granted development consent orders including The A63 (Castle Street Improvement, Hull) Development Consent Order 2020; The A1 Birtley to Coal House Development Consent Order 2021; The A19 Downhill Lane Junction Development Consent Order 2020; and The A303 Sparkford to Ilchester Dualling Development Consent Order 2021.</p> <p>Although the notice period of 28 days is less than that envisaged by the Neighbourhood Planning Act 2017 (the provisions of which are not yet in force), the Applicant needs to ensure that the Scheme can be adequately maintained and often remedial works to the strategic highway network need to be carried out efficiently and expeditiously to ensure the safety of road users. Therefore, the 28 days period is considered appropriate and proportionate.</p> <p>Article 35(5) ensures that the Applicant may only remain in possession of the land for so as long is reasonably necessary to carry out the maintenance works for which possession was taken, so it is not</p>

	<p>substantially longer than the 28-day required under article 35. Other than prior precedent, what is the justification for only requiring 28 days' notice in this case?</p> <ul style="list-style-type: none"> Under the NPA 2017, the notice would also have to state the period for which the acquiring authority is to take possession. Should such a requirement be included in this case? Powers of temporary possession are sometimes said to be justified because they are in the interests of landowners, whose land would not then need to be acquired permanently. The NPA 2017 Act provisions include the ability to serve a counter-notice objecting to the proposed temporary possession so that the landowner would have the option to choose whether temporary possession or permanent acquisition was desirable. Should this article make some such provision – whether or not in the form in the NPA 2017? 	<p>considered necessary that the notice contains a period.</p> <p>The provisions relating to temporary possession in the NPA 2017 have not yet come into force and regulations required to provide more detail on the operation of the regime have not yet been made it is not considered appropriate to follow that approach. Due to the uncertainty in relation to the detail around that regime, the Applicant has chosen to adopt the process available under the 2008 Act and has adopted the wording set out in the model provisions. The Applicant considers that if Parliament wished to apply the NPA 2017 temporary possession regime to DCO projects, it could have done so by effecting amendments to PART VII of the Planning Act 2008. It has not done so, and in the absence of the clarity this would provide, the Applicant proposes to proceed under the existing 2008 Act procedure.</p>
DCO.2.13	<p>As currently drafted this article in addition to giving the Applicant the power to enter, survey and investigate land within the Order limits it extends to land “<i>which may be affected by the authorised development</i>”. Can you:</p> <ol style="list-style-type: none"> Clarify which land outside the Order limits would likely to be affected. Further justify the need and extent of this power. 	<p>Within Article 22(1) the broad power is sought because the Applicant anticipates that surveys outside of Order lands may be required for ecological purposes. This would particularly be in regard to pre-commencement surveys for wildlife, which is protected under the Wildlife and Countryside Act 1981.</p> <p>It may also be necessary to carry out pre-commencement noise surveys on land outside of the Order limits in relation to providing evidence for dealing with claims for compensation under Part 1 of the Land Compensation Act 1973.</p>
DCO.2.14	<p>Noting the recent request for more information on A63 Castle Street where the Secretary of State expressed that he was concerned that the loss of trees is limited to those included within the Environmental Statement, and the final drafting of art 35 of the <i>A63 (Castle Street Improvement, Hull) Development Consent Order 2020</i>, the ExA may wish to ask the applicant to justify the powers provided by the current drafting, or to consider alternative drafting that would restrict the loss of trees only to those included in the environmental statement.</p>	
DCO.2.15	<p>Are the controls on issues related to the forms of potential nuisances under s 79 (1) of the Environmental Protection Act 1990 elsewhere in the DCO sufficient to justify the defence being provided by this article to statutory nuisance claims?</p> <p>This article also sometimes refers to legislation that has been repealed – e.g. s65 Control of Pollution Act 1974. It should refer to extant legislation only.</p>	<p>This Statement concludes that, with mitigation measures in place, none of the statutory nuisances identified under Section 79(1) of the Environmental Protection Act 1990 are predicted to arise on this Scheme. On that basis the inclusion of the defence is justified.</p> <p>Article 43 of the dDCO (APP-017) refers to Sections 60 and 61 of the Control of Pollution Act 1974 and these two sections are still in force and have not been repealed.</p>
DCO.2.16	<p>Are the Relevant Planning Authorities satisfied with the defence to proceedings in respect of statutory noise nuisance and, if not, what alternative wording would they suggest?</p>	
DCO.2.17	<p>Dealing with appeals under s61 of the Control of Pollution Act 1974. This element should be reviewed by the applicant and comments are invited on amending the provision. The ExA is seeking further justification and clarification as to why the appeal mechanism should be included within the DCO when standalone legislation already can facilitate appeals if required?</p>	<p>The intention of this article is to provide a swift appeal process in circumstances where a local authority issues a notice under section 60, or does not grant consent or grants conditional consent under section 61, of the Control of Pollution Act 1974. Its aim is to streamline the appeal process, thereby minimising the potential for unnecessary delay to the scheme. It is felt appropriate to provide a modern mechanism for this process, to avoid placing a further burden on the Magistrates Court. It may also be that the Magistrates Court is not be able to provide listings for appeals within a timeframe that does not impact on the scheme timetable.</p> <p>This article was not included in the model provisions but was included in the A14 Cambridge to Huntingdon Improvement Scheme Development Consent Order 2016 (2016 No. 547) as article 44. It has also been included in other, non-highway orders. See for instance paragraph 4 of</p>

		Schedule 17 to The Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014 No. 2384)
DCO.2.18	<p>It is unlikely that a consenting Secretary of State will allow arbitration provision wording to apply arbitration to decisions he/she,) may have to make on future consents or approvals within their remit.</p> <p>By way of example: The Secretary of State for BEIS included the following drafting in the arbitration article in the Norfolk Vanguard Offshore Windfarm DCO and the draft Hornsea Three Offshore Windfarm DCO (published with a minded to approve decision) to remove any doubt about the application of arbitration to decisions of the Secretary of State and the MMO under the DCO: <i>Any matter for which the consent or approval of the Secretary of State or the Marine Management Organisation is required under any provision of this Order shall not be subject to arbitration.</i></p> <p>The Secretary of State for BEIS also agreed with the ExA recommendation to remove reference to arbitration in the transfer of the benefit article and the deemed marine licences (DMLs) in the Hornsea and Norfolk Vanguard DCOs. The Hornsea ExA recommendation report at 20.5.9 details the reasons for removal from the transfer of benefit article, and at 20.5.17 – 20.5.24 regarding removal from the DMLs.</p> <p>It should also be noted that the Secretary of State removed the following from the arbitration clause in both DCOs: <i>Should the Secretary of State fail to make an appointment under paragraph within 14 days of a referral, the referring party may refer to the Centre for Effective Dispute Resolution for appointment of an arbitrator.</i></p>	<p>The arbitration wording, in Article 51 of the dDCO (APP-017), is consistent with the wording used across other highway DCOs. It also follows wording used in the model provisions and is appropriate to include as it provides for a mechanism for resolution of any disagreement that might arise between parties as to the future interpretation or implementation of the provisions of the DCO.</p> <p>The Applicant is considering the drafting in Article 10(6) further and will confirm whether any changes are proposed at Deadline 3.</p>
DCO.2.19	Should the dDCO include an article to deal with the removal of human remains (see article 17 of the model provisions)? If not, why not and if it should amend the next draft to include an appropriately worded article.	The environmental assessments and archaeological surveys carried out have not revealed a risk of uncovering human remains in the Order limits, therefore this power is not deemed necessary to facilitate the delivery of the Scheme.
DCO.2.20	██████████ provides standard drafting for articles dealing with discharge of requirements. If this guidance hasn't been followed justification should be provided as to why this is the case. See 13 (2 –(3)) relating to deemed discharge.	The Applicant has had regard to Advice Note 15.
DCO.2.21	Confirm that the streets, bridleways, cycle tracks and footpaths listed in these schedules accurately reflect your understanding of the streets, bridleways, cycle tracks and footpaths that would be affected as a result of the proposed development and if not, why not?	
DCO.2.22	Paragraph 10. The title should read Upper Tribunal.	The dDCO has been amended accordingly.
DCO.3.1	Draft Development Consent Order (DCO) [APP-017] Requirement 4 specifies the preparation of an Environmental Management Plan (EMP) and associated documents. The EMP being a mechanism to ensure the delivery of mitigation measures during the construction phase, as outlined in the Environmental Statement, including those in Chapter 13 Road drainage and the water environment.	<p>Please refer to response GC 1.12</p> <p>The Environment Agency will be a named consultee under dDCO (APP-017) Requirement 4 'Environmental Management Plan' and will be able to review and comment on the detailed design and through the application of permits.</p>

	<p>Justify why a streamlined outline EMP and final EMP approach cannot and should not be undertaken to secure the EMP. If it cannot be justified reconsider the approach.</p> <p>Named consultee requirements for the Environment Agency should also be referred to.</p>	
DCO.3.2	<p>As drafted, this appears to give the option of using an 'other recognised code of good practice' (which is not defined) as an alternative to British Standards which may not be desirable.</p> <p>Further justify/clarify the approach to be taken.</p>	<p>Other recognised codes of good practice have been included in the drafting in case "British Standards" ever cease to exist. This ensures the landscaping can be delivered in compliance with Requirement 5 of the dDCO (APP-017) regardless of any future changes to the relevant standards.</p>
DCO.3.3	<p>Requirement 6 covering contaminated land and groundwater matters.</p> <p>The Environment Agency advise that the proposed wording should be amended in so far as: the determination of the need for remediation in Part (2) should be based on a consideration of the risk assessment by all parties, rather than determined solely by the undertaker. Additionally, and also in respect of Part (2), remedial measures should be taken to render the land fit for its intended purpose and to prevent any impacts on controlled waters.</p> <p>Can the applicant comment on this approach, detailing any agreement to altering the dDCO with revised worded to that currently advanced?</p>	<p>The dDCO has been updated to reflect comments from the Environment Agency. Please see the response to RR-004.4 in the Applicant's comments on relevant representations (REP1-004).</p>
DCO.3.4	<p>Requirement 8 concerning surface and foul water drainage.</p> <p>Work on the detailed drainage design is specified as ongoing. The Environment Agency should therefore be a named consultee in respect of Requirement 8 for the approval of any surface and foul water drainage system.</p> <p>Confirm and provide necessary amendment.</p>	<p>The dDCO has been updated to reflect comments from the Environment Agency. Please see the response to RR-004.6 in the Applicant's comments on relevant representations (REP1-004).</p>
DCO.3.5	<p>Requirement 10 (Traffic management) provides that no part of the authorised development comprising the construction of the A11/A47 Link Road (Work No. 24) is to commence until a Traffic Management Plan has been prepared and approved by the Secretary of State following consultation with the relevant highway authority.</p> <p>Given the traffic management concerns expressed by a number of parties through Relevant Representations the ExA requests confirmation of when updated Traffic Management Plan information will be submitted to the examination for consideration?</p>	<p>The Applicant has had regard to the relevant representations made regarding traffic management and is considering amendments to the outline Traffic Management Plan (APP-129).</p> <p>However, the full Traffic Management Plan cannot be prepared until the detailed design has been finalised. This will be done post consent, the requirement to do so is set out in Requirement 10 of the dDCO (APP-017) and the Secretary of State must approve this plan following consultation with the relevant highway authority.</p>
DCO.3.6	<p>Requirement 17 referring to details of consultation, states that parties will be given not less than 10 business days to respond to any consultation.</p> <p>i) Provide comments on consideration of allowing greater flexibility on the period for consultation responses. For example, the Environment Agency have referred to 21 business days, to allow consultees enough time to provide a comprehensive response.</p>	<p>The Applicant has considered the comments made and amended the dDCO to provide 15 business days rather than 10 business days.</p>

	ii) Provide any suggested amendment to the dDCO wording.	
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11. FLOOD RISK AND DRAINAGE

Ref	ExQ1 Question	Applicant's Comment
FRD.1.1	<p>In respect of fluvial flood risk, paragraph 13.9.40 of Chapter 13 of the ES [APP-50] states that current assessments have shown that there is an increase in flood risk to a residential property of up to 15mm, and that property level protection is proposed as mitigation. It is highlighted that further survey work and flood modelling is being carried out to confirm the flood risk impacts and inform the required mitigation.</p> <p>i) Provide an update on the timing of the survey work to be provided to the examination. Detail how will the EMP secure the implementation of potential property level protection/flood risk mitigation measures.</p>	<p>The collection of additional survey and modelling to better predict the flood risk impacts in the vicinity of Intwood Road has been undertaken and the Applicant can confirm that the updated flood modelling predicts the impact is negligible at this property. The revised model and the updated hydraulic modelling report (Annex B of APP-111) was reissued to the Environment Agency on 15 July 2021. The Flood Risk Assessment (APP-111) will be updated to reflect the revised modelling output and will be sent to Norfolk County Council and the Environment Agency for review and comment. A revised Flood Risk Assessment (APP-111) is being prepared and will be submitted to the ExA at Deadline 4.</p>
FRD.1.2	<p>ES Chapter 13 [APP-050] Table 13.8, together with residual impacts after mitigation. The mitigation measures described in Table 13.8 are discussed in detail in Section 13.9.</p> <p>The effects of the Proposed Development on the conveyance of flow in the Cantley Stream Floodplain are described as ranging from moderate beneficial to moderate adverse depending on the location.</p> <p>The Applicant is asked to specify the locations that are predicted to experience moderate effects.</p>	<p>Following the collection of additional survey and modelling to better predict the flood risk impacts in the vicinity of Intwood Road, the Applicant can confirm that the updated flood modelling predicts the impact is negligible. Property level protection for the property in the vicinity of Intwood Road will no longer be required.</p>
FRD.1.3	<p>The ExA notes that ES Chapter 13, Section 13.5 [APP-050] describes assessment assumptions and limitations. Paragraph 13.5.2 explains that the design has evolved since the ground investigation was conducted, and that supplementary ground investigations and surveys are required to confirm construction and operation risks, particularly in relation to the Wards Wood underpass, works adjacent to the Cantley Stream (including the diversion) and the use of unlined road drainage.</p> <p>Section 13.5 describes outstanding survey work including but not limited to discharge locations, groundwater levels within the Chalk aquifer and on existing soakaways.</p> <p>The Applicant is asked to identify and provide an update as to the progress of all outstanding survey and assessment work and, as appropriate, either provide updated assessments or justification as to why it is considered that there would be no change to the current assessments.</p>	<p>Please see response to GC.4.5</p>
FRD.1.4	<p>Can the Applicant explain if and how Highways England's drainage renewal project for the Thickthorn junction referenced in FRA Appendix 13.1 paragraph 5.2.4 [APP-111] has been considered in the assessment of cumulative effects.</p>	<p>The drainage renewal project refers to ongoing network maintenance by National Highways. The drainage maintenance required at Thickthorn Junction does not require planning permission and therefore has not been included in the cumulative assessment in ES Chapter 15 (APP-052).</p>
FRD.1.5	<p>The Applicant is asked to identify all outstanding survey work in relation to flooding at Crossing Cottage and to provide a timeline for when this work will be completed and how it will be made available to the Examination. Can the Applicant explain how, in the absence of this data, the worstcase scenario in the ES has taken into account the final mitigation requirements? The Applicant should also explain how the implementation of property level protection would be secured.</p>	<p>Following the collection of additional survey and modelling to better predict the flood risk impacts in the vicinity of Intwood Road, the Applicant can confirm that the updated flood modelling predicts the impact is negligible at this property. The revised model and the updated hydraulic modelling report (Annex B of APP-111) was reissued to the Environment Agency on 15 July 2021. The Flood Risk Assessment (APP-111) will be updated to reflect the revised modelling output and will be sent to Norfolk County Council and the Environment Agency for review and comment. A revised Flood Risk Assessment (APP-111) is being prepared and will be submitted to the ExA at Deadline 4.</p>

FRD.1.6	<p>i) Can the Applicant confirm whether the supplementary ground investigation which was due to commence in March 2021 has now been completed and if so, provide it to the Examination? The Applicant is also asked to confirm whether this information affects the ES conclusions in respect of likely significant effects.</p> <p>The Applicant is asked to provide an outline version of the water monitoring and management plan.</p>	<p>The supplementary GI was carried out between 19 April and 18 July 2021 and the factual report produced is in the process of being analysed to determine if the outcome of the environmental assessment contained in ES Chapter 9, Geology & Soils (APP-046) changes based on the additional information available. An update will be provided for Deadline 4.. The Applicant notes there are still ten months of preconstruction water monitoring left to complete</p> <p>The individual Management Plans referenced in the EMP (APP-128) are produced during the detailed design and will not be produced at this stage. The commitment to produce the EMP is detailed in dDCO Requirement 4, with the commitment to the detailed design contained in dDCO Requirement 3.</p>
FRD.1.7	<p>i) In respect of Section 13.8 of APP-50 and potential impacts during construction, in the event that HDD will be used the Environment Agency has indicated that a prior assessment of the strata will be required.</p> <p>Confirm that it is your intention to undertake this assessment work as necessary and provide an indication of when this would be completed.</p> <p>ii) The Applicant is asked to confirm that there would be no discharges in areas where there is less than 1.2m between the feature and the groundwater table, and to comment on whether or not a thickness of 2-5m as recommended by the EA would be achievable. If not please provide justification.</p>	<p>i) The first iteration of the EMP (APP-128) will be updated to include commitments to undertake the necessary assessment work of strata HDD, which will be updated and submitted at Deadline 4.</p> <p>ii) Drainage (specifically discharge to groundwater) is to be reviewed at detailed design stage, and the EA's comments of a minimum unsaturated zone of 1.2m will be adopted. Where the unsaturated zone is less than 5m, these areas will be discussed further with the Environment Agency. A revised drainage strategy report (or an addendum) will be provided for review by the Environment Agency under Requirement 4 'Environmental Management Plan' (APP-128).</p>
FRD.1.8	<p>Section 4.4.2 of the FRA [APP-111] states "Agreement that the proposed new larger culvert beneath Cantley Lane removes the throttling effect on flows / levels and, due to the negligible changes in downstream flood risk, removes the requirement to provide any compensatory flood storage". The EA agree that no compensatory storage will be required, providing that further assessments continue to show that the project has no significant adverse impacts on flood risk. In their RR the EA have stated that they only agree that no compensatory storage would be required providing that further assessments continue to show that the project has no significant adverse impacts on flood risk.</p> <p>i) Can the Applicant confirm that they are in agreement with the EA in that compensatory flood storage may remain a requirement where further assessment work indicates that the Proposed Development may have significant adverse impacts on flood risk.</p> <p>ii) The EA have highlighted in their RR that the dewatering exemptions noted in ES Table 4-1, and elsewhere in the ES, are only applicable if the works will take less than 6 months. For works over a longer time period, an abstraction licence would be required for any dewatering at rates over 20 m3/d. The Applicant is asked to confirm whether or not an application for an abstraction licence would be required to be made.</p>	<p>i) The Applicant is working with the Environment Agency to address any comments raised. Following the collection of additional survey and modelling to better predict the flood risk impacts in the vicinity of Intwood Road, the Applicant can confirm that the updated flood modelling predicts the impact is negligible at this property. The revised model and the updated hydraulic modelling report (Annex B of APP-111) was reissued to the Environment Agency on 15 July 2021. The Flood Risk Assessment (APP-111) will be updated to reflect the revised modelling output and will be sent to Norfolk County Council and the Environment Agency for review and comment. A revised Flood Risk Assessment has been prepared and will be submitted to the ExA at Deadline 4.</p> <p>ii) The information collected as part of supplementary ground investigation, together with additional groundwater level monitoring, will be used to determine whether there is a requirement for an application for a dewatering abstraction licence. The supplementary ground investigation and the results are being analysed. There is ongoing water monitoring on site and the data will be reviewed monthly for a 12 month period. Additional groundwater level monitoring is also ongoing. An assessment of the requirement for dewatering will be undertaken at detailed design stage.</p>

12. HISTORIC ENVIRONMENT

Ref	ExQ1 Question	Applicant's Comment
HE.1.1	<p>The Applicant:</p> <p>Section 6.7.16 of the Chapter 6.1 of the ES [APP-043] indicates that the trial trenching proposed adjacent to scheduled monument 'Two tumuli in Big Wood' was not carried out.</p>	<p>i) Trial trenching initially planned adjacent to the scheduled monument could not be undertaken in 2020 due to the presence of dense vegetation. Supplementary trial trenching is proposed to commence in Q4 2021. This will include a series of hand dug trial pits in the area adjacent to the scheduled monument. Contact will be made with the appropriate authorities</p>

<p>i) Does the Applicant intend to hold further discussions about the proposed trial trenching adjacent to the scheduled monument with Historic England and/or Norfolk County Council? If so, provide an update on timings alongside the outcomes.</p> <p>ii) Clarify the level of harm that would be evident to the monuments setting/integrity during construction phases and post following completion inclusive of artificial lighting considerations and signpost the specific public benefits of the proposed scheme against any harm.</p> <p>iii) Chapter 6 of the ES identifies a wide range of non-designated heritage assets within the DCO application boundary and wider study area. Detail what further field survey is to be undertaken to fully establish the archaeological potential of the proposed development area. Alongside the mechanism for securing that provision.</p> <p>iv) A 'Compound/Material Storage Area' is proposed to the southeast of the existing A11 that does not appear to be included in the archaeological surveys. Can the applicant clarify the potential impact in this area, and whether further archaeological surveys are to be advanced?</p> <p>Historic England/ South Norfolk District Council/Norfolk County Council:</p> <p>i) Can you detail what additional heritage/archaeological impact surveys (if any) should be required of the applicant, in your view, together with their specific scope and content. Please also detail any other information you deem to be required giving specific reasons for that inclusion.</p> <p>ii) Set out any suggested amended requirement wording to the dDCO to ensure appropriate mitigation/consultation is secured, or by what other means you consider appropriate.</p>	<p>ii) ES Chapter 6: Cultural Heritage (APP-043) has assessed the potential impact of the Scheme on all heritage assets, including the scheduled monument 'Two Tumuli in Big Wood' as a result of both: reversible and temporary construction phase impacts (Part 6.8.3 - noise generated by construction work, movement of construction plant, siting of construction compounds, including the introduction of noise and lighting) and potential impact on the setting of heritage assets; and also operational phase impacts (Part 6.8.11 - the appearance of the Scheme), including landscaping works and presence of structures and signage, changes to traffic movements, noise, pollution, light and movement, and new road lighting) with the potential to alter the setting of heritage assets.</p> <p>Lighting levels will be reduced as far as possible from the baseline case, or else remain the same, in order to avoid any impact on the nearby designated assets and the historic landscape as a result of the Scheme. For 'Two Tumuli in Big Wood', therefore, as per all heritage assets assessed across the scheme study area, night time lighting levels will remain the same as current levels with no adverse effects predicted.</p> <p>Public benefits in relation to the scheduled monument, as cited in Sections 6.3.7 and 6.3.9 of ES Chapter 6 (APP-043), comprise an improved understanding of the context of the barrows through excavation and introduction of a new viewpoint and heritage information board. Whilst there are no mitigation measures available to fully ameliorate the permanent operational impact of the Scheme upon the scheduled monument as a result of development within its setting, these measures will enhance everyday public awareness and appreciation of a scheduled monument which is currently inaccessible to the public. The final assessment of harm and the weighting of public benefits against that harm is the prerogative of the decision maker</p> <p>iii) Archaeological trial trenching targeted to areas of potential identified through desk-based assessment and upon the results of geophysical survey to identify any areas of hitherto unknown potential has already been implemented as part of the environmental assessment, ES Appendix 6.2 (APP-078) and ES Appendix 6.3 (APP-079). The results of site visits, geophysical survey and trial trenching have been used to inform the assessment of archaeological potential. Further trial trenching initially planned adjacent to the scheduled monument could not be undertaken in 2020 due to the presence of dense vegetation. Supplementary trial trenching is proposed to commence in Q4 2021. This will include a series of hand dug trial pits in the area adjacent to the scheduled monument. The supplementary archaeological trenching is detailed in the written scheme of investigation (WSI) which is secured via Requirement 9 of the dDCO along with being included in Item CH5 of Table 3-1 (REAC) included in the EMP (APP-128) secured via Requirement 4 of the dDCO.</p> <p>iv) Supplementary archaeological trial trenching is proposed to be commenced Q4 2021. The supplementary survey covers areas that were not surveyed during the 2020 trial trenching.</p> <p>In consultation with the county archaeologist, trial trenching only is proposed at the location of the Compound/Material Storage Area shown southeast of the existing A11 on Figure 2.1 (APP-054)</p>
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13. NOISE, VIBRATION AND LIGHT

Ref	ExQ1 Question	Applicant's Comment
NV.1.1	<p>ES Chapter 11 concerning Noise and Vibration [APP-048] at paragraph 11.4.5 states that the use of baseline noise survey data obtained in May 2018 was reviewed and agreed to be valid for this assessment by South Norfolk Council. ES Chapter 4 paragraph 4.4.3 [APP-041] states that existing traffic data from 2015 was used to inform the environmental baseline for the purposes of the Air Quality (model verification), Noise and Vibration, Population and Human Health, Road Drainage and Water Environment and Climate assessments.</p> <p>i) Can the Applicant provide robust justification as to why 2015 baseline traffic data remains valid for the purposes of an application made in 2021?</p>	<p>i) Please see AQ.1.2 for response to baseline question.</p> <p>In addition, ES Chapter 11 (APP-048) presents an assessment of the noise and vibration effects that are predicted due to occur as a result of the Scheme. The assessment of construction noise effects includes consideration of environmental noise conditions that would be present in the baseline scenario without the Scheme, determined via a noise survey or through road traffic noise predictions. The assessment of operational noise effects includes consideration of environmental noise conditions that would be expected to be present in the Opening Year in the Do Minimum Scenario (i.e. without the Proposed Scheme, accounting for any traffic flow changes or committed developments occurring between the baseline year and the Opening Year).</p> <p>As part of the EIA process, an environmental noise survey was carried out in May 2018, as described within ES Appendix 11.3 (APP-109). The results of the survey, in combination with road traffic noise level predictions for the Do Minimum Opening Year scenario (DMOY),</p>

	<p>Do any Interested Parties have comments in this regard? If so, make comment.</p>	<p>were used to determine baseline conditions and construction noise effect levels (LOAELs and SOAEL*s). ES Appendix 11.4 (APP-109) presents a comparison of measured road traffic noise levels with predicted road traffic noise levels for the DMOY scenario. Explanation of the differences between these values was provided and it was concluded that the DMOY noise model predictions were robust for representing the level of noise at each receptor without the Scheme.</p>
<p>NV.1.2</p>	<p>ES Chapter 11 [APP-048] paragraph 11.6.3 states that for the construction vibration assessment DMRB LA 111 notes that a study area encompassing a 100m area from vibration-generating activity is normally sufficient. Can the Applicant provide further justification for the 30m study area used in the assessment.</p>	<p>ES Chapter 11 (APP-048) states the reasoning for the use of a smaller study area for the consideration of construction vibration within section 11.6.3, 11.8.11 and Table 11-6. Based on the expected construction working methods, construction vibration has the potential to result in significant effects in terms of human perception at a distance of 30m from the works or less. Beyond this distance, historical field measurements of construction vibration show that peak particle velocities from the expected construction working methods would be below 1 mm/s and below the threshold for a significant effect.</p> <p>The LOAEL and SOAEL values for construction are defined as per DMRB LA111 Table 3.31. These values are the same at all receptors (since they based on human perception thresholds for vibration). Therefore, where significant effects due to construction vibration are avoided at receptors within 30m of the works, it follows that significant effects at more distant receptors will not occur.</p>
<p>NV.1.3</p>	<p>ES Chapter 11 [APP-048] paragraph 11.9.11 states that further detailed assessments of construction vibration shall be undertaken by the Principal Contractor demonstrating how significant effects due to vibration are avoided.</p> <p>i) Can the Applicant explain how this information and potential resulting mitigation to reduce significant residual effects can be assured in the absence of detailing mitigation in the ES and securing them in the dDCO.</p> <p>Tables 11-10 and Table 11-11 in ES Chapter 11 [APP-048] present predictions for operational short term and long-term changes in traffic noise levels arising from the Proposed Development, however it is unclear if this includes predictions for weekend noise levels.</p> <p>ii) Can the Applicant explain whether weekend noise levels have been factored into the assessment of effects?</p>	<p>i) The dDCO sets out Requirement 4 stating that no development is to commence until an Environmental Management Plan (EMP) (Second Iteration) substantially in accordance with the EMP (First Iteration) (APP-128) is submitted to and approved by the Secretary of State following consultation with the relevant planning authority and local highway authority. Requirement 4 of the dDCO also states that the Scheme must be constructed, operated and maintained in accordance with the EMP (APP-128).</p> <p>The submitted EMP sets out commitments relating to noise and vibration in Table 3-1 (REAC). Reference N1 requires that construction noise is limited to less than the construction noise SOAEL. Furthermore, where there is the risk of the SOAEL being exceeded, monitoring and detailed assessments by the Contractor will be required, to be discussed and agreed with the local planning authority (LPA). In relation to work outside of normal construction hours, the practices required to minimise construction noise impacts are to be determined in discussion with the LPA. This could include a prior consent application under Section 61 of the Control of Pollution Act 1974. The above process, as necessary under Requirement 4, will ensure that appropriate means of mitigating any significant residual construction noise effects will be identified prior to works commencing.</p> <p>ii) ES Chapter 11 Tables 11-10 and Table 11-11 (APP-048) present the number of receptors expected to be subject to each change in road traffic noise level category. These changes are determined through road traffic noise predictions for each scenario (Do Minimum, Do Something) for each year (Opening Year, Future Year) in accordance with the Design Manual for Roads and Bridges LA111: Noise and Vibration, Revision 2. Road traffic noise level predictions are carried out in accordance with the Calculation of Road Traffic Noise (CRTN, HMSO, 1988). Road traffic noise level predictions are carried out for the annual average weekly traffic flows (AAWT) using annual average weekly traffic parameters and over the period from 06:00 to 24:00. The above guidance does not allow for weekend operational noise changes to be determined. However, it is sufficient for determining the likelihood of potential significant effects due to changes in road traffic noise for weekdays when the traffic volumes would be greater.</p>
<p>NV.1.4</p>	<p>Paragraph 11.7.5 of Chapter 11 [APP-048] states that within the 300m construction noise study area, a total of 481 noise and vibration sensitive receptors have been identified.</p> <p>The Applicant: Further clarify how the contribution of noise and vibration from construction traffic or arising from the potential diversion of other forms of traffic has been assessed with respect to the relevant receptors considered most susceptible to noise and vibration.</p> <p>Planning Authority/Interested Parties ii)</p>	<p>ES Chapter 11 (APP-048) contains details regarding the assessment of construction traffic within Section 11.5.9 to 11.5.13. This includes the reasonable worst case maximum number of additional lorry movements per day expected to occur during the construction period. In addition, construction vehicle routes are to be controlled as outlined in the Outline Traffic Management Plan (a Traffic Management Plan, substantially in accordance with the Outline Traffic Management Plan, is secured through Requirement 10 of the dDCO). ES Chapter 11 Table 11.8 (APP-048) demonstrates that the expected change in road traffic noise due to additional construction traffic is negligible along all proposed routes (less than 1 dB LA10,18hr) and therefore no significant effects are expected due to noise generated by construction traffic.</p> <p>The Outline Traffic Management Plan sets out the proposed diversion</p>

	<p>Are you satisfied relevant receptors applicable have been considered? If not give your reasons.</p>	<p>routes for the construction period. Due to the absence of traffic forecasts during each diversion route period, no quantitative assessment of the change in road traffic noise during the use of these diversions was presented within ES Chapter 11 (APP-048). However, the potential likelihood of significant effects is discussed qualitatively. Mitigation for noise generated due to additional traffic during the use of diversions includes the use of diversions via the primary road network only, as well as the requirement that the Contractor assesses the noise impact of diverted traffic prior to the use of these routes, and presents these for discussion with the LPA (ES Chapter 11 section 11.9.16) (APP-048). This is secured through EMP REAC commitment reference N4 (APP-128), which requires that the Principal Contractor routes diversions along the least noise-sensitive routes.</p>
<p>NV.1.5</p>	<p>The Applicant:</p> <p>i) Outline how would monitoring thresholds be identified and implemented, and indicate whether the EMP should include a commitment to remedial measures should monitoring identify higher than predicted noise and vibration levels?</p> <p>ii) Can the Applicant explain if monitoring (and appropriate trigger levels) would be required to determine whether measures need to be implemented to further reduce noise? If so, how would these and any requisite remedial measures be secured?</p> <p>Proved an update where necessary.</p> <p>Relevant Planning Authorities/Interested Parties:</p> <p>iii) Comment on the need for monitoring of operational phase noise and mitigation.</p>	<p>ES Chapter 11 section 11.11 (APP-048) sets out the requirements for monitoring, in relation to noise and vibration. The requirement for monitoring of noise during the construction period is included within Table 3-1 (REAC) commitment N1 and N3 in the EMP (APP-128). The requirement for monitoring of vibration during the construction period is included within EMP REAC commitment N2. Both of these commitments require remedial measures to be taken should construction noise and vibration otherwise be expected to exceed the SOAEL value at sensitive receptors within the vicinity. Operational noise effects are to be monitored through ensuring that mitigation measures incorporated within the EIA are included within the as-built project, and through ensuring specifications of barriers or low-noise road surfaces meet the design specification identified within the EIA.</p> <p>The assessment of operational noise presented within Chapter 11 concludes that no significant effects (adverse or beneficial) are expected to occur due to change in operational road traffic noise. Furthermore, all minor impacts (adverse or beneficial) occur at receptors where the predicted road traffic noise level with the Scheme is below the SOAEL. The assessment has identified that no specific operational noise mitigation (barriers or low noise surface) is required to avoid significant effects due to operational noise.</p> <p>DMRB LA111 states that:</p> <p><i>“Post construction noise monitoring cannot provide a reliable gauge for whether the predicted magnitude and extent of operational adverse impacts are greater or less than those predicted in the assessment, this is due to the following reasons: 1) the assessment is based on annual average conditions with and without the project to ensure a like-for-like comparison, which is not possible to replicate through monitoring within a reasonable timescales; 2) monitoring in the absence of the project would need to be completed before the start of the construction works, and would therefore be a number of years before the with-scheme monitoring and the assessment completed for the environmental statement is based on calculated road traffic noise levels, whereas ambient noise monitoring can be affected by other noise sources such as people, agricultural activities, military activities, aircraft etc.”</i></p> <p>For this reason, no requirement for post-completion operational noise monitoring was incorporated into the EMP (APP-128).</p>
<p>NV.1.6</p>	<p>APP-086, Appendix 7.7 Lighting Assessment. The ExA notes that changes to light levels in the immediate area through artificial lighting has the potential to alter amenity conditions for existing nearby properties and/or have potential impacts to local wildlife and the environment.</p> <p>Considering the scheme as a whole:-</p> <p>i) Clarify how many additional lighting columns are either likely or proposed as a result of the improvement scheme and what are the anticipated locations? Indicative best case and worse case ranges can be given. Explain the height column range and why lower end range height columns may be suitable.</p> <p>ii) Clarify how proposed lighting will address heritage asset impacts. Explain how would lighting be omitted/designed/managed so as to minimise any light spillage to surrounding</p>	<p>i) The design of the Scheme lighting has been undertaken in accordance with the UK DMRB TA 501 – Road Lighting Appraisal. This document sets out the process for the appraisal of new and replacement road lighting for motorway and all-purpose trunk roads. The amount of lighting columns proposed for the Scheme in the likely worst case scenario is approximately 60 columns. The applicant will assess the potential to re-use some of the existing columns and just replace the existing lanterns which may reduce the amount of new columns to approximately 48 columns.</p> <p>The extent of the proposed lighting is shown in Annex A of Appendix 7.7 of Chapter 7 of the Environmental Statement (APP- 086). Briefly, it is limited to replacing or reusing the existing lighting on the Thickthorn gyratory, new lighting on the approach to the gyratory on the westbound A47 diverge slip road and A47 eastbound entry slip road, and on the section of the new A11-A47 Connector Road.</p> <p>The proposed column mounting heights are expected to be a combination of 12m and 10m with a wall mounted luminaire solution in the two underpasses. Lower mounting height columns would not provide sufficient overall uniformity and would not be suitable solution due to excessive extra columns and potential for a ‘wall of columns’ effect. The final detailed design of the lighting provision will be</p>

	<p>properties as well as the local environment and how would this be secured?</p> <p>iii) Would the footbridge, overbridges or underpasses proposed need to be lit at night and what are the reasons for the approach selected?</p> <p>iv) Can the Applicant respond to i) to iii) both in terms of operational lighting and fixed artificial lighting to form part of the completed scheme.</p> <p>v) What are the potential carbon emission impacts from any potential artificial lighting installations? Provide an indication of those or any potential design features reliant on solar energy.</p> <p><i>You may wish to combine the answer to this question with the answers to questions DE.1.1, DE.1.2, DE.1.3, DE.1.5.</i></p>	<p>confirmed as part of the detailed design, to be approved through dDCO Requirement 3 in consultation with the relevant planning authority.</p> <p>ii) As secured in clause G2 of the Environmental Management Plan REAC (APP – 123) the lighting design will be managed to minimize light spillage at sensitive lighting receptors. Where lighting columns back onto residential properties and/or sensitive receptors, backlight shields or similar mitigation will be required to mitigate significant effects. Lighting at the junction will be designed with backlight shields and LED bulbs to reduce light spillage onto habitats which support commuting and foraging bats. During construction of the Scheme, works lighting shall be directional, at the minimum luminosity necessary and use low energy consumption fittings. In addition please see response to HE 1.1 part ii)</p> <p>iii) Following consultation with Norfolk County Council as the maintaining authority, the Applicant does not propose to light the new footbridge and overbridges that are required for the Cantley Lane Link road. The underpasses required for the A11-A47 Connector Road shall be lit day and night and the design approach is accordance with latest professional lighting guidance and is a design approach to avoid black hole effect for motorists driving through the short road tunnels.</p> <p>iv) The Applicant does not differentiate between operational and fixed lighting.</p> <p>v) No lighting features are reliant on solar energy. As detailed in section 14.8.4 of Chapter 14 'Climate' of the Environmental Statement (APP-051), the Highways England Carbon Tool (v2.3 published in 2019) predicts emissions associated with operational energy for the Proposed Scheme to be approximately 18 tCO₂e per annum, based on the annual kWh electricity demand of lighting columns, i.e. 1,080 tCO₂e over the 60-year appraisal period. The detailed design for the street lighting shall assess the proposed luminaire and identify the most energy efficient solution, whilst meeting the technical requirements of the lighting strategy.</p>
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14. TRAFFIC AND TRANSPORT

Ref	ExQ1 Question	Applicant's Comment
TT.1.1	<p>Application document APP-129, the Outline Traffic Management Plan. The measures are indicative and there are several traffic management concerns being raised by interested parties through relevant representations. Considering those concerns as well as the characteristics of the local road network the ExA requests that Traffic Management Plan issues are resolved during the examination as far as possible.</p> <p>Relevant Highway Authorities/Interested Parties:</p> <p>i) Relevant Highway Authorities what are your views in relation to the scope and content of the</p>	
TT.1.2	<p>Cantley Lane South is referred to in relevant representation [RR-039] as a popular cyclist route. Can you:</p> <p>i) Explain the basis for the speed restrictions Cantley Lane South set out in the dDCO having regard to cyclists.</p> <p>ii) Clarify to what extent speed restrictions specified in the dDCO considered the potential presence of cyclists and the potential for a lower limit.</p> <p>iii) If the potential for increased presence of cyclists using the lane has not been considered, explain how those circumstances would/could be proactively factored into any resultant road speed designation.</p>	<p>i) The existing speed limit on the Cantley Lane/Cantley Lane South corridor is 60mph (National Speed Limit). The proposed speed limits for Cantley Lane South have been considered as 2 separate sections.</p> <p>Section 1 – This section covers the length of Cantley Lane South between the existing railway bridge and the proposed new junction of Cantley Lane South with Cantley Lane Link Road. A speed limit of 40mph is proposed, reflecting the design parameters for the new junction and Cantley Lane Link. The proposed 40mph speed limit represents a significant reduction from the existing speed limit of 60mph. Cyclists traveling along Cantley Lane South in an easterly direction will pass under the railway bridge and as they enter the scheme, they will have the option of either exiting the road and joining the shared footway / cycleway along Cantley Lane Link or alternatively, they can continue in an easterly direction on the road and Section 2 (described below).</p> <p>The 40mph speed limit proposed for Cantley Lane South has been</p>

		<p>selected to provide a consistent speed limit between the B1172, Cantley Lane Link and Cantley Lane South and has been agreed with Norfolk County Council. Reducing the speed limit to 40mph would also improve conditions for cyclists in this location in the future.</p> <p>Section 2 – This section covers the length of Cantley Lane South between the proposed new junction of Cantley Lane South with Cantley Lane Link and the proposed WCH overbridge linking to Cantley Lane. The proposed speed limit of 20mph reflects the fact that this section of Cantley Lane South will become a no through road/cul-de-sac as a result of the Scheme and will serve local access only. As such, future traffic flows will be significantly reduced. The Applicant considers the proposed 20mph speed limit, which represents a significant reduction for the existing 60mph speed limit, to be the lowest practical speed limit which can be adopted for this setting. The proposed 20mph will improve conditions for cyclists using this section of Cantley Lane South in the future.</p> <p>ii) The Scheme design adopts a reduced speed limit of 40mph on Cantley Lane Link and at its junction with Cantley Lane South, when compared to the existing speed limit of 60mph on Cantley Lane South. Reducing the speed limit to 40mph would improve conditions for cyclists in this location in the future. With regard to the potential presence of cyclists, the Scheme provides a shared footway / cycleway along Cantley Lane Link to enable cyclists to be separated from vehicular traffic. To the east of the junction between Cantley Lane South and Cantley Lane Link, a 20mph speed limit is proposed where cyclists and pedestrians will share the road surface with vehicular traffic. The speed limit on Cantley Lane South to the south of the existing railway bridge will remain as 60mph as this highway lies outside of the scope of the Scheme.</p> <p>iii) The Applicant considers that the optimum speed limits have been selected for the new and improved highways, which takes into consideration a number of factors. The Applicant also considers that any potential for increased cyclists would not further change any decisions with respect to speed limits.</p>
<p>TT.1.3</p>	<p>Construction operatives are assumed to be parking at each of the main compounds during construction.</p> <p>i) Provide details of the location and design parameters of the parking provision for operative's vehicles to demonstrate that parking areas would include sufficient capacity to avoid "fly parking" on nearby local roads or other parking facilities in the vicinity.</p> <p>ii) Clarify how would "fly parking" be prevented.</p>	<p>i) The compound design is currently at high level and sufficient parking spaces are provided to allow for the amount of operatives who will be on site at any one time.</p> <p>ii) All staff working on the Scheme will be provided sufficient parking to restrict the fly parking issue.</p>
<p>TT.2.1</p>	<p>RR-001 highlights that some of the concerns of Norfolk County Council relate to the potential taking on of responsibilities for assets including significant new infrastructure comprising a link from the B1172, across the A11 trunk road and Norwich-Cambridge railway line, to Cantley Lane south and the proposed classification of this new link as a B class road.</p> <p>i) Can Norfolk County Council provide further details of those concerns if they have not already done so, and, provide justification of their current position on these particular matters?</p> <p>ii) The new overbridge Work No.35 that is to become a public right of way. Provide an update of discussions to facilitate that alongside potential consideration of a ceiling enclosure or other such barrier which could be included in the final design of the overbridge with respect to safety provision as well as potential future user's perception of safety.</p>	<p>ii) Please refer to response to DE.1.1vii) in respect of the Applicant's position regarding ceiling enclosures and barriers of the footbridge.</p>