

A47 North Tuddenham to Easton

Scheme Number: TR010038

Volume 9

9.9 Applicant's Comments on Responses to the Examining Authority's First Written Questions (ExQ1s)

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

Planning Act 2008

October 2021

Infrastructure Planning

Planning Act 2008

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

A47 North Tuddenham to Easton
Development Consent Order 202[x]

**9.6 APPLICANT'S COMMENTS ON RESPONSES TO THE EXAMINING
AUTHORITY'S FIRST WRITTEN QUESTIONS (ExAQ1s)**

Rule Number:	8(1)(c)
Planning Inspectorate Scheme Reference	TR010038
Application Document Reference	TR010038/EXAM/9.9
BIM Document Reference	HE551489-GTY-LSI-000-RP-TX-40010
Author:	A47 North Tuddenham to Easton Project Team, Highways England

Version	Date	Status of Version
Rev 0	October 2021	Deadline 3 Issue

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1 INTRODUCTION

- 1.1.1 The Development Consent Order (DCO) application for the A47 North Tuddenham to Easton scheme was submitted on 15 March 2021 and accepted for examination on 12 April 2021.
- 1.1.2 The purpose of this document is to set out Highways England's (the Applicant) comments on responses by the following local authorities and statutory environmental bodies to the Examining Authority's First Written Questions 1 (ExQ1) issued 14 September 2021:
- Breckland Council (**REP2-017**)
 - Broadland District Council (**REP2-018 and REP2-041**)
 - Historic England (**REP2-021**)
 - Environment Agency (**REP2-020**)
 - Norfolk County Council (**REP2-040, REP2-040 and REP2-042**)
 - South Norfolk Council (**REP2-023 and REP2-041**)
 - Weston Longville Parish Council (**REP2-032**)
- 1.1.3 The following sections present the responses where concerns or requests are made warranting provision of additional information or clarity by the Applicant.
- 1.1.4 However, the Applicant has no further comments to make on the response by Historic England¹.

2 KEY ABBREVIATIONS

- 2.1.1 The following common abbreviations have been used in the Applicant's submissions to the Examination:
- dDCO = draft Development Consent Order
 - DMRB = Design Manual for Roads and Bridges
 - ES = Environmental Statement
 - ExA = Examining Authority
 - NPSNN = National Policy Statement for National Networks 2014
 - NWL = Norwich Western Link
 - the Scheme = the A47 North Tuddenham to Easton dualling scheme

¹ Available at: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000459-DL2%20-%20Historic%20England%20-%20Response%20to%20ExQ1.pdf>

3 NORFOLK COUNTY COUNCIL

3.1.1 Norfolk County Council's responses to the Examining Authority's First Written Questions are available at:

- <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000610-Norfolk%20County%20Council%20-%20Deadline%20%20-%20Responses%20to%20ExQ1.pdf>
- <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000610-Norfolk%20County%20Council%20-%20Deadline%20%20-%20Responses%20to%20ExQ1.pdf>
- <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000617-Norfolk%20County%20Council%20-%20Other-%20Deadline%20%20-%20responses%20to%20the%20ExA%20s%20first%20written%20ques.pdf>

No	ExA Question	Council's Response	Applicant's Comment
2.0.11	ES Chapter 5: Air Quality [APP-044], section 5.7, Baseline conditions, are the parties satisfied that this provides an accurate assessment of the current conditions? If not, please explain why.	NCC are unable to add any comment on this given the detailed assessment and mapping of the area by the applicants. There is no clear basis on which to challenge or confirm these baseline measurements. However, it is important to understand the interaction between measurements and distance of populations as well as how different pollutants disperse (e.g. NOx and PM behave in different ways and have different impacts at varying concentration levels)	ES Chapter 5 Air Quality (APP-045) has considered the interaction between measurements and distance of populations as well as how different pollutants disperse.
3.0.5	ES Chapter 8: Biodiversity [APP-047], Table 8.3, please confirm that all the surveys are still valid and in-date and can therefore be relied upon by the ExA during the course of the Examination and Recommendation stage. If not, please explain what is required to address them.	Some of the survey data collected is considered out of date in accordance with CIEEM's advice note on the lifespan of ecological reports and surveys (CIEEM; 2019). NCC recommend where survey data is out of date that updated surveys are carried out in accordance with best practice guidance.	CIEEM (2019) Guidelines for Ecological Impact Assessment (EclA) require ecological data to have been collected within one or two years prior to an EclA being written. Table 8-3 in ES Chapter 8 Biodiversity (APP-047) 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. 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. However, pre-construction ecological surveys are proposed in the Environmental Management Plan (APP-143), with Action BD11 specifically recognising the need to ensure European Protected Species surveys have occurred within two years before construction works commence.
3.0.11	ES Chapter 8: Biodiversity [APP-047], in general, are the parties content with the proposed receptor sites? If not, why not.	No details of the proposed receptor sites (for example locations, suitability of the sites to support the translocated populations) appear to have been provided and therefore it is not possible to determine if the proposed receptor sites referred to in the Biodiversity Chapter are suitable.	The provisional design of the proposed ecological mitigation is presented in the Environmental Masterplan, Rev.1 (AS-007) and all mitigation detailed in Section 8.9 of ES Chapter 8 will be detailed and implemented as part of the Record of Environmental Actions and Commitments (REAC), which forms Table 3.1 in the Environmental Management Plan (EMP) (APP-143). Construction works affecting a protected species will be managed by detailed construction methodologies and mitigation measures to be agreed as part of licence applications to Natural England, compliance with such will be required. Extensive consultation with Natural England has been undertaken throughout the process to ensure that site survey methodologies are appropriate and that the assessment and mitigation is proportionate for the sensitive receptors mentioned. The 'ecological mitigation' areas on the General Arrangement Plans (APP-005) show the proposed great crested newt relocation receptor areas, under Action BD7 in Table 3.1 of the EMP. Additional detail regarding the mitigation design will be presented in Annex B5 'Landscape and Ecology Management Plan (LEMP)' of the EMP, to be produced by an appointed Landscape Architect and Ecologist prior to construction. The LEMP will detail how the proposed landscape and ecological mitigation and compensation measures, pre, during and post construction, would be implemented to minimise disruption to the eco-system (e.g. creation or enhancement of habitats as receptor areas for species; and implementing measures to continue habitat connectivity during construction). The LEMP will also define how these measures would be

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			<p>managed and monitored to achieve the required new habitat creation as soon as possible, and optimise benefits for protected and notable species.</p> <p>Delivery of these commitments, including consulting the local highway authority (Norfolk County Council) on the final landscaping design and Environmental Management Plan, are secured through the dDCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (REP2-005).</p>
3.0.14	<p>ES Chapter 8: Biodiversity [APP-047], paragraph 8.12.2 states that the underpasses on the Proposed Scheme are not directly on existing bat flight paths as that could not be designed into the Proposed Scheme but will have planting to encourage bats to use them. Please provide further justification to explain this statement. Are NE, NCC, BC, BDC and SNC satisfied with this approach?</p>	<p>Section 4.5 of LD 118 Biodiversity design states "only mitigation measures that are effective and proven shall be included in project design". It has not been demonstrated that mitigation measures, such as underpasses and planting to encourage bats to use them, would be effective where proposed.</p>	<p>The Applicant has addressed the suitability of bat crossing mitigation in the response to Q3.0.10 in the Applicant's Response to the Examining Authority's First Written Questions (REP2-014).</p> <p>In summary, as there is some uncertainty in respect of hop-over effectiveness, a worst case assessment was undertaken as discussed in the Applicant's response to Q3.0.13. For underpasses and overpasses, the Applicant has provided evidence showing these to be effective in previous studies. In any event, monitoring is proposed at each of the proposed crossing points and nearby underpasses and overpasses, in years 1, 3, and 5 after Scheme completion. This is a commitment under Action BD6 in Table 3.1 of the Environmental Management Plan, to be secured under Requirement 4 of the dDCO (REP2-005). Should this monitoring show a reduction of bats crossing the roads, the Applicant will engage with stakeholders including Natural England and Norfolk County Council to discuss options and identify suitable additional mitigation.</p>
4.0.3	<p>ES Chapter 14: Climate [APP-053], paragraph 14.4.3, can the Applicant explain why no further consultation has taken place? Are NE, NCC, BC, BDC and SNC satisfied with approach?</p>	<p>The LLFA has briefly viewed Chapter 14. The LLFA notes that the climate change allowances for the assessment of flood risk relate to the Flood Risk Assessment Climate Change Allowance guidance. This guidance was updated on 20th July 2021 to adjust the revised fluvial peak flows.</p>	<p>The Environment Agency's response to Q15.0.17 in its Deadline 2 Submission 'Responses to the ExA's First Written Questions (ExQ1)' (REP2-020) is relevant. With regards to the 20 July 2021 guidance update, the Environment Agency states: "We would add that the July 2021 the peak river flow climate change allowance for the area of the proposed scheme are actually lower than the previous allowance, meaning that in effects the proposed approach is more precautionary than would be now be required."</p>
7.0.14	<p>Art 12(1): It includes wording 'the highway including any culverts or other structures laid under it must be maintained by and at the expense of the local highway authority from its completion with the exception of the culvert to be delivered as Work No. 5' – are NCC happy with this?</p>	<p>The county council remains in discussion with the applicant regarding the transfer of assets – including new assets – to the county council following the works. We have asked that the applicant produce a schedule list of the physical parameters of new highways and the assets they contain, including structures or culverts it intends to construct under the highway; and similar for existing assets to be transferred on completion of the scheme. A discussion can then take place with the intention that Norfolk County Council, as local highways authority (LHA), adopt unless the LHA states in writing why a specific item should not be adopted. The county council is seeking existing assets to be brought up to a suitable standard and for a suitable commuted sum provided by the applicant in respect of future maintenance for both existing and new assets to be transferred before assets are transferred to the LHA.</p>	<p>This approach has been agreed and a plan is being developed to form the basis for a discussion to commence the process of agreeing what new highways and assets are to be transferred to Norfolk County Council, as local highways authority, on completion of the Scheme.</p>
13.0.4	<p>ES Chapter 12: Population and human health [APP-051] paragraph 12.4.11 are parties satisfied that the data is sufficient to enable the Applicant to state that they are representative of the average use?</p>	<p>The surveys do not take account of latent demand. The current A47 forms a barrier to north-south pedestrian and cycle movements: there are likely to be more potential users than shown by the survey if A47 crossing provision were available. One 14 week period of data collection is limited and does not take into account seasonal variation.</p>	<p>The walking, cycling and horse riding (WCH) surveys were undertaken between 13 July and 26 July 2020, inclusive, during a period of dry and bright weather. Government advice at that time was to undertake exercise in your local area and it is generally acknowledged that this advice led to an increased use of walking and cycling activity due to reduced volumes of traffic on the roads.</p> <p>Therefore, if anything, the WCH activity recorded by the surveys may be slightly higher than would normally have been expected and may also have</p>

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			<p>included the suggested latent demand given the favourable conditions for walking and cycling at the time of the surveys.</p> <p>The use of potentially inflated WCH usage figures, will have resulted in a robust assessment of the effects of the Scheme on WCH. It is the Applicant's view that any surveys conducted at other times of the year, where weather and traffic conditions may have been less favourable for walking and cycling, would likely have recorded lower levels of WCH activity.</p>
13.0.6	<p>ES Chapter 12: Population and human health [APP-051] are NCC satisfied that the proposed footpath closures and proposed diversions are justified and that the proposed alternative routes are acceptable? If not, why not?</p>	<p>Fp12: Closure is accepted as this is a cul-de-sac PRow.</p> <p>Fp7: A north/south crossing in the immediate vicinity of Fp7 would be supported. The diversion / alternative route to get to the same point replaces a rural off-carriageway recreation route with a significantly longer on-carriageway travel route.</p> <p>RB1: The route of the diversion is generally accepted although further conversation is needed to finalise details of facilities, width, appropriate surface treatments, and other details.</p>	<p>The Applicant acknowledges Norfolk County Council's support for the closure of Hockering FP12.</p> <p>The decision not to provide a WCH overbridge along the route of Hockering FP7 was informed by the level of existing WCH usage. To provide an indication of current usage of Hockering FP7, WCH surveys were conducted at the junction of the footpath with the existing A47 between 7am and 7pm for 14 consecutive days between Monday 13 July and Sunday 26 July 2020. In the main, the weather during the surveys was dry and bright. As such, we would expect that the usage information collected is representative of the average use and is sufficient to inform the assessment of the Scheme.</p> <p>The WCH surveys recorded very low usage of Hockering FP7 and it is evident that the footpath is used mainly for recreational purposes, i.e. dog walking, as reported in Table 12.6 of ES Chapter 12 Population and human health (APP-051). In total, only 18 movements (17 pedestrian and 1 cyclist) were recorded over the 14-day survey period and no movements were recorded on the majority of days. The maximum number of movements recorded on any single day was 3 movements and this occurred on 2 days. No electric scooter or wheelchair users were recorded on any of the survey days.</p> <p>Norfolk County Council previously noted that Public Right of Way Hockering FP8, Hockering FP7 and East Tuddenham FP9 form a circular walk either side of the River Tud and claimed that this circular walk was well used by the local community. The results of the WCH surveys do not support the usage suggested by Norfolk County Council. With the Scheme in place, residents of Hockering will have improved access to the circular walk albeit that they will need to access the footpaths on either side of the River Tud via use of the shared use cycle tracks to be provided adjacent to the section of the A47 to be de-trunked and the new Mattishall Lane Link Road. Use of the cycle tracks to access the circular walk will be no less convenient for the residents of Hockering and underbridge provided as part of the Mattishall Lane Link Road will facilitate the safe segregated crossing of the new A47.</p> <p>The Applicant acknowledges that those users currently using Hockering FP7 to undertake a trip between Hockering and East Tuddenham will experience an increase in journey length (in excess of 500 metres) as a result of the Scheme. However, the WCH surveys have indicated that the number of users undertaking such a trip is likely to be very low and any such trips will likely be for recreational purposes. For users undertaking recreational trips, taking a direct route is likely to be of less importance, and the creation of additional lengths of cycle track is far more likely to be considered as beneficial since it creates additional walking and cycling opportunities for them.</p> <p>It is therefore not possible to justify the third party landtake, environmental impacts and construction and maintenance costs to provide an additional crossing facility (e.g. WCH overbridge) to</p>

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			<p>accommodate Hockering FP7.</p> <p>The Applicant acknowledges Norfolk County Council's support for the route of the diversion of Honingham Restricted Byway 1 (RB1). However, further liaison will be undertaken with Norfolk County Council's Public Rights of Way/Access Officer to understand the particular requirements of horse and carriage users along the route and where the diverted RB1 will cross the existing A47 to be de-trunked.</p>
13.0.6	<p>ES Chapter 12: Population and human health [APP-051] Table 12.6 are the parties satisfied with the sensitivity levels attributed to each of the receptors? If not, please explain why.</p>	<p>Hockering Fp7: Disagree. The heading of the table is 'Sensitivity of WCH routes to changes in journey length'.</p> <p>The lack of a crossing being provided for the severance of Fp7 should therefore make this high sensitivity not medium as PROW users will have a significant detour to gain the same point.</p>	<p>The assignment of sensitivity to a receptor is a matter for professional judgement. In assigning sensitivity to a walking, cycling or horse-riding route, account is taken of a number of factors including: the status of the existing route, (i.e. whether the route is a national or regional trail used for both commuting and recreational purposes that has frequent daily use or if the route is a local route used predominantly for recreational purposes); and, whether or not the route is regularly used by vulnerable travellers such as the elderly or school children (i.e. such users could be disproportionately affected by small changes in the baseline). Medium sensitivity was assigned to Hockering FP7 as it is a local route with very low observed usage, mainly for recreational purposes, i.e. dog walking.</p> <p>The Applicant has acknowledged that severing Hockering FP7 would have a Major impact as the resulting permanent increase in journey length would be in excess of 500m for some users. As such, the effects are assessed as permanent Moderate adverse given the very low usage of this recreational route.</p>
7.0.21	<p>Art 15 Street works: Should this article be restricted to specific streets set out in a Schedule? Should it confirm that the power is "without the consent of the street authority"? Should the powers be exercised with the consent of the street authority subject to consultation? What is the view of NCC in respect of this Article?</p>	<p>NCC's view is that roads within the limits of the DCO do not necessarily need to be notified via the permit system, and NCC would not necessarily need to be consulted, as they are not public highway at the time. However, if there are any potential highway assets in the ground at that time (drainage/culverts/street lighting etc), then NCC would need to be informed of any potential alterations to them that could affect their function, as it may affect assets outside the DCO limits. On this basis, NCC would like to be consulted.</p>	<p>Article 15(3) states that the provisions of sections 54 to 106 of the 1991 Act apply to any street works carried out under paragraph (1).</p> <p>Sections 54 to 106 of the New Roads and Street Works Act 1991 address notice and co-ordination of works, works to streets subject to special controls, general requirements as to execution of street works, reinstatement, charges, fees and liabilities of undertaker with respect to apparatus, apparatus affected by highway works and provisions with respect to particular authorities and undertakings.</p> <p>The Applicant trusts that the application of these statutory provisions addresses NCC's request.</p>
7.0.22	<p>Art 16 (6): Are NCC happy with a period of 28 days.</p>	<p>NCC's standard request period for temporary road closures is 6 weeks (42 Days). NCC would request that this be the minimum lead in. This is particularly so in the case of closures that affect roads outside the DCO limits.</p>	<p>A period of 28 days has been included and accepted in the last five Highways England DCOs granted, including the A1 Birtley to Coal House Development Consent Order 2021 and The A303 Sparkford to Ilchester Dualling Development Consent Order 2021. Therefore the Applicant is of the view that this is a reasonable timeframe to provide consent and is not proposing a change to the dDCO.</p>
7.0.50	<p>R19: Do the parties consider 10 business days sufficient time to respond to consultation on the discharge of requirements?</p>	<p>The material that remains to be resolved through the discharge of requirements is very substantial the County is therefore concerned that the default "approval" in the instances that timescales are met is not in the public interest. A matter that is compounded by the extremely short timescales proposed by the developer. NCC recommend that the period is extended to 15 working days and the overall time period for discharge is extended accordingly.</p>	<p>The Applicant has amended the dDCO in line with NCC's recommendation and Requirement 19 now provides 15 business days rather than 10 business days.</p>
10.0.2	<p>Are the parties satisfied with the Environmental Masterplan [APP-138] and the indicative proposals shown for the Proposed Development?</p>	<p>NCC find the plan acceptable but suggest more detailed design may be required.</p>	<p>The final detailed environmental mitigation design will be developed during the detailed design stage, in consultation with the relevant planning authority, pursuant to Requirement 3 'Detailed Design' and Requirement 5 'Landscaping' of the dDCO (REP2-005).</p>

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12.0.6	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.7.3 are the parties content with the way the appellant has addressed the issue of undertaking surveys during the COVID19 pandemic? If not, why not.	NCC agree it is sensible to consider pre-lockdown traffic flows as well as those measured during lockdown and recommend more recent data now that restrictions and movements are likely to be returning to previous levels.	ES Appendix 11.4 (APP-092) provides a discussion regarding the baseline noise survey and the effects of the global Covid-19 pandemic on measured road traffic noise levels. Table 11.4-1 of this Appendix demonstrates that 24 hour traffic flows during the survey were 10% less than a typical month before the pandemic (September 2019). When applying the Calculation of Road Traffic Noise methodology (required by DMRB LA111) this reduction in traffic flow would be associated with a 0.5 dB LA10,18hr reduction in road traffic noise across the 18 hour period (06:00 to 00:00). This is a negligible change and the therefore the effect of the pandemic on measured road traffic noise levels obtained in September 2020 is deemed to be negligible when compared to a typical month before the pandemic.
13.0.1	ES Chapter 12: Population and human health [APP-051] are the parties satisfied with the assessment methodology? If not, please explain.	Subject to following set down process following agreed statutory and PHE guidance there is no basis upon which to challenge the methodology. The only caveat being to ensure economic factors are considered as a key determinant to population health, as well as those mentioned elsewhere.	ES Chapter 12 (APP-051) reports the assessment undertaken of potential impacts on population and human health as a result of the Scheme. The assessment for human health considers health profiles of affected communities, health determinants and likely health outcomes in accordance with DMRB LA112. Health determinants are defined in DMRB LA112 as personal, social, economic and environmental factors which determine the health status of individuals and communities. An assessment of the economic impacts of the Scheme is also available in Chapter 5 of the Case for the Scheme (APP-140).
13.0.2	ES Chapter 12: Population and human health [APP-051] are the parties satisfied that Section 12.7 provides an accurate assessment of the baseline conditions?	NCC are unable to provide comment on this given the detailed assessment and mapping of the area by the applicants. There is no basis on which to challenge or confirm these baseline measurements. NCC recommend seeking local knowledge and specialist knowledge of district council colleagues. NCC also note that some key health outcomes, determinants and deprivation measures do seem to have been actively considered at Tables 12.8 and 12.9	The Applicant has considered the baseline conditions for land use and accessibility and human health elements as per DMRB LA112 and as detailed in Section 12.4 of ES Chapter 12 (APP-051). Paragraph 12.4.3 of ES Chapter 12 (APP-051) confirms that " <i>Baseline information has been gathered using desktop sources and information collected for the other topic assessments in this ES....</i> ". The paragraph then goes on to list all the desktop sources used for baseline information gathering. ES Chapter 12 (APP-051) Paragraphs 12.4.10 to 12.4.12 detail the surveys which were commissioned and used for baseline information. As noted by NCC in the response, Tables 12.8 and Table 12.9 present the health profile and health determinants baseline information respectively. These tables account for the additions to scope following consultation with the District Councils as detailed in ES Chapter 12 (APP-051) paragraphs 12.4.14 and 12.4.15.
15.0.1	ES Chapter 13: Road drainage and the water environment [APP-052], are the parties content with the Applicant's Flood Risk Assessment (FRA) and drainage proposals? If not, please explain why and what additional information is required.	The LLFA has raised a couple of concerns regarding the FRA and drainage proposals that relate to Hockering culvert and Oak Farm culvert and the potential floodplain storage compensation. The current Environmental Statement chapter has overstated the position of the LLFA, while the Flood Risk Assessment presents a fairer summary of the current position, although it is still misleading compared to what was discussed in February 2021. The disconnect between these documents is significant and should be updated to ensure the information being presented is consistent. Further information is given in 15.0.15 in relation to the Oak Farm culvert. The LLFA note the culvert at Hockering is within the Norfolk Rivers IDB area of jurisdiction who would provide any formal	See response RR-066.13 in the Applicant's Responses to the Relevant Representations (REP1-013). The Applicant has issued further information at Deadline 3 which will address the majority of the concerns raised. The Applicant will submit further information to the ExA and Norfolk County Council at Deadline 4 in response to the query written as " <i>....However, the LLFA would query the extent and the location of the River Tud Floodplain and the tributary's floodplain. Based on the information presently available from a limited 1D model, it is not clear whether the proposed crossing is causing a loss in either the tributary's or the River Tud's floodplains. The 1D modelling results have not been provided as a flood extent map. In addition, the model results do not appear to consider the effects of the River Tud's water levels on those of the tributary. Consideration</i>

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		<p>agreement or approval on this element of the scheme. However, the LLFA would query the extent and the location of the River Tud Floodplain and the tributary's floodplain. Based on the information presently available from a limited 1D model, it is not clear whether the proposed crossing is causing a loss in either the tributary's or the River Tud's floodplains. The 1D modelling results have not been provided as a flood extent map. In addition, the model results do not appear to consider the effects of the River Tud's water levels on those of the tributary. Consideration of the River Tud's water levels would be appropriate given the close proximity of the road crossing to the confluence. The LLFA would suggest that further work is undertaken by the applicant to ensure that the scheme would not increase flood risk elsewhere. At present that evidence base is not presented. In addition, the LLFA would like to correct an assertion made in the ES Chapter 13, to date no agreement has yet been reached with the LLFA regarding the flood storage compensation at either the Oak Farm and Hockering culverts. In addition, the LLFA have not stated that no flood floodplain compensation storage is acceptable. The LLFA seeks assurances this work will be undertaken to determine the impacts of the current proposed design in its ability to manage the potential future flood risk that could be derived from this scheme. In addition, the LLFA are aware that the temporary drainage design during construction is yet to be developed and confirmed. At present, the high-level summary of the temporary drainage approach requires some clarifications. For example, are the proposed settlement ponds mentioned in section 13.5.6 of the Environmental Statement (ES) temporary ponds or are they the proposed permanent ponds? The LLFA seeks assurances that further information and work will be undertaken in the interests of managing potential future flood risk that could be derived from this scheme. In relation to the drainage strategy, no information regarding the proposed drainage approach is provided for the construction stage. Therefore, the information presented in the ES chapter 13 is not substantiated by the current evidence base. The LLFA seeks assurances that further information will be provided regarding the construction drainage strategy to ensure there is no increase in flood risk during the construction phase, prior to the permanent surface water drainage system becoming operational.</p>	<p><i>of the River Tud's water levels would be appropriate given the close proximity of the road crossing to the confluence. The LLFA would suggest that further work is undertaken by the applicant to ensure that the scheme would not increase flood risk elsewhere. At present that evidence base is not presented. ...".</i></p> <p>The Applicant is committed to working with the LLFA to address their concerns.</p>
15.0.3	<p>Chapter 13: Road drainage and the water environment [APP-052], do the parties agree that section 13.7, baseline conditions, is an accurate assessment of the current situation? If not, why not.</p>	<p>It is only appropriate for the LLFA to respond on aspects of this section based upon their area of responsibility. Therefore, aspects relating to the Groundwater Quality, Aquifer Properties, Groundwater Vulnerability, Water Framework Directive, Abstractions and Discharge Consents, Aquatic ecology and main river flood risk from the River Tud would all be under the jurisdiction of the Environment Agency to comment upon as the lead consultee. While the Recreation and Human Health section would be considered mostly by another body.</p> <p>The climate change section is likely to be considered out of date as the Met Office report stated in 13.7.94 is likely to have been succeeded by UK Climate Predictions 2018 report in December 2018. This report has been the basis for the Environment Agency to update their climate change allowances guidance for flood risk assessments amongst many other activities. In section 13.7.98, Table</p>	<p>We acknowledge the issue raised by the LLFA. The Applicant will respond to the ExA at Deadline 4.</p>

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		<p>13-7, the LLFA observes that the main rivers are assessed as separate features for their importance of water environment attributes in study areas, while the two ordinary watercourses that have properties potentially at flood risk are considered as one feature. This does seem to limit the quality of the targeted nature of the assessment. The remaining aspects of the section have been reviewed and considered acceptable.</p>	
15.0.11	<p>ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.15 refers to the provision of replacement ponds. Are the parties satisfied that the replacement proposals will deliver the necessary mitigation? Do they provide an improvement to the current situation?</p>	<p>The limited information about these ponds in Chapter 13 from a local surface water drainage network perspective and does not clearly identify the seven ponds that are to be replaced. From looking at Figure 13.1 (sheets 1 and 2) and the catchment plans in the Drainage Strategy, the ponds are indicated to appear offline from the local surface water drainage network. However, the chapter acknowledges that the developer's investigations are limited, and that uncharted drainage system may exist.</p>	<p>We acknowledge the issue raised by the LLFA. The Applicant will respond to the ExA at Deadline 4.</p>
15.0.13	<p>ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.22 refers to the Drainage strategy (Appendix 13.2 (TR010038/APP/6.3)) which proposes all road drainage will drain by surface water outfalls to the River Tud and its tributaries at twelve locations, utilising nine new outfalls. Is this approach acceptable to parties and in their view, is it adequate to deal with surface water and does it make suitable allowances to cover the design life of the Proposed Scheme?</p>	<p>The GI results reported in section 4.3 indicate that infiltration to ground is poor to very poor in the Lowestoft formation while in the Sheringham Cliff Formation were moderate to good. However, the availability of the Sheringham Cliff Formation is limited along the route and are mostly small, isolated areas of the formation that is surrounded by the Lowestoft Formation. Therefore, the opportunity in most areas is limited across the site. Along the existing A47 road there are 9 outfalls that discharge to the local surface water drainage network. The approach of discharging to a watercourse is considered acceptable. Supplementary GI was indicated for the first quarter of 2021, although as yet the LLFA has not had sight of this information. In section 6.6.3 of Appendix 13.2, the LLFA notes that the developer proposes to attenuate flow only in catchments where any increase in flow is found to be excessive. The developer confirms their intention to use either oversized pipes in the verge or ditches. This is considered by the LLFA to be a traditional drainage solution and would not be in accordance with the NPPF principles that seek the inclusion of SuDS on major developments and that there should be no increase in flood risk elsewhere from the development. It has not been possible to compare the pre and post development run off rates as no comparable information has been provided. The LLFA had previously raised the lack of clarity on this matter prior to DCO submission but there has not been addressed as yet. The scheme's drainage design has relied heavily on the guidance that is provided in the DMRB, yet there is only limited consideration of the LLFA guidance on the inclusion of SuDS that is derived from National Policy. The LLFA observes that of the 18 surface water drainage networks only 13 of the networks include SuDS features. This means that 5 of the networks are not including SuDS. The use of attenuation basins is the limited way that SuDS have been included within the scheme. Based on the report, the attenuation basins are used to address only one of the four pillars of SuDS; water quantity. The rest of the proposed drainage scheme relies on traditional road drainage structures that do not provide value in terms of water quality, amenity or biodiversity. This is at an odd position to the scheme's proposals to seek to replace the ponds and the associated habitat that would be lost but has missed an opportunity to better incorporate SuDS within the proposed scheme. The LLFA</p>	<p>We acknowledge the issue raised by the LLFA. The Applicant is committed to working with the LLFA to address their concerns.</p> <p>Section 5.10 of the Drainage Strategy Report (APP-127) outlines the Pollution Control processes included within the drainage design of the Scheme.</p> <p>Section 5.11 provides information on the SuDS features included within the drainage design of the Scheme.</p> <p>Section 5.11.3 of the report outlines how the detention basins and wetlands promote the 4 pillars of SuDS.</p> <p>Information on attenuation is contained within Section 6.6, with Table 6.2 providing information on the existing and proposed catchment areas.</p> <p>The five networks highlighted by the LLFA as not including SuDS are proposed to tie into existing drainage systems. These are networks M1, S1, S2, S3 and S4 and described in Sections 6.3.1 and 6.3.11 to 6.3.14.</p> <p>In such locations it is not feasible to incorporate SuDS over such a short distance or as a result of the existing physical constraints. In these locations, the proposals are to utilise flow controls with oversized pipes in the existing verge / ditch if the flows are found to be excessive. This is covered within Section 6.6.3 and Table 6-2.</p> <p>The Applicant notes that two wetlands are proposed as part of the Scheme as described in section 6.8.6 (Enhancement Measures), with Section 6.8.7 providing information on the enhancements for the remaining detention basins along the Scheme</p>

No	ExA Question	Council's Response	Applicant's Comment
		is yet to see the supporting pre and post development calculations. Therefore at this stage, the LLFA are not in a position to determine whether there is adequate capacity within the proposed drainage systems.	
15.0.14	ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.29, are parties satisfied that these are sufficient allowances to cover the design life of the proposed scheme?	The LLFA is satisfied with the 40% climate change allowance for the 100-year design life that would be associated with the 2080s epoch for the peak rainfall intensity allowances. It is noted that the drainage design life is considered to be 60 years in ES Appendix 13.2 Drainage Strategy. However, when assessing essential transport infrastructure in terms of assessing flood risk a 100 year design life would be applied.	The Applicant can confirm the assessment flood risk has considered a 100 year design life.
15.0.15	ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.32, are parties content that these measures are sufficient to address the identified flooding? If not, please explain.	The LLFA is broadly satisfied with the proposed approach, however, there is one issue that the LLFA considers that further information is required. The LLFA would like to correct an assertion made in the ES Chapter 13, to date no agreement has yet been reached with the LLFA regarding the flood storage compensation at both the Oak Farm and Hockering culverts. In addition, the LLFA have not stated that no flood floodplain compensation storage is acceptable. The LLFA does acknowledge that, in principle, flood compensatory storage at Oak Farm and Hockering might not possible due to the local topography and land availability. However, before this can be decided further information and evidence is required to determine the extent of the upstream off-site impacts before NCC can form an informed opinion. At the Oak Farm Culvert, the LLFA seek clarification and further information that demonstrates the flood storage volume is maintained, even if changed in its level, along with information quantifying the displaced volume. At present in the FRA, there is an assessment of volume for the post development scenario but not for the pre-development scenario. This prevents a suitable comparison identifying the areas of potential loss and whether suitable compensation can be identified. At the Oak Farm Culvert, no information has been presented to the LLFA that justifies the selection of the orifice type and size as a suitable flow control structure for this location. In addition, no debris assessment has been presented for the structure. This would feed into the development of a credible blockage scenario being modelled and the results presented.	See response RR-066.13 in the Applicant's Responses to the Relevant Representations (REP1-013). The Applicant has issued further information at Deadline 3 in response to the concerns raised. The Applicant is committed to working with the LLFA to address their concerns.

4 BRECKLAND COUNCIL

4.1.1 Breckland Council's responses to the Examining Authority's First Written Questions are available at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000606-DL2%20-%20Breckland%20Council%20Response%20to%20Deadline%201%20questions%20September%202021.pdf>

No	ExA Question	Council's Response	Applicant's Comment
Q2.0.5	ES Chapter 5: Air Quality [APP-044] paragraph 5.4.10, are the parties happy with the approach taken with regards to PM2.5? If not, please explain.	The approach is based on the one advocated in the LA105 Air quality guidance document used by Highways England to assess air pollution. This document states that 'There should be no need to model PM2.5 as the UK currently meets its legal requirements for the achievement of the PM2.5 air quality thresholds and the modelling of PM10 can be used to demonstrate that the project does not impact on the PM2.5 air quality threshold.' There is no local monitoring of PM10 or PM2.5	ES Chapter 5 Air Quality (APP-045) has provided full details of the assessment methodology and conclusions. The dispersion modelling of the baseline PM10 has shown that the predicted concentrations are significantly below the Air Quality Objective (AQO), and thus following DMRB methodology there is no need to further assess this pollutant. This model has been fully verified following LAQM TG(16). PM2.5 makes up around 60% of PM10 dependent on the source of the emissions. The ES has shown that there is no risk

No	ExA Question	Council's Response	Applicant's Comment
		so the assessment is based on nationally produced data by Defra. PM10 and 2.5 are mainly linked with emissions from vehicle engines. It is difficult to know if localised emissions reflect those predicted and as such it is recommended that predictions and modelling are supported by localised monitoring.	to the PM10 objective being exceeded even if all of the PM10 was PM2.5 the modelling confirms that there is also no risk to the current PM2.5 AQO and therefore, there is no requirement to undertake further monitoring.
Q2.0.11	ES Chapter 5: Air Quality [APP-044], section 5.7, Baseline conditions, are the parties satisfied that this provides an accurate assessment of the current conditions? If not, please explain why.	The approach is that by modelling PM10 emissions this will demonstrate that the project does not impact on the PM2.5 air quality threshold smaller PM2.5 LA105 suggests that there are very few areas in the UK outside of London that exceed the air quality thresholds for particulate matter (PM10 or PM2.5). It is difficult to be able to support this statement without more data and to know if localised emissions reflect those predicted. As such it is recommended that predictions and modelling are supported by localised monitoring.	
Q3.0.5	ES Chapter 8: Biodiversity [APP-047], Table 8.3, please confirm that all the surveys are still valid and in-date and can therefore be relied upon by the ExA during the course of the Examination and Recommendation stage. If not, please explain what is required to address them.	Breckland Council considers that any survey should be less than 24 months old. Any survey that is more than 24 months old should be updated in line with professional guidance.	CIEEM (2019) Guidelines for Ecological Impact Assessment (EclA) require ecological data to have been collected within one or two years prior to an EclA being written. Table 8-3 in ES Chapter 8 Biodiversity (APP-047) 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. 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.
Q7.0.33	Art41: What are the respective parties views of the imposition of a date of 24 July 2020?	The date relates to Tree Preservation orders made after that time. There is a need to understand the context of the date and why it is considered necessary.	This is the date the arboricultural survey was carried out, therefore any Tree Preservation Orders made after this date will not be known to the Applicant and have not been considered as part of the DCO application.
Q10.0.2	Are the parties satisfied with the Environmental Masterplan [APP-138] and the indicative proposals shown for the Proposed Development?	Breckland Council is broadly content with the general indicative proposals shown on the Environmental Masterplan subject to details which it is assumed will be agreed post decision.	The final detailed environmental mitigation design, including supporting landscape mitigation planting, will be developed post DCO Examination during the detailed design stage, in consultation with the relevant planning authority, pursuant to Requirement 3 'Detailed Design' and Requirement 5 'Landscaping' of the dDCO (REP2-005).
Q10.0.13	ES Chapter 7: Landscape and Visual Effects [APP-046], Table 7.6 - are the assumptions around tree heights for Yr15 reasonable? If not, please explain.	Breckland Council considers that the assumptions for year 15 tree heights within Table 7.6 are reasonable. There should be more information in relation to tree types and planting conditions to allow a proper assessment to be made.	More information in relation to tree types and planting conditions will be developed, in consultation with the relevant planning authority, as part of the final detailed design and supporting landscape mitigation planting development pursuant to Requirement 3 'Detailed Design' and Requirement 5 'Landscaping' of the dDCO (REP2-005).
Q12.0.10	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.9.6 are the parties content with the triggers for the implementation of temporary mitigation? If not, please explain why.	The applicant has stated 'Mitigation measures in the form of temporary noise barriers or site hoarding shall be considered to mitigate construction noise effects at the residential receptors presented in Table 11-12. These shall be provided where construction activity in the vicinity of the receptor is expected to exceed 10 days or nights in any 15 consecutive days or nights; or for a total number of days exceeding 40 in any six consecutive months.' BDC is concerned that mitigation will only be provided if noisy night work is carried out for more than 10 days or nights and as such believe that noise levels shall be assessed at the time and temporary barriers provided at the time to protect residents particularly if sleep disturbance is expected. Mitigation shall be based on noise levels not on how long it continues.	Noise from construction of the Scheme shall be managed by Action G1 within the Environmental Management Plan (APP-143), secured via Requirement 4 of the dDCO (REP2-005). Action G1 requires that works outside of normal working hours, irrespective of duration, are discussed with the local planning authority and appropriate methods of mitigation (including for noise and vibration) are agreed with the local planning authority. Therefore, Breckland Council will have the opportunity to review noise mitigation measures for night-time works should these be unavoidable during the construction period for the Scheme.
Q13.0.11	ES Chapter 12: Population and human health [APP-051] Table 12.5 are the parties satisfied that this represents an accurate list of	Breckland Council considers that there appears to be an inconsistency between the receptors within Table 12.5 and those within	ES Chapter 12 (APP-051) Table 12.5 summarises the existing Walkers, Cyclists and Horse-riders (WCH) facilities in the study area. They comprise PRoW, (namely footpaths and restricted byways),

No	ExA Question	Council's Response	Applicant's Comment
	all receptors? If not, please explain why.	Table 12.6.	permissive routes and footways provided as part of the highway network. They are also shown on ES Figure 12.1 for reference (APP-077). Those receptors and their sensitivity to changes in journey length are then summarised in Table 12.6. The receptors listed are the same for both tables although the receptor description in Column 1 of Table 12.6 are described with more detail than those PRow references in Column 2 of Table 12.5. This is true for location references 24 to 29 of Table 12.5.
Q13.0.12	ES Chapter 12: Population and human health [APP-051] Table 12.6 are the parties satisfied with the sensitivity levels attributed to each of the receptors? If not, please explain why.	Breckland Council notes that there have been no usage studies carried out for the Combined footway/cycleway linking Main Road and The Street at Hockering set out in Table 12.6. Given its quality and importance an understanding of its level of usage would enable a proper understanding of its importance given it is not able to be substituted.	There was no requirement for the Applicant to undertake usage surveys for the existing combined footway/cycleway linking Main Road and The Street, to inform the judgement regarding the level of sensitivity selected this facility. This is because the Proposed Scheme provides a direct replacement for the infrastructure to be lost. As can be seen on Sheets 2 and 4 of the Rights of Way and Access Plans (APP-008) new lengths of cycle track, which can also be used by pedestrians, will be provided alongside the new access roads between points CF27 to CF28, CF29 to CF30 and CF31 to CF32. In combination, these new facilities will maintain connectivity between Main Road and The Street for pedestrians and cyclists.

5 SOUTH NORFOLK COUNCIL

5.1.1 South Norfolk Council's responses to the Examining Authority's First Written Questions are available at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000563-DL2%20-%20South%20Norfolk%20Council%20-%20Responses%20to%20the%20ExAs%20First%20Written%20Questions.pdf>

No	ExA Question	Council's Response	Applicant's Comment
Q2.0.5	ES Chapter 5: Air Quality [APP-044] paragraph 5.4.10, are the parties happy with the approach taken with regards to PM2.5? If not, please explain.	Given the evolving but uncertain position and the focus now on reducing long term average concentrations of PM2.5 South Norfolk Council is of the opinion that it would be helpful if the applicant could use modelling to demonstrate the impact, if any, of the proposed development for this pollutant.	ES Chapter 5 Air Quality (APP-045) has provided full details of the assessment methodology and conclusions, including use of modelling to demonstrate the impact of the Scheme for this pollutant. The dispersion modelling of the baseline PM10 has shown that the predicted concentrations are significantly below the Air Quality Objective (AQO), and thus following DMRB methodology there is no need to further assess this pollutant. This model has been fully verified following LAQM TG(16). PM2.5 makes up around 60% of PM10 dependent on the source of the emissions. The ES has shown that there is no risk to the PM10 objective being exceeded even if all of the PM10 was PM2.5 the modelling confirms that there is also no risk to the current PM2.5 AQO and therefore, there is no requirement to undertake further monitoring.
Q4.0.6	ES Chapter 14: Climate [APP-053] paragraph 14.5.2 please explain what levels of maintenance are expected?	South Norfolk Council has no objection to the approach subject to the levels of maintenance not being likely to materially affect the baseline calculations.	The levels of maintenance are not likely to materially affect the baseline calculations, as stated in paragraph 14.5.2 of ES Chapter 14 Climate (APP-053).
7.0.33	Art41: What are the respective parties' views of the imposition of a date of 24 July 2020?	Broadland District Council and South Norfolk Council are not sure why it is this date in particular, but don't have a particular issue with it.	This is the date the arboricultural survey was carried out, therefore any Tree Preservation Orders made after this date will not be known to the Applicant and have not been considered as part of the DCO application.
10.0.2	Are the parties satisfied with the Environmental Masterplan [APP-138] and the indicative proposals shown for the Proposed Development?	These remarks were offered previously, but do not appear to have been considered: <ul style="list-style-type: none"> • Reservations about the proposed formal approach to planting around the Eastern pedestrian/cycle bridge; this is not an urban area as the annotation suggests. • Will it be possible to view St Peter's Church Easton from the pedestrian/cycle crossing and/or its approach(es)? If not, is this desirable/possible? 	The Council's comments were addressed in the following responses in the Applicant's Response to the Relevant Representations (REP1-013): <ul style="list-style-type: none"> • RR-057.9 • RR-057.10 • RR-057.11

No	ExA Question	Council's Response	Applicant's Comment
		<ul style="list-style-type: none"> • What is the function of the spur of former Church Lane to the north of the proposed Easton pedestrian/cycle bridge? Is this necessary? 	
10.0.13	ES Chapter 7: Landscape and Visual Effects [APP-046], Table 7.6 - are the assumptions around tree heights for Yr15 reasonable? If not, please explain.	<p>Whilst the anticipated heights are potentially achievable, it would be useful to have information about the likely species within each category as there could be exceptions to the heights suggested.</p> <p>Our experience is that hedgerow plantings at year 1 are commonly shorter than stated at no more than 0.45m.</p>	<p>For the purposes of assessment, Year 15 is considered a reasonable estimate of the time taken for proposed mitigation planting to reach a level of maturity that it will provide a level of landscape and visual mitigation such that an accurate assessment of residual effects, i.e. effects following the establishment of mitigation, may be carried out.</p> <p>The assumptions around tree heights in Table 7-6 are considered to be reasonable. The nature of planting growth is not an exact science and trees will be planted at different specifications (i.e. size and nursery growth type) to ensure variety. In addition, different species of trees demonstrate different growth rates and the varying ground and climatic conditions throughout the site will give rise to further differences in the growth rates that will be achieved. However, it is safe to assume that after 15 years areas of proposed woodland trees, which comprise the majority of the proposed tree planting, will reach an approximate 8m in height. This assumes an approximate height of 0.6m when planted and a subsequent growth rate of 0.5m per annum.</p> <p>Additional detail regarding the planting types and sizes (heights) will be considered further when developing the final landscaping design under DCO Requirement 5 'Landscaping' (REP2-005) and the detailed Landscape and Ecology Management Plan (LEMP), which forms Appendix B.5 of the Environmental Management Plan (APP-143), during the detailed design stage prior to construction.</p> <p>The relevant planning authority will be consulted in the final landscaping scheme and LEMP that will be delivered as commitments through dDCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (REP2-005).</p>
Q12.0.1	ES Chapter 11: Noise and Vibration [APP-050] are the parties satisfied that the baseline conditions as identified in Section 11.7 is accurate? Have all the receptors been correctly identified? If not, please explain.	South Norfolk Council consider that the applicant should provide further information about their reasoning in Appendix 11.4 and in particular in para11.1.9.	<p>ES Appendix 11.4 (APP-092) provides a discussion regarding the baseline noise survey and the effects of the global Covid-19 pandemic on measured road traffic noise levels.</p> <p>Table 11.4-1 of ES Appendix 11.4 demonstrates that 24 hour traffic flows during the survey were 10% less than a typical month before the pandemic (September 2019). When applying the Calculation of Road Traffic Noise methodology (required by DMRB LA111) this reduction in traffic flow would be associated with a 0.5 dB $L_{A10,18hr}$ reduction in road traffic noise across the 18 hour period (06:00 to 00:00). This is a negligible change and the therefore the effect of the pandemic on measured road traffic noise levels obtained in September 2020 is deemed to be negligible when compared to a typical month before the pandemic.</p> <p>Paragraph 11.1.9 presents a summary of the differences between the Do Minimum Opening Year calculated road traffic noise levels and the measured road traffic noise levels obtained during the survey. The average difference between road traffic noise levels measured during the survey at the long-term measurement positions and the road traffic noise model results is +1.6 dB. This is considered to be a good correlation and the road traffic noise model was considered to be robust for use in the environmental impact assessment for the Scheme.</p>
Q12.0.2	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.4.3, are the parties satisfied with the changes to the assessment methodology from the scoping report? If not, please explain why.	Has the applicant considered para 3.50 of LA 111Rev2 when determining Table 11.2 of APP- 050? Our understanding is that the parameters in Table 3.49.1 are not fixed.	<p>Paragraph 3.50 was one consideration borne in mind within the assessment of significance presented in Table 11.16 of ES Chapter 11 (APP-050).</p> <p>When considering the type of receptors that were potentially subject to a significant effect due to operational noise, no modification to the LOAEL or SOAEL values (either an increase or reduction in these values) was considered appropriate.</p>

No	ExA Question	Council's Response	Applicant's Comment
Q12.0.3	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.4.11 are the parties satisfied with this approach? If not, please explain why.	Please see Q12.0.1 above	Please see response to Q12.0.1 above
Q12.0.6	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.7.3 are the parties content with the way the appellant has addressed the issue of undertaking surveys during the COVID19 pandemic? If not, why not.	Please see Q12.0.1 above	Please see response to Q12.0.1 above
Q12.0.10	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.9.6 are the parties content with the triggers for the implementation of temporary mitigation? If not, please explain why.	Childhood First are expressing concern about impacts on their residents at Merrywood House. South Norfolk Council are not familiar with current discussions but would hope that effective mitigation or other measures will be provided to avoid distress.	<p>The Applicant has, and is continuing to, engage with Childhood First to manage their concerns relating to the construction works in the field north of Merrywood House.</p> <p>The effects of noise and vibration associated with the construction and operation of the Scheme were considered and discussed within ES Chapter 11.</p> <p>In terms of operational noise, the Scheme is expected to result in negligible change in road traffic noise at Merrywood House and no significant operational noise effects are expected.</p> <p>In terms of construction noise, further mitigation was identified as being required in Table 11.12 in relation to the pre-works stage (National Grid gas main diversion). With further mitigation as detailed in Action NV1 in Table 3.1 of the Environmental Management Plan (APP-143), secured via Requirement 4 of the dDCO (REP2-005), no significant effects are expected due to construction noise.</p> <p>Noise from construction shall also be subject to Action G1 within Table 3.1 of the Environmental Management Plan. This requires that works outside of normal working hours are discussed with the local planning authority and appropriate methods of mitigation (including for noise and vibration) agreed with the local planning authority. Therefore, the relevant local planning authority will have the opportunity to review noise mitigation measures for night-time works should these be unavoidable during the construction period for the Scheme.</p>
Q12.0.12	ES Chapter 11: Noise and Vibration [APP-050] paragraph 11.9.29 are the parties satisfied with the justifications provided for the exclusion of these mitigation measures from the proposed scheme? As a result, do the parties consider that the proposed noise barriers are in accordance with NPS NN as mitigation measures that are considered to be proportionate and reasonable? If not, please explain why.	It would appear that the applicant has explored a barrier for Hall Farm and cottages, Honingham, 442m long x 3m high and that due to the topography presumably this does not provide worthwhile attenuation.	<p>A noise barrier was considered at this location as part of the noise impact assessment, as discussed further in paragraph 11.9.29 of ES Chapter 11 (APP-050).</p> <p>The effect of the barrier of a significant length and height was to reduce road traffic noise levels by between 0 and 2 dB. This was not sufficient to influence the impact magnitude or conclusion with regard to the significance of operational noise effects. Therefore, this barrier was not proposed at this location since it is not a proportionate or reasonable mitigation measure.</p> <p>Mitigation in the form of a low-noise surface along the length of the Scheme has been included; but is not sufficient to avoid significant adverse noise effects in this location.</p> <p>With the Scheme, road traffic noise levels are expected to range from 55 to 58 dB L_{A10,18hr} at these receptors and are therefore below the SOAEL.</p> <p>Good indoor conditions (defined within the WHO Guidelines for Community Noise and British Standard 8233:2014) within these receptors would be achieved with a building envelope that provides a level difference of approximately 21 dB. This would be achieved where the external walls to habitable rooms incorporate an open trickle vent and 6 mm single glazed windows that are closed. For this reason, no significant adverse health effects are expected on the occupants due to this level of road traffic noise and the provision of secondary glazing is not considered necessary.</p>

No	ExA Question	Council's Response	Applicant's Comment
Q13.0.1	ES Chapter 12: Population and human health [APP-051] are the parties satisfied with the assessment methodology? If not, please explain.	<p>In 2018 the World Health Organisation published health based Environmental Noise Guidelines for road traffic noise for the whole day (53 dB Lden) and for night time (45 dB Lnight) BDC and SNC believes it would be helpful if an assessment could be carried out to determine the effect of the applicant's proposal by comparing noise levels from the existing road with the proposed completed road using the noise units above.</p>	<p>The WHO Environmental Noise Guidelines for the European Region (2018) set out recommendations for protecting human health from exposure to environmental noise including road traffic noise. This includes the guideline value of 53 dB L_{den} for road traffic noise. This guideline was derived primarily with reference to studies on annoyance and road traffic noise, and was established as the point at which 10% of population is "highly annoyed" when considered a best-fit line through a wide range of different studies from different countries. It is noted that different studies presented in Figure 6 of the WHO guidelines demonstrated the threshold of 10% "highly annoyed" at a wide range of different road traffic noise levels varying from 40 dB L_{den} to 75 dB L_{den}. This guideline applies outdoors and is therefore not an appropriate measure for assessing indoor health effects (since building sound insulation performances and therefore indoor noise levels vary from building to building).</p> <p>Road traffic noise levels with the Scheme are shown graphically within ES Figures 11.5 (for the opening year) and 11.6 (for the future year) (APP-074). Predicted road traffic noise levels are expressed in terms of dB L_{A10,18hr}, as required by DMRB LA111. For locations where road traffic noise is the dominant source of noise, the L_{den} parameter is approximately equivalent to the dB L_{A10,18hr} parameter when using the TRL Conversion Method referenced in ES Chapter 11.</p> <p>Based on the above assumption, dwellings within approximately 400 m of the Scheme will be subject to road traffic noise levels that are above the recommended threshold within 2018 WHO Environmental Noise Guideline of 53 dB L_{den}. This is not unusual in context of research carried out by the European Environment Agency that estimates that more than 100 million people in Europe are exposed to L_{den} levels above 55 dB; for night-time road traffic noise, over 72 million Europeans are exposed to L_{night} levels above 50 dB (Blanes et al., 2017). Dwellings within approximately 300 m of the existing A47 at Honingham will currently be subject to road traffic noise levels that are above the recommendations within 2018 WHO Environmental Noise Guideline of 53 dB L_{den}.</p> <p>The assessment of potentially significant effects within ES Chapter 11 (APP-050) considers both expected change in road traffic noise with the Scheme as well as the absolute road traffic noise level with the Scheme versus the effect levels within DMRB LA111. The significance of operational road traffic noise is then presented within Table 11.16.</p>
Q15.0.1	ES Chapter 13: Road drainage and the water environment [APP-052], are the parties content with the Applicant's Flood Risk Assessment (FRA) and drainage proposals? If not, please explain why and what additional information is required.	<p>South Norfolk Council is concerned to ensure that the development poses no risk to private drinking water supplies. It was noted in Appendix 13.4 para 2.45 that the applicant has made a request to SNC for details of private water supplies in the vicinity but had not received a response to this request. We will look back at our records to see whether we can clarify what occurred and in the meantime will provide the applicant and the Inspector with information concerning boreholes and wells that we are aware of. Whilst we will make every effort to assist, our view is that it is for the applicant to determine the location of all private water supplies. Our records are not complete and it might be necessary to ask property owners to confirm whether they have a private supply for example. Once every effort has been made to determine locations the applicant should assess whether the development might pollute the supplies taking account of the drainage proposals both in normal operation and in situations such as accidents and tanker spillages for example.</p>	<p>The Applicant welcomes South Norfolk Council's offer to provide information concerning unlicensed abstractions.</p> <p>At the detailed design stage, the Applicant will undertake a water features survey to confirm the details of unlicensed abstractions and additional water features (including additional abstractions) in the vicinity of construction works. The Drainage Strategy (APP-126 and APP-127) has considered groundwater pollution risk (HEWRAT) and mitigation has been proposed.</p> <p>Delivery of this commitment is specified in actions RD3 and RD5 in Table 3.1: Record of Environmental Actions and Commitments of the Environmental Management Plan (APP-143) which will be delivered under dDCO (REP2-005) Requirement 4.</p>

No	ExA Question	Council's Response	Applicant's Comment
Q15.0.3	ES Chapter 13: Road drainage and the water environment [APP-052], do the parties agree that section 13.7, baseline conditions, is an accurate assessment of the current situation? If not, why not.	Please see answer to 15.0.1	Please see response to Q15.0.1 above

6 BROADLAND DISTRICT COUNCIL

6.1.1 Broadland District Council's responses to the Examining Authority's First Written Questions are available at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000561-DL2%20-%20Broadland%20District%20Council%20-%20Responses%20to%20the%20ExAs%20First%20Written%20Questions.pdf>

6.1.2 With regards responses by Broadland District Council where concerns or requests are made warranting provision of additional information or clarity by the Applicant, the majority were the same as those presented above for South Norfolk Council. Therefore, the Applicant has not duplicated these responses, but provided below a list of questions this approach applies to:

- Q2.0.5
- Q4.0.6
- 7.0.33
- 10.0.2
- 10.0.13
- Q12.0.1
- 12.0.2
- Q12.0.3
- Q12.0.6
- Q12.0.10
- Q12.0.12
- Q13.0.1
- Q15.0.1
- Q15.0.3

6.1.3 The table below presents a Broadland District Council specific concern warranting provision of additional information or clarity by the Applicant.

No	ExA Question	Council's Response	Applicant's Comment
Q5.0.5	At paragraph 4.17.11 of the SoR [APP-021], the Applicant does not consider the presence of the unimplemented Local Development Order to be a risk or an impediment to the Scheme. What is BDC's view of this statement?	<p>Broadland District Council consider that you can't describe the Local Development Order (LDO) as 'unimplemented'.</p> <p>The LDO is in place for an initial 15 years from its adoption and two buildings are currently being delivered 'under' the LDO.</p> <p>Direct access to the strategic road network is an integral element of delivering the FEP vision in its entirety and improved access will help to expedite the delivery of the FEP. If an access to the FEP is not provided in the vicinity of Blind Lane there is likely to be an unacceptable increase in heavy goods movements through the village of Easton. The Council would continue to request that the A47 Scheme includes this important access and helps facilitate its delivery.</p> <p>The operators of the FEP have submitted a planning application to Broadland District Council for a proposed access into the FEP in the vicinity of Blind Lane and to tie in with the proposed A47 scheme. Application reference 20211335.</p>	<p>The Applicant agrees that the LDO has been implemented and the Statement of Reasons (REP2-010) will be updated accordingly to reflect this. The Applicant still considers that the presence of the LDO is not a risk or an impediment to the Scheme, particularly as the LDO does not include an existing or contingent requirement that requires the Food Enterprise Partnership (FEP) to be accessed directly from the A47.</p> <p>The Applicant has considered the access to the FEP in more detail in section 9.3 of the Scheme Design Report (AS-008) and sets out analysis as to why a direct access to the A47 is not required. This is also set out in paragraph 4.17 of the Statement of Reasons (REP2-010).</p> <p>The LDO made by Broadland District Council (BDC) on 31 October 2017 required a vehicular access route to the FEP to be approved prior to commencement of development pursuant to condition 2.20 of the LDO as well as the closure of Blind Lane. The route via Church Lane was approved by BDC on 21 December 2018 and has therefore been the intended route since that date. As such, there is no requirement for the Scheme to provide an access over and above what has been approved to-date by BDC.</p> <p>The Applicant notes that developers of the FEP have submitted a separate planning application for access into the FEP and to tie in with the A47.</p>

7 ENVIRONMENT AGENCY

7.1.1 The Environment Agency's responses to the Examining Authority's First Written Questions are available at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000572-DL7%20-%20Environment%20Agency%20-%20Responses%20to%20the%20ExA%E2%80%99s%20First%20Written%20Questions.pdf>

No	ExA Question	Environment Agency's Response	Applicant's Comment
Q15.0.13	ES Chapter 13: Road drainage and the water environment [APP-052], paragraph 13.9.22 refers to the Drainage strategy (Appendix 13.2 (TR010038/APP/6.3)) which proposes all road drainage will drain by surface water outfalls to the River Tud and its tributaries at twelve locations, utilising nine new outfalls. Is this approach acceptable to parties and in their view, is it adequate to deal with surface water and does it make suitable allowances to cover the design life of the Proposed Scheme?	<p>We can confirm that we are currently satisfied with the approach outlined in the drainage strategy for managing surface water during operation in respect of protecting water quality within the River Tud. As highlighted in our Relevant and Written Representations, we would wish to review the details of the new outfalls and the mitigation measures to be included at the detailed stage to ensure that these are also acceptable. In order to enable this, we requested that the Environment Agency be included as a named consultee in respect of Requirement 8 Surface and foul water drainage system.</p> <p>We are pleased to note that in the dDCO Revision 1 [REP1-003], R8 has been amended to include the Environment Agency as a named consultee in respect of Part (1). We would however request that we are also a named consultee in Part (2).</p>	The draft dDCO has been updated to include the Environment Agency as a consultee in in part (2) as well as part (1)

8 WESTON LONGVILLE PARISH COUNCIL

8.1.1 Weston Longville Parish Council's response to the Examining Authority's First Written Questions is available at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000450-DL2%20-%20Weston%20Longville%20Parish%20Council%20-%20Response%20to%20ExQ1.pdf>

No	ExA Question	Council's Response	Applicant's Comment
Q10.0.10	ES Chapter 7: Landscape and Visual Effects [APP-046], 7.7.33, given that paragraph 7.7.32 identifies that 'As the existing extent of lighting is concentrated around Easton, Hockering and Honingham, the surrounding areas are susceptible to a spread or coalescence of lighting beyond existing limits', please explain and justify why, in 7.3.33, the night-time context around settlements is considered to be of low sensitivity?	<p>Weston Longville Parish Council accepts, and regrets, the statutory requirement for artificial lighting at the Wood Lane Junction. It is currently an 'intrinsically dark' rural environment and whatever lighting is provided should be the absolute minimum and should be at pains to avoid any 'sky glow'.</p> <p>The Applicant should also take account of the research that suggests that LED streetlights are decimating moth numbers in England and advocates the use of bat friendly red lighting. See link below: LED streetlights decimating moth numbers in England https://www.theguardian.com/environment/2021/aug/25/led-streetlights-mothengland-eco-friendly-sodium-insect-decline.</p> <p>WLPC also noted that the lighting impact assessment was delegated to Designs for Lighting Ltd who produced a desk based report.</p> <p>WLPC suggests that its conclusions should be tested on site prior to implementation.</p>	<p>The Bat Conservation Trust and Institution of Lighting Professionals issued Guidance Note 08/18 Bats and Artificial Lighting in the UK in 2018.</p> <p>This document is aimed at lighting professionals, lighting designers, planning officers, developers, bat workers/ecologists and anyone specifying lighting. It is intended to raise awareness of the impacts of artificial lighting on bats, and mitigation is suggested for various scenarios. However it is not meant to replace site-specific ecological and lighting assessments.</p> <p>The Applicant will consider this guidance when developing their detailed design.</p> <p>WLPC comments have been noted and conclusions from ES Appendix 7.7 Lighting Assessment (APP-094) shall be carried forward into the lighting strategy for detailed design stage.</p> <p>Further site assessment works are to be assessed in relation to ES Appendix 7.7's conclusions being tested on site prior to implementation, and may result in further site work during the detailed stage.</p>