

A47 North Tuddenham to Easton

Scheme Number: TR010038

9.8 Applicant's Response to the Written Representations

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]

9.8 APPLICANT'S RESPONSE TO THE WRITTEN REPRESENTATIONS

Rule Number:	8(1)(c)	
Planning Inspectorate Scheme Reference	TR010038	
Application Document Reference	TR010038/EXAM/9.8	
BIM Document Reference	HE551489-GTY-LSI-000-RP-TX-40009	
Author:	A47 North Tuddenham to Easton Project Team, Highways England	

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



CONTENTS

1	Introduction	1
2	Key Abbreviations	1
3	Brown & Co on Behalf of Alston Farms Ltd	2
4	SAvilLs UK on Behalf of Anthony Meynell	3
5	Bryan Robinson	7
6	Childhood First	8
7	Climate Emergency Policy and Planning (CEPP)	9
8	D G M Kenney	11
9	David Hooker	11
10	David Lewis	14
11	David Pett	14
12	Easton Parish Council	14
13	Environment Agency	14
14	Historic England	17
15	Brown & Co on Behalf of Honingham Aktieselskab	18
16	National Grid Gas	22
17	Norfolk County Council	23
18	Norfolk County Council (as Scheme Promoter of Norwich Western Link)	25
19	Norfolk Gardens Trust	26
20	Norwich Green Party Group of City and County Councillors	27
21	Orsted Hornsea Project Three (UK) Limited	29
22	Richard Hawker	29
23	Sally Watts	39
24	Weston Longville Parish Council	40
ANNEY	A - Existing and Proposed routes to the Farmland Owned by Mr Alston	11



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) responses to the Written Representations submitted to the Examining Authority at Deadline 1, on 01 September 2021.

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



3 BROWN & CO ON BEHALF OF ALSTON FARMS LTD

- 3.1.1 The below Written Representation submitted at Deadline 1 on behalf of James Alston (see below link) has been examined and the responses to the questions and concerns raised are provided in the table below.
 - <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000489-D1_Brown%20&%20Co%20for%20James%20Alston%20-%20Written%20Representations%20(WRs).pdf

Comment	Applicant's Response
HE's proposals result in: More farm traffic mixed in with local traffic,	As set out in RR-074.1 and RR-074.2 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has provided responses on this matter.
which will be concentrated due to closures	The Scheme is located in a rural location where agricultural traffic and local traffic utilise the local road network on a daily basis.
	The Scheme would close Berrys Lane, Blind Lane and Church Lane to through traffic as a result of consultation feedback and engagement with the multi parish local liaison group and the local highway authority.
	The Applicant supplied two drawings (see Annex A in this document), in response to the Interested Party's Relevant Representation, that identified the existing routes and proposed routes to the farmland blocks owned by Mr Alston.
	From these access points it appears the internal farm access network could be utilised more to remove agricultural vehicles from the local road network. The internal farm access network is well defined and visible on satellite mapping dated 2021.
Longer routes meaning more safety issues, disturbance, road time and significant fuel cost let alone air pollution from farm machinery	The proposed routes provide safer crossings of the A47 through the grade separated Wood Lane and Norwich Road junctions, removing the existing safety risk of large slow moving agricultural vehicles crossing the eastbound and westbound carriageways of the Strategic Road via the existing at grade staggered T-junctions at Berrys Lane / Wood Lane & Blind Lane / Taverham Road.
	In the existing situation to travel north or south, large agricultural vehicles have to wait for an opportunity to access the A47, before then slowing down to a standstill and awaiting a gap to cross the opposing carriageway. This requires the vehicles to be idling at the junction locations and also causes a platooning effect of traffic on the Strategic Road Network.
	The Scheme removes this safety risk and provides a continuous route with free flow junctions providing safe segregated crossings of the A47.
Routes that will put all farm traffic through the centre of Ringland Village	The proposed routes shown on drawing HE551489-GTY-LLO-000-SK-BL-30002, in Annex A, do not indicate traffic entering the centre of Ringland Village.
Routes that will put all farm traffic through Ringland Hills	The proposed routes shown on drawing HE551489-GTY-LLO-000-SK-BL-30002, in Annex A, do not place all traffic through Ringland Hills.
Farm traffic to be pushed to the village Easton straight past the historic Church and near the proposed developments and interacting with FEP traffic.	The LDO made by Broadland District Council (BDC) on 31 October 2017 required a vehicular access route to the Food Enterprise Park to be approved prior to commencement of development pursuant to condition 2.20. The route via Church Lane was approved by BDC on 21 December 2018 and has therefore been the intended route since that date. The LDO also requires the closure of Blind Lane upon completion of 10,000m2 of development floorspace. So the closure of Blind Lane and any associated impacts are likely to occur regardless of whether the Scheme is implemented
	As set out in RR-074.2 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant notes that the promoters of the FEZ and owners of Honingham Thorpe Farm (HTF) have now lodged a planning application (27 th July 2021) with the Local Planning Authority, Broadland District Council, (Application No.: 20211335) for the provision of a private access to the Scheme along the route of the existing Blind Lane access.
	The Applicant will continue to engage on this matter through the course of the DCO Examination in light of the submitted planning application.
The total closure of Honingham Lane is objected to and the respondent wishes for the applicant to	The Applicant has engaged with the Interested party via the appointed land agent and has confirmed in writing the Applicant's position on this matter.
reconsider its appraisal of the possible post construction routes, gain a better understanding of the highways network on the ground and cease promoting a plan that adds to journey times, local network congestion and pushes traffic into residential areas. The respondent supports the restriction of traffic through Honingham Lane to those parties requiring it for direct access to their property. It is vital that Honingham Lane remain physically passable to all vehicles needing to access the [REDACTED]. The respondent is willing to work with HE to develop a scheme to secure their continued use of Honingham Lane whilst excluding public traffic, thus helping to safeguard the residents of Ringland	Article 16 of the dDCO provides powers to temporarily stop up, alter, divert or prohibit the use of any street for the purposes of carrying out the authorised development subject to certain conditions. Therefore, the Applicant has the power to close Honingham Lane if so required; however, it will not be implemented on Day 1 of construction.
	The existing sideroads will be closed at differing times, thus affording routes north – south during the construction period; for example, removal of Easton roundabout and access to Church Lane, Easton, is not proposed until approximately 16 months into the construction programme.
	However, this is still under discussion with Norfolk County Council as the closure of Honingham Lane is only a temporary mitigation measure for the potential delay between the opening of the A47 Scheme and the proposed NWL scheme.
	The Applicant explained the approach to on the closure of Honingham Lane and how it is not the intention to provide a gated access and permit restricted access to any party as this would lead to enforcement issues.
village from congestion and rat running.	Please see RR-074.2 of the Applicant's Responses to Relevant Representations (REP1-013), where the process and practicalities for a gated access were broken down to reflect the 9 step process required.



Comment	Applicant's Response	
	A potential mitigation measures has been suggested which would prohibit use of the route by cars / vans but permit access for agricultural vehicles. The Applicant is exploring this mitigation measure with the Local Highway Authority (Norfolk County Council) and will continue to engage with affected parties regarding the construction programme and associated traffic management.	
	The Applicant also notes the answer provided in relation to point 1 is also relevant here.	

4 SAVILLS UK ON BEHALF OF ANTHONY MEYNELL

- 4.1.1 The following Deadline1 submission documents from Savills UK have been examined and are available for viewing at: https://infrastructure.planninginspectorate.gov.uk/projects/eastern/a47-north-tuddenham-to-easton/?ipcsection=docs&stage=4&filter1=Deadline+1+%28D1%29.
 - Summary of Written Representation ACM 00
 - Index of documents submitted
 - Written Representation ACM 01 Introduction and index
 - Written Representation ACM 02
 - Written Representations ACM 03.08
 - Written Representation ACM 03 Statement of A.C. Meynell
 - Written Representation ACM 03.1 Appendix 1
 - Written Representation ACM 03.2 Appendix 2
 - Written Representation ACM 03.3 Appendix 3
 - Written Representation ACM 03.4 Appendix 4
 - Written Representation ACM 03.5 Appendix 5
 - Written Representation ACM 03.6 Appendix 6
 - Written Representation ACM 03.7 Appendix 7
 - Written Representation ACM 03.8 Appendix 8
 - Written Representation ACM 03.9 Appendix 9
 - Summary of Written Representation ACM 03.10 Appendix 10
 - Written Representations ACM 03.8 Appendix 11
 - Written Representation ACM 03.11A Annex A to Appendix 11
 - Written Representation ACM 04 Transport Consultant's Report
 - Written Representation ACM 05 Woodland Appraisal
- 4.1.2 The below table presents the Applicant's response to the issues raised. The Applicant has discussed these issues with representatives of the Berry Hall Estate and the parties are working towards a Statement of Common Ground (TR010038/EXAM/8.8) which is being prepared to issue to the Examination as an additional post Deadline 3 submission for consideration prior to the hearings in November.

Issue	Specific Concern	Applicant's Response
Consultation process	 Failing related to consultation on: Temporary works – compounds and storage areas. A47 access removal not mentioned. 	As set out in RR-061.11 and RR-061.13 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has been in correspondence with the landowner and their representatives about the effects on the Berry Hall Estate.
	Wood Lane junction proposals.	The landowner was consulted on the route options in 2017 (see response to RR-061.11) and on the preferred route design, including A47 access removal and Wood Lane junction design and a proposed DCO boundary allowing for temporary work areas extents, during Statutory Consultation (February – April 2020). An updated design with revised DCO boundary and additional details of compounds and storage areas was consulted upon during the Targeted Consultation (December 2020-January 2021) and via meetings and direct correspondence.
		As set out in RR-061.8 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has made several changes to the Scheme design to reduce the impact on Berry Hall Estate.
Estate's designation under Inheritance Tax Act 1984	Estate's designation under Inheritance Tax Act 1984 means the Berry Hall Estate should have been assessed as being an asset of national significance	The effects on Berry Hall Estate and its listed buildings as Heritage, Visual and Landscape constraint were considered, and impacts assessed in ES Chapter 6 – Cultural Heritage (APP-045) and ES Chapter 7 Landscape and Visual Effects (APP-046).
	for its scenic and heritage value.	As set out in RR-061.2, RR-061.6 and RR-061.7 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has reviewed the Berry Hall Estate ITA 1984 designation and Heritage Management Plan and concluded that, while they contain some additional information on the Estate to



Issue	Specific Concern	Applicant's Response
		that considered during the assessment, this would not affect the conclusions
		within the route options studies and in ES Chapters 6 and 7.
	No proposed mitigation measures to preserve the historic and scenic interest for which the Estate has been designated.	As set out in RR-061.8 and RR-061.9 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has considered alternative options to Wood Lane junction and made changes to minimise the permanent landtake impact on the Estate.
		In addition, actions are proposed in the Environmental Management Plan (APP-143) to limit and mitigate the impact to and protect cultural heritage assets during construction and operation of the Scheme, such as CH1 that proposes: "Sensitive vegetation planting design along the route corridor and proposed junctions to screen and enhance the setting of heritage receptors (such as St Peter's Church, St Andrew's Church, Berry Hall, and Church Farm House and Barn)." These actions are secured through dDCO Requirement 4 'Environmental Management Plan' (REP2-005).
Compliance with the statutory and policy requirements relating to compulsory acquisition	The Applicant has failed to consider reasonable alternatives to the proposed Wood Lane junction involving no or lesser compulsory acquisition upon the Estate, and resulting in no or	The land included within the Application is no more than is reasonably required for the construction, operation and maintenance of the Scheme, and the limits of the land required have been drawn so as to avoid unnecessary land take. The approach taken is proportionate. The permanent, temporary and new rights allocation has assumed as a worst
	The Applicant has failed to demonstrate that it has sought to minimise the impact upon the Owner's	case need for the DCO application purposes and will be continually under review as the detailed design process progresses. If during the Examination it becomes apparent that less land is required, or the Scheme can be constructed with reduced rights (e.g. avoiding permanent acquisition), then the Applicant will continue to seek to minimise the permanent landtake impacts on the landowner.
	land and, consequently, that the interference is proportionate.	As set out in RR-061.8 and RR-061.9 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant has considered alternative options to Wood Lane junction and made changes to minimise the permanent landtake impact on the Estate.
	The Applicant has made no meaningful attempt to acquire the land it requires by agreement.	The Applicant has engaged with the landowner since 2017 as described in RR-061.13 of the Applicant's Responses to Relevant Representations (REP1-013). The Applicant will continue to work with representatives of the Berry Hall Estate, during the DCO Examination and detailed design development of the Scheme, to seek an agreement to acquire land for permanent, temporary and new rights.
	Alternative designs have been presented for the location and layout of Wood Lane junction.	The Applicant is reviewing the Transport Consultant's Report submitted by Savills UK. However, representatives of the Berry Hall Estate submitted updated alternative Wood Lane junction design proposals to the Applicant on Friday 17 September 2021 at 11.38pm (pdfs) with digital AutoCad (.dwg) files issued on Tuesday 21st September 2021.
		Therefore, the Applicant has not been able to complete their assessment of the alternative design proposals for submission at Deadline 3. However, the Applicant will provide the ExA a technical review note by Monday 25 October to allow time for the ExA to consider before the hearings in November.
		The technical review will consider the alternative designs with regards to:
		1. DMRB Compliance
		a. Mainline
		b. Junctions
		i. DMRB Junction Hierarchy
		ii. DMRB Compliance
		c. Sideroads
		Operational Traffic a. Operational capacity and queuing etc
		b. A47 interaction with side road network and communities
		c. Implications for Applicant's commitments post Statutory consultation feedback
		3. Safety Objectives
		a. Departures
		b. Safety Concerns
		4. Number of Structures
		a. Cost
		b. Environmental impact (incl. carbon emissions)
		c. Maintenance
		5. Landtake impacts a. Berry Hall Estate land
		b. Land owned by other landowners
		2



Issue	Specific Concern	Applicant's Response
Loss of access to the Estate	Compulsory acquisition would authorise permanent acquisition of every access/egress to the Estate, leaving Owner and others without any property right to access or egress the Estate.	The Applicant requires the rights to construct a permanent drainage system across the private driveways connecting Berry Hall to Berrys Lane. However, the Applicant would ensure the Owner and occupiers of the Berry Hall Estate retain the right to access or egress the Estate during construction and subsequent operation of the Scheme. In addition, Article 17 of the dDCO (REP2-005) only provides the power to close the private accesses listed in Schedule 4 and only the access from the A47 to Berry Hall is listed as being permanently stopped up. The permanent acquisition rights proposed in the DCO are a worst case option to enable the Applicant to install new land drainage across the accesses from Berrys Lane. Through the detailed design of the Scheme, the Applicant will work with representatives of the Berry Hall Estate to provide this drainage provision with minimal permanent loss of land to the Berry Hall Estate or, if feasible, through acquisition of easement rights to install and maintain the drainage, thereby avoiding the need to apply permanent compulsory acquisition rights.
	Need for continued access to the Estate throughout construction and operation, including by HGVs.	All direct access to the strategic road network within the Scheme extent is proposed to be closed off to achieve the safety improvements and free flowing requirements of the Scheme design.
	Closure of the A47 access (the 'Old Back Drive'), namely the resulting inability for HGVs including refuse lorries, farm vehicles and timber lorries, to access to the Estate (and, potentially fire engine).	However, the Applicant is working with representatives of the Berry Hall Estate to clarify concerns regarding impacts on vehicular access to the estate from closure of the direct access to the existing A47 and, if required, explore means to maintain access to the Estate via Berrys Lane for private property, agricultural and forestry needs.
	Implications of the above for the farming and forestry businesses.	
	The closure of Berry's Lane at the A47 junction would result in a loss of passing sales for Berry hall Estate's Christmas tree business, and the BHE's biggest advertising signs are placed at that junction.	The Applicant acknowledges the potential impact on the business, albeit access would be retained via Berrys Lane. Any impact would be addressed as part of a land agreement between the Applicant and Mr Meynell.
Impact on farming business	Extent of both the temporary land take for the farming business (including use of the cattle building), namely that the taking of the majority of all three arable fields and their use for works purposes and the loss of the silage clamp is likely to result in the cessation of the beef farming business at the Estate because of the significance of both to the system of farming operated.	As set out in RR-085 of the Applicant's Responses to Relevant Representations (REP1-013), the Applicant would work with the farmer to mitigate the temporary impact to the farming business. The Applicant will make sure access to and use of the building for the cattle and silage clamp will be maintained during construction of the Scheme, while alternative measures for the temporary loss of use of the arable fields for growing grain for feed and spreading the cows' manure as fertiliser would be addressed as part of a land agreement between the Applicant and Mr Meynell.
	The meadows will be unable to be used in practice for pasture and degraded by lack of use.	Access to the meadows will also be maintained during the construction of the Scheme, avoiding the pastures degrading by lack of use. This would be addressed as part of a land agreement between the Applicant and Mr Meynell.
	The arable fields will be degraded and are likely to take several years before any viable cultivation can recommence.	The Applicant's Principal Contractor will make sure where the arable fields are temporarily used, the site clearance and restoration would follow established soils management best practice to enable cultivation to recommence post restoration; these principles will be set out in Annex B.2 (Soil Handling Management Plan) of the Environmental Management Plan, compliance with which is secured through Requirement 4 of the dDCO (REP2-005). The Applicant will continue working with representatives of the Berry Hall Estate to understand the type of restoration required to support their cropping needs.
	Permanent land take for the farming, with the middle field likely to be lost as it will probably have to have an earth bund constructed across it to deflect noise from the south dumbbell and the remainder taken to be fully planted as a visual barrier to the new road to protect the hall and gardens.	The Applicant is working with representatives of the Berry Hall Estate to explore means to minimise the permanent landtake due to Wood Lane junction and associated drainage and landscaping west of Berrys Lane. No noise earth bund is required in this location.
Water supply to the farming business	Continued use of the Estate's private reservoir, the criticality of which to the farming enterprise the Applicant has explicitly recognised, but which is proposed to be permanently acquired and where no alternative has been proposed.	The Applicant will continue working with representatives of the Berry Hall Estate during the development of the Scheme's detailed design to provide measures to maintain use of the Estate's private reservoir or provide an alternative water supply.



Issue	Specific Concern	Applicant's Response
Impact on arboricultural interest of the estate	Through taking the northern woodland belts into their ownership the Applicant will thereby not only waste a generation of careful and continuous work on the Estate's trees but will destroy the opportunity for these trees to be managed in the future to grow to their full capability and thus the opportunity to provide the contributions to the community and to its economic vitality that were intended when they were planted. The significance of the effect of the Proposed Scheme upon the arboricultural interest of the Estate, having regard to the increased quality and sensitivity of that interest as compared to that identified in the Environmental Statement.	The Applicant requires permanent land acquisition rights to ensure delivery of the Scheme, but for the woodland belt either side and west of the existing A47 access to Berry Hall these are a worst case option to enable the Applicant to create the westbound on slip road over the existing A47 and works to utility cables along the route of the access track through the woodland. Action LV3 of the Environmental Management Plan, delivery of which would be secured through Requirement 4 of the dDCO (REP2-005), seeks to minimise the loss or harm to existing trees. However, the Principal Contractor may also need to do some works to certain trees to help protect those trees and/or its workforce. The Applicant would wish to negotiate temporary access or new easement rights to enable the landowner to retain and continue managing those areas of woodland that will not be permanently removed
	An alternative Woodland Appraisal was presented.	ES Appendix 7.6 Arboricultural Impact Assessment (APP-094) is based on the British Standard 5837: 2012 'Trees in relation to design, demolition and construction – recommendations'. This report is not a woodland appraisal, and therefore the two reports cannot be compared equally. The BS5837:2012 assessment is based on the tree feature at the time of survey, not what it has the potential to develop into, as the Woodland Appraisal has made reference to.
		The Woodland Appraisal does not appear to disagree or offer a rebuttal that the ADAS report G227 and G232 (W1) were both recorded as Category B according to BS5837:2012. It should be noted that the guidance suggests that these features should have an estimated remaining life expectancy (not contribution as the Woodland Appraisal is implying) of at least 20 years, and therefore these features could feasibly live well in excess of 20 years, not that they will only live for another 20 years as the Woodland Appraisal seems to have interpreted the guidance.
		The Woodland Appraisal is not considered correct to suggest that arboricultural considerations are not taken into account on large civil engineering projects. On the contrary, the presence of BS5837:2012 is one of the assessments that has increased the consideration of the impact a project will have on trees. It should be noted that BS5837:2012 states "This British Standard provides recommendations and guidance for arboriculturists, architects, builders, engineers, and landscape architects. It is also expected to be of interest to land managers, contractors, planners, statutory undertakers, surveyors, and all others interested in harmony between trees and development in its broadest sense."
		The retention of these woodlands has been taken into consideration at the design stage, and as such G227 will be retained in its entirety, and only sections of G232 and G159 will need to be removed. A section of W1 (G232 in ES Appendix 7.6) is proposed for removal around the junction of the existing A47 and Berry's Lane to facilitate the construction of the new roundabout, and a section of W2 (G159 in ES Appendix 7.6) is proposed for removal around the junction of Berry's Lane and Dereham Road to allow for the realignment of these roads as they feed into the new roundabout.
		Under BS5837:2012, W1 (G232 and G237) is already recorded as Category B. W2 (G159) was considered to be of a lower quality and recorded as Category C. The Woodland Appraisal implies that the stem diameter recorded in G159 to be less than 150mm diameter, yet the survey has recorded stem diameter at 170mm.
		Therefore, the Woodland Appraisal does not alter the conclusions of impact assessment. Penlacement of lost woodland is illustrated in the Environmental Masterplan.
		Replacement of lost woodland is illustrated in the Environmental Masterplan, Rev.1 (AS-007) and measures to protect the retained woodland through actions in Table 3.1 of the Environmental Management Plan (EMP) (APP-143).
		The Applicant will continue to engage with representatives of the Berry Hall Estate during the development of the final landscaping design under dDCO Requirement 5 'Landscaping' (REP2-005) and the detailed Landscape and Ecology Management Plan (LEMP), which forms Appendix B.5 of the EMP to be secured through dDCO Requirement 4 'Environmental Management Plan' (REP2-005).
Land drainage impacts	Works on the parts of the fields will likely upset the drainage on the	The land drainage would be managed during construction and restored post construction to avoid any increased flooding and ponding impacts.
	remaining parts.	This commitment is secured through Environmental Management Plan Annex B.9 Temporary Surface Water Drainage Strategy and Action GS3. Action GS3 requires "Restoration of temporary land take areas to their former condition, based on pre-construction site surveys". Delivery of the Environmental Management Plan is secured through Requirement 4 of the dDCO (REP2-005).



Issue	Specific Concern	Applicant's Response
	Unless the proposed water run off into the River Tud upstream of Berry's Bridge is so constructed as to avoid the risk of causing flooding the Scheme is likely to cause a risk of damage to my land from flooding and a further adverse impact on access to the estate through the additional flood risk to Berry's Lane.	Flood risk is considered in ES Appendix 13.1 Flood Risk Assessment (APP-124 and APP-125). The Scheme includes mitigation measures that will ensure that the design is safe for its lifetime and will not detrimentally impact flood risk to others. A proposed pre earthworks ditch is required to provide a flow path for the land drainage ditches around the southern roundabout to an outfall at the River Tud. This is located parallel to the west side of Berrys Lane as shown on Sheet 9 of the Drainage & Surface Water Plans (APP-011). The proposed pre earthworks ditch will not be conveying any surface water run-off from the carriageway as this is contained within the piped network leading to the detention basin adjacent to the A47.
		The final pre earthworks ditch will be designed in liaison with Norfolk County Council, as the Lead Local Flood Authority, and the Environment Agency as part of their consenting processes and Requirement 8 'Surface water drainage' of the dDCO (REP2-005). The design will be required to avoid increasing flood risk and includes allowances for increased rainfall due to climate change.
		The Applicant is currently working with representatives of the Berry Hall Estate to explore the potential of, and ability to, connect into a previously unknown existing drainage system on the east side of Berrys Lane, in order to avoid the need to impact the Berry Hall Estate west of Berrys Lane. It is noted that at this location, the Berry Hall Estate owns land either side of Berrys Lane north of the River Tud, including the land occupied by Merrywood House, thereby facilitating the ability to agree with the landowner if a minor change was required to change this part of the proposed drainage design for approval under Requirement 8 'Surface water drainage' of the dDCO (REP2-005).
Scope of cultural heritage assessment	The Applicant should be required to review its environmental assessment so far as the omission of the buildings described above is concerned. My views as to the likely omitted impacts include the following. The crinkle crankle wall is a sensitive 200 year old wall 12 feet high without buttresses which is only one brick thick and relies for its stability on its sine wave shape. This could be severely compromised by the heavy machinery moving and vibrating so close to it. No impact assessment has been made of it, as is evident from its omission from the Cultural Heritage chapter. The cobbled carriageway which I believe to be of a similar age to the crinkle crankle wall, is made from rectangular granite cobblestones. It appears to be likely to be intended to be removed by the Applicant, who again has made no assessment of the impact on it of the works intended.	No Scheme construction plant would use the access track past the wall, as this section lies outside the DCO boundary. Table 11.6 in ES Chapter 11 Noise and Vibration (APP-051) sets out indicative distances, defined by guidance based on historical field measurements, at which certain construction activities are expected to result in a level of vibration below 1mm/s peak particle velocity (PPV). The furthest distances range from 10m for heavy construction vehicles to 30m for rotary bored piling. The DCO boundary is approximately 30m from the wall at its closest point and the main ground disturbing activities would be around the Wood Lane junction, further reducing the risk of vibration impacts. Vibration risks to cultural heritage assets are managed through Action CH2 of the Environmental Management Plan (APP-143), secured through dDCO Requirement 4 'Environmental Management Plan' (REP2-005). Action CH2 states: "Protocols will be established following best practice guidance to ensure vibration levels are kept within acceptable tolerances(as defined in BS 5228-2), to avoid damage, and to halt or alter works methodology should tolerances be exceeded." Although other assets are mentioned in this commitment, this is to capture different, specific measures. The vibration protocols will not be necessarily inclusive or exclusive of any particular asset, allowing us to react to concerns as they arise. The cobblestones at the driveway entrance off Berrys Lane would be covered under the archaeological Written Scheme of Investigation (WSI), which would include pre-works recording and monitoring of features if they are to be disturbed. The proposed works are to install land drainage under the driveway, so the cobblestones would be returned in-situ.

5 BRYAN ROBINSON

- 5.1.1 This below submission from Bryan Robinson has been examined and the Applicant's responses the points raised are detailed in the table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000526-D1%20Bryan%20Robinson%20-%20Written%20Submissions.pdf

Comment **Applicant's Response** In my representation I outlined my concerns at the overdesign of The Applicant has responded to Bryan Robinson's concern about over-design the junctions on the A47 scheme between North Tuddenham and and interaction of the NWL in response RR-013.2 in the Applicant's Responses to the Relevant Representations (REP1-013). Easton. At the same time. I sent a representation to the Inspector for the The design of the proposed grade separated junctions is based on the scheme design year (2040) traffic flows. The traffic flow varies according to road type, contemporaneous scheme on the A47 between Blofield and North Burlingham asking whether the junctions on that scheme were junction location, sideroad network, local traffic movements and consideration of local constraints. under designed. The Blofield scheme has had a response from Highways England (HE) that the smaller junctions are adequate The junction design takes into account local user traffic movements, future traffic which confirms my concerns that those on the Easton scheme are growth, future developments and provides safe access to and from the Strategic over designed. Road Network for users (villages) north and south of the A47 in a form I would therefore ask that consideration is given to why the Norwich consistent with junctions on this section of the A47 corridor. Road junction needs to be so large if smaller junctions are suitable The proposed Norwich Road Junction has been designed in accordance with the



Comment	Applicant's Response
elsewhere on the A47.	'UK DMRB, CD 122 – Geometric design of grade separated junctions' and follows the junction hierarchy presented in Appendix A, which outlines layouts based on increasing traffic flows.
	The design year mainline flows are in excess of 30,000 AADT* with the minor road flows on the southern roundabout in excess of 3,000 vehicles AADT 2-way**, therefore a fully grade separated option was developed.
	The operational modelling assessment is described within section 4 of the Case for the Scheme (APP-140).
	* – UK DMRB, CD 122, Clause 2.2.1 – "Compact grade separated junctions should not be used on dual and single carriageway roads when mainline flows are above 30,000 AADT". Note: Compact grade separated junctions consist of left-in left-out priority junction(s), between the mainline and connector road, designed in accordance with CD 123 [Ref 2.N]
	** – UK DMRB, CD 123, Clause 2.10.1 – "Priority junctions should not be provided on rural dual carriageway roads where the minor road flows exceed 3,000 vehicles AADT 2-way."
	The Applicant has followed the requirements and good practice outlined in the UK DMRB.
I also note the Norfolk County Council (NCC) in its representation is lobbying for the Wood Lane underpass from its proposed NWL should be dual carriageway and considers that the NWL should be raised as part of the Inquiry.	The applicant has responded to Norfolk County Council in Response RR-037.6 in the Applicants Responses to the Relevant Representations (REP1-013).
It is also understood that others are asking for the NWL to be considered against cumulative environmental and climate issues.	These issues are discussed in Common Responses C and D in the Applicant's Responses to Relevant Representations (REP1-013).
Whist endorsing both requests that the NWL is considered at the Inquiry, I request that the primary interest is that of the A47 proposals and that any negative impacts should be noted but accounted for in the separate NWL planning application scheduled for 2022.	

6 CHILDHOOD FIRST

- 6.1.1 The email submission that encloses the relevant representations that where initially provided in the examination provided have been fully examined. The responses have been provided in the table below.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000458-D1_Childhood%20First%20-%20Written%20Representations%20(WRs).pdf

Comment	Applicant's Response
I wrote to you on 16 June enclosing our relevant representation as provided for in the examination process. Please regard this email, together with our earlier representation and attachments, as comprising our written representation requested by the examining authority at deadline 1 of the examination. Since submitting our relevant representation, Highways England has not engaged with us to discuss the concerns raised in our representation and the requests made of them. Accordingly I am writing again to emphasise that the issues raised in the relevant representation are outstanding and should be addressed during the examination. Our concerns remain the same and we respectfully request that the examining authority gives them due consideration. We are seeking written confirmation that these concerns will be addressed and secured within the DCO application documents.	The Applicant has contacted Childhood First to direct them to response RR-016.1 to RR-016.3 in the Applicant's Responses Relevant Representatives (REP1-013). The Applicant is continuing to engage with Childhood First and held a meeting on 30 September to discuss these commitments, including how works would be managed on site and how the recent noise monitoring results will inform the detailed design of the construction noise mitigation. The Applicant also confirmed a Stakeholder Manager has been appointed to be a point of contact throughout the process going forward.
Additionally, HE's contractor has recently undertaken noise monitoring at but we have been informed that the results will not be available until September and are unable to comment further at this time. We therefore wish to reserve our position to make further representations once we have been able to consider the monitoring data.	



7 CLIMATE EMERGENCY POLICY AND PLANNING (CEPP)

- 7.1.1 The below Written Representation submitted at Deadline 1 has been examined and the 18 non-compliance issues raised have been responded to in the following table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000469-D1_Climate%20Emergency%20Policy%20and%20Planning%20(CEPP)%20-%20Written%20Representations%20(WRs).pdf
- 7.1.2 With regards the below notification of wish to make oral representations at Issue Specific Hearings, the Applicant notes the request for several assessment methodology documents be made available for Examination. The Applicant advises this is not possible due to copyright legal protection on the publication of such documents, which have been produced by third parties. However, these documents are available for purchase by the Interested Party.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000471-D1_Climate%20Emergency%20Policy%20and%20Planning%20(CEPP)%20-%20Notification%20of%20wish%20to%20make%20oral%20representations%20at%20Issue%20Specific%20Hearings%20(ISH).pdf

Comment	Applicant's Response
N_C-1: The Environmental Statement does not comply with the requirements of the NPS NN and the EIA Regs. The absence of cumulative, and short, medium and long-term, impact assessment of carbon emissions renders the Environmental Statement inadequate under the EIA Regs, and CEPP respectfully request that the ExA consider this under EIA Reg 20 (see Appendix B).	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-2: The applicant has not complied with the NPS NN, EIA Regs, DMRB LA 103 as the Environmental Statement provides no cumulative assessment of carbon emissions.	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-3: The applicant has not complied with the EIA Regs and the guidance, nor with the NPS NN invocation of the EIA Regs, in only attempting to assess the scheme itself, and only providing a national assessment against national whole economy GHG targets (ie: no local and regional assessments have been attempted).	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-4: Local cumulative carbon assessment cannot currently be done because no rational choice of study area has been made which would enable it to be calculated coherently across different schemes. By definition, coherent cumulative assessment requires a common and standard study which enables all relevant schemes in the local area to be assessed against the same baseline area. The applicant, and also Norfolk County Council, have not chosen a standard study area across the relevant local schemes.	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). With regards to study area, the study area assessed for the Scheme is in accordance with paragraphs 3.8 and 3.9 of DMRB guidance <i>LA 114 Climate</i> .
N_C-5: Carbon assessment requires a study area that reflects the specific characteristics of carbon. Appropriating a "study area" used for air quality assessment to carbon assessment ignores the differences in the fundamental physical science and impacts between air pollutants and carbon emissions. As the affected road network (ARN) derived for air quality is different across each scheme, cumulative carbon assessment across schemes in the area as part of compliance with the EIA regs is precluded.	The study area assessed for the Scheme is in accordance with paragraphs 3.8 and 3.9 of DMRB guidance <i>LA 114 Climate</i> . Greenhouse gas (GHG) emissions are then compared with national carbon budgets in part because it is not possible to attribute a specific local emission of carbon to effects on a local receptor.
N_C-6: The applicant has not complied with DMRB LA 106 by not considering road projects (locally, regionally and nationally) which are confirmed for delivery over a similar timeframe for cumulative carbon effects.	This has previously been addressed in response Q4.0.12 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-7: The applicant has not provided any assessment of national cumulative carbon emission impacts for the scheme despite the requirement for cumulative assessment across Highway's England networks under section 5.3(c) of the Highways England licence, and the requirement for national cumulative assessment in the EIA Regs guidance, and the NPS NN which requires compliance with the EIA Regs.	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-8: No assessment of the scheme has been made against the period 2038-2049 when the UK is required legally to achieve net-zero and over-all eliminate all carbon emissions. Significant additional emissions from road use in Norfolk are inherent in each year of this period from the applicant's data. Further additional emissions would accrue from cumulative assessment with other local schemes, which the applicant has not carried out. Together these have an, as yet not fully assessed, material impact on the ability of Government to meet its carbon reduction targets.	Please see to previous responses Q4.0.1 and Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). The UK carbon budgets are the only measures against which to assess emissions and, as highlighted within the response to Q4.0.1, an assessment has been made against each relevant carbon budget.
N_C-9: No assessment of the scheme has been made against the 35-year period 2050-2084, post the 2050 net-zero target. Irrespective of UK legislative dates, scientists are clear that a net-negative world, with massive extraction of CO2 is required urgently (ie actually before 2050). Yet significant additional emissions from road use in Norfolk are inherent in each year of the 2050-2084 period in the Environmental Statement making the scheme net-positive. Further additional net-positive emissions would accrue from cumulative assessment with other local schemes, which the applicant has not carried out. Together these	Please see to previous responses Q4.0.1 and Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). The UK carbon budgets are the only measures against which to assess emissions and, as highlighted within the response to Q4.0.1, an assessment has been made against each relevant carbon budget. The carbon figures reported within ES Chapter 14: Climate (APP-



Comment	Applicant's Response
have an, as yet not fully assessed, material impact on the ability of the UK to its obligations under the global endeavour to stabilise global heating at 1.5°C enshrined in the Paris agreement.	053) are conservative as the end user carbon assessment does not account for the ban of new petrol and diesel cars beyond 2030. Q4.0.1 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014) also describes measures set out in Highways England's Net Zero Plan and DfT's Transport Decarbonisation Plan that will help ensure that road infrastructure accords with the national net zero target.
N_C-10: The lack of transparent information and data about the traffic models on which operational carbon emissions are based does not allow any independent review and scrutiny of the high-level figures published in the Environmental Statement. The applicant is in contravention of the terms of the Aarhus	The development of the traffic model scenarios used in the assessment are described in Chapter 4 'Transport Assessment' of the Case for the Scheme (APP-140), submitted with the original DCO applicant on 15 March 2021.
Convention.	This document has been available for independent review and scrutiny since the DCO application was accepted and made public on 12 April 2021.
do cumulative assessment with the Norwich Western link road (NWL).	A cumulative effects assessment was presented in ES Chapter 15: Cumulative Effects Assessment (APP-054). The Chapter was prepared in accordance with the requirements of the Infrastructure Planning EIA Regulations 2017, Planning Inspectorate 'Advice Note Seventeen: Cumulative Effects Assessment' (2019) and DMRB LA 104 Environmental Assessment and Monitoring (2020) (Revision 1).
	Those assessments using traffic models, including the carbon assessment in ES Chapter 14 Climate (APP-053), considered the cumulative operational effects in combination with the NWL road scheme because the traffic models included future other developments such as the NWL scheme.
	As per the Applicant's response to RR-037.29 in the Applicant's Responses Relevant Representatives (REP1-013), the Applicant has acknowledged Norfolk County Council's feedback regarding the submission of an EIA Scoping Report and subsequent EIA Scoping Opinion for the NWL road now being available on Norfolk County Council's Planning Portal. Therefore, the Applicant is updating ES Chapter 15 to reflect the NWL scheme as a Tier 2 development under Advice Note Seventeen guidance. The amended ES Chapter 15 will be provided by Deadline 4.
N_C-12: In two recent DCO applications, the SoS is requiring cumulative carbon assessment in line with the NPS NN and EIA Regs. This implies that the Environmental Statement for the scheme, which has no cumulative carbon assessment, is inadequate under the EIA Regs, and the ExA should consider this under EIA Reg 20.	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-13: PINS requested that cumulative environmental assessment is done for A47NTE including the NWL, but traffic modelling for the two schemes uses different base years, and there is a major loss of traffic from one model which remains unexplained. The applicant must provide new traffic modelling that allows cumulative environmental assessment, which is consistent between both schemes, and corrects errors.	This has previously been addressed in response Q2.0.3 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-14: Even before cumulative carbon emissions are considered, the applicant's carbon assessment does not reduce operational carbon emissions (from vehicle use) over the 60-year appraisal period, as is required to comply with the government's Transport Decarbonisation Plan (TDP6) for ambitious quantifiable carbon reductions in transport at the local level. It shows an addition of 596,000 tCO2e over the already very high baseline of over 53,000,000 tCO2e over the study area. In the critical 4th carbon budget that spans half of this decade in which United Nations have said we must halve emissions, an additional 111,626 tCO2e will be emitted from construction and operation of the scheme. Such additional carbon emissions without any mitigation plan are not acceptable in the Climate Emergency.	Please see to previous response Q4.0.1 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). Section 14.9 of ES Chapter 14 Climate (APP-053), highlights mitigation options that have been implemented and that are being considered during future design stages and construction of the Scheme.
N_C-15: The applicant has not provided the traded and non-traded operational emissions, and should make the 60-year appraisal and the TAG GHG workbook available to the Examination.	Traded and non-traded emissions are categories used within the European Union Emissions Trading Scheme (EU ETS). There is no need to specifically report traded and non-traded emissions within NPSNN or DMRB guidance <i>LA 114 Climate</i> .
N_C-16: CEPP do not accept that only comparing carbon emissions from the scheme against carbon budgets for the entire UK economy is a credible assessment method. It makes no sense from a scientific perspective where reference data for comparison should always carefully chosen. It is a deliberate tactic to "loose the signal in the noise", and it is antithetical to good science. Further, it does not comply with the EIA Regs guidance for local, regional and national assessment, against known local, regional and national carbon targets, as invoked by the NPS NN. The Environmental Statement is narrow, inadequate, and noncompliant in ignoring the wider scope of the EIA Regs.	This has previously been addressed in response Q4.0.11 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).



Comment	Applicant's Response
N_C-17: Additional new local transport emissions are introduced by the scheme in the BBSNN7 area. Between 2025 to 2027, these would add between 9.6% (scheme alone) and 25.9% (scheme in cumulation with other schemes8) new emission sources when compared against the 2019 transport emissions for the area, as reported by BEIS, as a baseline. When assessed against the opening year 2025 using the 4th carbon budget as the baseline, the equivalent figures are very similar at 8.6% and 23.1%. By not considering or assessing these impacts, the applicant does not comply with the EIA Regs guidance to take relevant greenhouse gas reduction targets at the national, regional, and local levels into account. These additional emissions also fall in the period leading up to the UK international commitment, via its NDC under the Paris Agreement, to reduce emissions by 68% by 2030 (relative to 1990 levels). Additional local emissions of this magnitude, with no evident mitigation strategy, will impact national efforts, and therefore create a serious risk against the UK delivering on its NDC commitment by 2030. Accumulated with other schemes in the local area, and nationally, this risk cannot be ignored, but has not been addressed in the Environmental Statement.	This has previously been addressed in response Q4.0.10 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).
N_C-18: Even without cumulative effects, the applicant's figure for carbon emitted from the scheme and in the wider road network (ARN) is approximately 5 times the entire carbon budget from BBSNN (Broadland, Breckland, South Norfolk and Norwich, a larger area) area for the period from 2033 to the net-zero date 2050 using science-based carbon budgets from the Tyndall Centre. For the period, after 2050, the corresponding applicant's figure is approximately 100 times greater than the available science-based carbon budget, and infinitely greater than the Government and CCC's implied budget for the post net-zero era. The applicant has provided no indication of how these additional carbon emissions would be mitigated. This has a clear material impact on the ability of the UK to contribute to the global endeavour to stabilise global heating at 1.5oC, and it does not comply with the UK obligations under the Paris Agreement.	This has previously been addressed in response Q4.0.10 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).

8 D G M KENNEY

- 8.1.1 The below Written Representation by D Kenney has been reviewed and the Applicant's response to the key issues raised has been presented in the following table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000439-D1_DGM%20Kenney%20-%20Written%20Representations%20(WRs).pdf

Comment	Applicant's Response
Response to Open Floor Statements with regards impacts on residents along and users of Taverham Road and consideration of alternatives and a side road strategy.	The ExA is directed to responses RR-010.1 to RR-010.5 in the Applicant's Responses Relevant Representatives (REP1-013) with regards the issues raised by Mr Kenney, whilst the response to RR-055.10 relates to Mr Hawker's concerns relating to the impact on the local road system.
Recommendation as to where the ExA should go during their site inspection in the week commencing 15 November 2021.	These suggestions have been considered by the ExA and the proposed response is reported within Annex B of the updated Accompanied Site Inspection Itinerary (REP1-016).
It is also utterly unsuited to be used by Equinor as a cross-country route to their Easton site compound. (Please ask why Equinor are not negotiating a shared access with HE at Easton, rather than attempting to turn large vehicles off Taverham Road (lane) and then trundle them a few miles eastwards over fields to Easton?).	The Applicant assumes the comment is meant to refer to the Orsted Hornsea Project Three UK access from Taverham Road. Access is being provided from Taverham Road to the offshore cable corridor to the east as a requirement to mitigate the loss of Orsted's DCO access from Church Lane, Easton, after the removal at Easton roundabout and closure of the access from the A47 to Church Lane, north of the existing A47,.

9 DAVID HOOKER

- 9.1.1 The below Written Representation by David Hooker has been reviewed and the Applicant's response to the key issues raised has been presented in the following table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000428-D1_David%20Hooker%20-%20Written%20Representations%20(WRs).pdf

Comment	Applicant's Response
Non statutory Consultation April 2017 This provided a major opportunity for Highways England to understand local issues that should be taken into consideration as their proposals were developed. Highways England published their Report on the consultation in August 2017.	The ExA is directed to responses RR-006.3, RR-006.4, RR-050.1, RR-050.2 and RR-050.3 in the Applicant's Responses to the Relevant Representations (REP1-013), which cover these concerns raised by Mr Hooker during the submission of Relevant Representations.



Comment **Applicant's Response** Highways England have continued to ignore a number of suggestions made to them at that time and subsequently. In particular that St Andrew's Church, Honingham should continue its direct connection to the village and that the Honingham roundabout should continue to be connected to the original A47. Norwich Western Link consultation 2018/19 The ExA is directed to responses RR-006.5 and RR-050.5 in the Applicant's Responses to the Relevant Representations (REP1-This consultation by Norfolk County Council indicated two alternative junctions 013), which cover the need for and location of the proposed for the Norwich Western Link with the A47. One at Wood Lane and the other at Norwich Road roundabout in response to Relevant Taverham / Norwich Road. Based on the results of the consultation Norfolk Representations submitted by Mr Hooker. County Council have announced that the Norwich Western Link will join the A47 at Wood Lane. It is also important to note that Norfolk County Council held consultations on the four Norwich Western Link route options in late Norfolk County Council have discontinued their original alternative of a junction 2018 / early 2019, with the preferred route announced in July 2019. at Taverham / Norwich Road. Highways England, however, have continued their The Applicant's Scheme Assessment Report (SAR)¹ summarises plans for both junctions. the scheme development works undertaken during Stages 1 & 2 (December 2015 to November 2017) of the route options

Junction and side road strategy February 2020

This is a highly detailed paper but fails to address the major environmental impact of the area of land taken from the countryside to satisfy Highways England's proposals. It is noted that the Ordnance Survey has now measured land use changes across England, Scotland and Wales between 2010 to 2020 when roads expanded by 132 square miles or 84,480 acres. Having drawn attention to the enormity of the numbers, the Ordnance Survey are likely to monitor future developments more closely.

Highways England do not present any acreage figures for the compulsory purchases and they make no suggestion that they have made any effort to minimise the areas that will be taken out of agriculture by their proposals.

Statutory Pre Application Consultation April 2020

This Consultation closed on 30 April 2020. The comments and questions received and the audited results and conclusions reached by Highways England have not been published before the application for a development consent order almost a year later.

Highways England may have followed the legalities of the Consultation but have made little effort to convince anyone that they have taken notice of many of the local issues raised.

Project update Winter 2020

Highways England have suggested in their update Winter 2020 that safety is one of their prime considerations. It has been pointed out to them that on Taverham Road, a single track country lane, as recently as 2020 they projected an increase from 200 traffic movements per day in 2019 to 1100 in 2025 with their new Taverham/Norwich Road junction.

The existing traffic on Taverham Road is unsafe. If Taverham Road had been the selected option to join the Norwich Western Link to the new A47 it would have been rebuilt and dualled. In the event, the Wood Lane junction was selected and there are no plans proposed by Norfolk County Council for changes to Taverham Road.

Highways England claim that their modelling completed in 2021 now shows a projected decrease from 600 traffic movements per day in 2015 on Taverham Road to 200 in 2025 on the opening of the Norwich Western link. This is not a credible response as the numbers are clearly contradictory. At 200 traffic movements per day, it is unreasonable to suggest that Highways England can support the Taverham / Norwich Road Junction.

The Highways England proposal for a new Taverham / Norwich Road junction is neither justified nor required by the traffic movements on Taverham Road now that it is no longer required to support the Norwich Western Link connection to the A47. Further, it destroys excessive rural acreage and will leave Taverham Road unsafe.

Land take areas for each land parcel identified for compulsory acquisition of temporary, new rights or permanent acquisition are detailed in the 4.3 Book of Reference, Rev.1 (**REP1-008**).

Junction 2 - west of Easton to replace the existing Easton at-

assessment. Appendix N outlines the four shortlisted Scheme options assessed, which demonstrates that two junctions were considered as required by the A47 Scheme as a standalone

• Junction 1 - On the axis of Berrys Lane and Wood Lane

scheme prior to the NWL Scheme being considered:

grade roundabout, which the Scheme removes.

Total land take for each of these categories is presented in ES Chapter 2 The Proposed Scheme, Rev.1 (AS-005).

The ExA is directed to response RR-006.2 in the Applicant's Responses to the Relevant Representations (**REP1-013**), which covers responses to Mr Hooker's Relevant Representation request for the Applicant to reassess and minimise the area of agricultural land.

Please see responses RR-006.1 and RR-055.13 in the Applicant's Responses to the Relevant Representations (**REP1-013**), which responds to comments about these consultation process issues raised in Mr Hawker's relevant representation.

During the pre-application design development, the Applicant engaged with affected landowners, the Local Liaison Group (Norwich County Council and Parish Councils) and South of the A47 taskforce (led by George Freeman MP) and other interested partis. As part of this engagement, issues raised during the statutory consultation were discussed and changes to the Scheme design agreed; as reported in Table 4.12 of the Consultation Report (APP-024).

Please see responses RR-006.5 and RR-050.5 in the Applicant's Responses to the Relevant Representations (REP1-013), which cover the need for and location of the proposed Norwich Road roundabout in response to Relevant Representations submitted by Mr Hooker.

The Applicant has engaged with the Local Highway Authority (Norfolk County Council), the NWL project team and Norfolk County Council Public Rights of Way officers throughout the design development process. The Applicant confirms that no safety concerns have been raised by the Local Highway Authority.

Norfolk County Council also presented their independent traffic modelling results to the Local Liaison Group (Norfolk County Council and Parish Councils) on 23 February 2021. The results demonstrated that the Average Annual Daily Traffic (AADT) on Taverham Road with the proposed mitigation measures in place (Honingham Lane closure) was 400 AADT in the Scheme opening year of 2025; also a reduction on the 600 traffic movements per day in the 2015 baseline.

Local Transport Note 1/20 (July 2020) Cycle Infrastructure Design references rural lanes as those with flows of less than 1000 AADT and speeds of 40mph or less.

The Applicant has continued to engage with the Local Highway Authority since the submission of the DCO application and has proposed to implement a speed restriction of 30mph on Taverham

¹ This report is available amongst the Consultation 2020 documents at: https://highwaysengland.co.uk/ourwork/east/a47-north-tuddenham-to-easton-improvement/



Applicant's Response
Road from the proposed Norwich Road junction to the River Tud bridge. This has been agreed with Norfolk County Council and the Applicant's dDCO and supporting DCO plans have been revised and submitted to the ExA at Deadline 3 to reflect this change.
The Applicant's Scheme Assessment Report (SAR)² summarises the scheme development works undertaken during Stages 1 & 2 (December 2015 to November 2017) of the route options assessment. Appendix N outlines the four shortlisted Scheme options assessed, which demonstrates that two junctions were considered as required by the A47 Scheme as a standalone scheme prior to the NWL Scheme being considered:
Junction 1 - On the axis of Berrys Lane and Wood Lane
Junction 2 - west of Easton to replace the existing Easton at- grade roundabout, which the Scheme removes.
The design of the proposed grade separated junction is based on the scheme design year (2040) traffic flows. The traffic flow varies according to road type, junction location, sideroad network, local traffic movements and consideration of local constraints.
The junction design takes into account local user traffic movements, future traffic growth, future developments and provides safe access to and from the Strategic Road Network for users (villages) north and south of the A47 in a form consistent with junctions on this section of the A47 corridor.
The proposed Norwich Road Junction has been designed in accordance with the 'UK DMRB, CD 122 – Geometric design of grade separated junctions' and follows the junction hierarchy presented in Appendix A, which outlines layouts based on increasing traffic flows.
The design year mainline flows are in excess of 30,000 AADT* with the minor road flows on the southern roundabout in excess of 3,000 vehicles AADT 2-way**, therefore a fully grade separated option was developed.
The operational modelling assessment is described within section 4 of the Case for the Scheme (APP-140).
* – UK DMRB, CD 122, Clause 2.2.1 – "Compact grade separated junctions should not be used on dual and single carriageway roads when mainline flows are above 30,000 AADT". Note: Compact grade separated junctions consist of left-in left-out priority junction(s), between the mainline and connector road, designed in accordance with CD 123 [Ref 2.N]
** – UK DMRB, CD 123, Clause 2.10.1 – "Priority junctions should not be provided on rural dual carriageway roads where the minor road flows exceed 3,000 vehicles AADT 2-way."
See response RR-006.1 in the Applicant's Responses to the Relevant Representations (REP1-013) to the same issue.
See response RR-006.2 in the Applicant's Responses to the Relevant Representations (REP1-013) to the same issue.
See response RR-006.3 in the Applicant's Responses to the Relevant Representations (REP1-013) to the same issue.
See response RR-006.4 in the Applicant's Responses to the Relevant Representations (REP1-013) to the same issue.
See response RR-006.5 in the Applicant's Responses to the Relevant Representations (REP1-013) to the same issue.
The Economic Appraisal in Chapter 5 of the Case for the Scheme (APP-140) demonstrates the Scheme provides a positive Benefit Cost Ratio (BCR). The Funding Statement (APP-022) demonstrates that the Scheme will be adequately funded through the Road Investment Strategy.

² This report is available amongst the Consultation 2020 documents at: https://highwaysengland.co.uk/ourwork/east/a47-north-tuddenham-to-easton-improvement/



10 DAVID LEWIS

10.1.1 The below Written Representation from David Lewis has been reviewed and the Applicant acknowledges the support of the side roads strategy regarding the closure of Church Lane, Lower Easton.

Furthermore, the Applicant welcomes the feedback and confirms these are some of the anticipated benefits of our Scheme.

<a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000438-D1_David%20Lewis%20-%20Written%20Representations%20(WRs).pdf

11 DAVID PETT

- 11.1.1 The below Written Representation from David Pett has been reviewed.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000443-D1_David%20Pett%20-%20Written%20Representations%20(WRs).pdf
- 11.1.2 In summary the Written Representation states:
 - "The assessment of the impact of the Scheme on the environment, and how it will adversely effect the environment is not complete, nor up to date due to its failure to have regard to the presence of a super colony of the International Union for Conservation of Nature Red Listed barbastelle bat.
 - The conservation value of this species of bat fulfils the criteria for SAC and SSSI accreditation. The Scheme fails to comply with the NPS NN, the EIA Regs, the HRA Regulations, and the Highways England licence (Appendices 1, 2 and 3), by failing to assess the impact on this super-colony of a European protected species, both for the schemes itself and the scheme in cumulation with other developments and projects in the area.
 - We present in Appendices 4 and 5 compelling ecological evidence to support the above submission, and which shows
 that when evaluating impact and effect it is necessary to look at, and to take into account, the interdependency of known
 colonies of the barbastelle bat based not only in within the boundary of the Scheme (Paxton Barn SAC) but also those
 known to be based throughout Norfolk, including the super colony situated in close proximity to the River Wensum SAC
 - It is our case that without further investigation and assessment, it is impossible to form a reliable baseline, and further to make any informed decision on the adequacy or otherwise of the proposals for mitigation and compensatory measures. This is of fundamental importance; without adequate survey and assessment there can be no guarantee that the proposed construction and operation will not be detrimental to maintaining the barbastelle population at a favourable conservation status in their natural terrain."
- 11.1.3 The Applicant has considered the additional information presented concerning the Barbestelle bats north of the Scheme and the Core Sustenance Zone overlap with the Scheme.
- 11.1.4 The additional information presented does not change the Applicant's response to question 3.0.16 in the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). Of particular note, with regards the map showing a Core Sustenance Zone overlap with the Scheme, the evidence basis for creation of this zone is unclear without details of the actual colonies considered.

12 EASTON PARISH COUNCIL

- 12.1.1 This Written Representation made by the acting Chairman on behalf of Easton Parish Council reports the comments made at the Open Floor Hearing on 12 August 2021 in support of the Scheme.
- 12.1.2 The Applicant welcomes the feedback from Easton Parish Council and reaffirms the Scheme will provide the benefits discussed in the Written Representation.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000435-D1 Easton%20Parish%20Council%20-%20Written%20summaries%20of%20oral%20submissions%20made%20at%20OFH1.pdf

13 ENVIRONMENT AGENCY

- 13.1.1 The following representation made by the Environment Agency has been reviewed and illustrated below is a table designed to help answer any further queries. Where the questions have been previously asked and/or answered there is a clear direction to where the information can be found.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000445 D1 Environment%20Agency%20-%20Written%20Representations%20(WRs).pdf

ExA Question	Guidance
1.0 Document 3.1 Draft Development Consent Order (DCO)	Please see responses RR-066.6 and RR-066.7 in the Applicant's
1.1 We previously requested that the Environment Agency be included as a named consultee in respect of Requirement 4 (Environmental	Responses to the Relevant Representations (REP1-013). Requirement 4 of the dDCO (APP-017) has been updated accordingly.
Management Plan (EMP)), for matters relevant to our remit. This remains outstanding.	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).



ExA Question	Guidance
1.2 We also requested confirmation that an Emergency Flood Plan would be provided, given that construction activity will be required to take place in and around areas of fluvial Flood Zone 2 and 3 (medium and high probability). This could be as part of the EMP or as a standalone document.	Please see response RR-066.8 in the Applicant's Responses to the Relevant Representations (REP1-013).
	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).
1.3 We supported the inclusion of Requirement 6 Contaminated land and groundwater, but the proposed wording should be amended. 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. We await confirmation of these changes.	Please see response RR-066.9 in the Applicant's Responses to the Relevant Representations (REP1-013). Requirement 6 of the dDCO (APP-017) has been updated accordingly.
	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).
1.4 We have highlighted that the Environment Agency should be a named consultee in respect of Requirement 8 Surface and foul water drainage system, to enable us to review and confirm that the detailed proposals are acceptable. For clarity, we would add that this should be in respect of both part (1) and (2) of Requirement 8.	Please see response RR-066.11 in the Applicant's Responses to the Relevant Representations (REP1-013). The Applicant has further amended Requirement 8 so that the Environment Agency is a named consultee in part (2) as well.
2.0 Document 3.3 Consents and Licences Position Statement 1.0 Our Relevant Representation highlighted some amendments that	Please see responses RR-066.13 and RR-066.14 in the Applicant's Responses to the Relevant Representations (REP1-013).
should be made to Appendix A - Table of Consents and Agreements. We look forward to viewing an updated version of this document.	The applicant and The EA continue to work together to prepare a SoCG.
	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019)
2.2 As stated within Appendix A, progress on consents required from the Environment Agency will be reported in a Statement of Common Ground (SoCG). We have now agreed with the Applicant a process for progressing the SoCG. All necessary permits must be in place prior to any works commencing.	The Applicant is working with the Environment Agency to prepare a SoCG with the aim of submitting a first issue to the ExA as additional information prior to the November hearings.
3.0 Document 6.1 Environmental Statement Chapter 8 - Biodiversity	Please see responses RR-066.16, 17, 28, 29, 30, 39, 40 and 46 to 50 in
3.1 We highlighted in our Relevant Representation several measures to be included in the EMP, or in the Landscape and Ecology Management Plan (LEMP), which will form an Annex to the EMP. We would wish to review	the Applicant's Responses to the Relevant Representations (REP1-013). As per their response at Deadline 2 (REP2-019), the Environment Agency has accepted the responses subject to some additional amendments to the EMP:
the further detail on these measures proposed for inclusion in the second iteration of the EMP, and therefore should be added as a named consultee for Requirement 4.	RR-061.28 - RD9 in Table 3.1 is amended to make clear that this action will be achieved through the EMP.
	RR-061.29 – the action is added to Table 3.1 in the EMP to enable the Environment Agency to review and comment on the final proposals at Oak Farm tributary.
	The Applicant confirms these actions will be added to the EMP (APP-143) and will re-issue the EMP by Deadline 5 to include these and other committed ahead of the development of iteration 2 under Requirement 4 of the dDCO (REP2-005).
4.0 Document 6.1 Environmental Statement Chapter 9 – Geology and Soils4.1 We highlighted a number of required amendments to Table 9-6:	Please see response RR-066.20, RR-066.21 and RR-061.38 in the Applicant's Responses to the Relevant Representations (REP1-013). Responses have been accepted by the Environment Agency subject to some additional amendments to the EMP:
Baseline data in our Relevant Representation, and that records of former landfills taking 'inert' waste should be substantiated. We also emphasised the importance of ensuring that he private dripking water supplies will be	to some additional amendments to the EMP: As per their response at Deadline 2 (REP2-019), the Environment Agency has accepted the responses subject to the Applicant continuing
the importance of ensuring that no private drinking water supplies will be derogated, even temporarily, without the prior consent of the owner and the provision of mitigation measures.	to bear in mind risks to SPZs. The Applicant's confirms SPZs will continue to be considered during the detailed design stage.
5.0 Document 6.1 Environmental Statement Chapter 10 – Material Assets and Waste	Please see response RR-066.24 in the Applicants Responses to the Relevant Representatives (REP1-013).
5.1 We confirmed that Appendix 10.2 Outline site waste management plan is sufficient, but that the references at 10.1.20 and 10.1.32 to the Environmental Permitting (England and Wales) Regulations 2010, should be updated to Environmental Permitting (England and Wales) Regulations 2016.	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019)
6.0 Document 6.1 Environmental Statement Chapter 13 – Road Drainage and Water Environment and Appendices	Please see response RR-066.25 in the Applicant Responses Relevant Representatives (REP1-013).
	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019)
6.1 In respect of fluvial flood risk, we have stated that we are generally satisfied with the Flood Risk Assessment (FRA), and with the proposals to	Please see response RR-066.26 in the Applicant Responses Relevant Representatives (REP1-013).
manage fluvial flood risk across the scheme, subject to clarification on a number of points and the inclusion of some further information.	Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019)



ExA Question	Guidance
6.2 The Applicant has confirmed that further information to demonstrate that the required flood storage compensation at the proposed River Tud crossing can be accommodated is being prepared and will be submitted as an addendum to the FRA. We are satisfied with this approach and look forward to reviewing the addendum.	Please see response RR-066.27 in the Applicant Responses Relevant Representatives (REP1-013).
	Issue still in discussion with the Environment Agency, but way forward agreed as per their response at Deadline 2 (REP2-019).
	The Applicant has issued further information at Deadline 3 to respond to the Environment Agency's query.
6.3 As previously highlighted, the Environment Agency would wish to review and agree the detailed River Tud compensatory flood storage	See response RR-066.28 in the Applicant Responses Relevant Representatives (REP1-013).
scheme. The mechanism through which we will be consulted on this should be confirmed; it is not clear whether this would be through consultation on the EMP for example. It would not be appropriate for this matter to be considered as part of a Flood Risk Activity Permit consultation.	As per their response at Deadline 2 (REP2-019), the Environment Agency has accepted the response subject to action BD9 being amended RR-061.28 - RD9 in Table 3.1 is amended to make clear that this action will be achieved through the EMP.
	The Applicant confirms this will be added to the EMP (APP-143) and will re-issue the EMP by Deadline 5 to include the commitment ahead of the development of iteration 2 under Requirement 4 of the dDCO (REP2-005).
6.4 In response to our questions regarding the potential requirement for flood compensatory storage on the Oak Farm tributary, the Applicant has	Please see response RR-066.29 in the Applicant Responses Relevant Representatives (REP1-013).
advised that a further statement will be provided to address the points we have raised, along with those highlighted by Norfolk County Council as the Lead Local Flood Authority (LLFA). We look forward to reviewing that statement.	As per their response at Deadline 2 (REP2-019), the Environment Agency has accepted the response subject to action being added to Table 3.1 to make clear that this action will be achieved through the EMP.
	The Applicant confirms this will be added to the EMP (APP-143) and will re-issue the EMP by Deadline 5 to include the commitment ahead of the development of iteration 2 under Requirement 4 of the dDCO (REP2-005).
6.5 Regarding the possible need for compensatory flood storage on the Hockering watercourse, we understand from the Applicant that the flood	Please see response RR-066.30 in the Applicant Responses Relevant Representatives (REP1-013).
model is being updated with the outputs from the detailed topographical survey. This will provide a better understanding of the situation, and further detail on the implications of the scheme on this watercourse will subsequently be provided. Again, we look forward to reviewing that information.	As per their response at Deadline 2 (REP2-019), the Environment Agency has accepted the response subject to the action being added to Table 3.1 to make clear that this action will be achieved through the EMP.
information.	The Applicant confirms this will be added to the EMP (APP-143) and will re-issue the EMP by Deadline 5 to include the commitment ahead of the development of iteration 2 under Requirement 4 of the dDCO (REP2-005).
	The Applicant has also issued further information at Deadline 3 to respond to the Environment Agency's query in RR-0066.31 about Hockering watercourse.
6.6 In respect of surface water and ecology, in our Relevant Representation we stated it should be demonstrated that the potential	Please see response RR-066.32 in the Applicant Responses Relevant Representatives (REP1-013).
impact of the new 30m wide bridge deck over the River Tud has been fully assessed. This was particularly in relation to the impact of shading on aquatic, marginal and bankside vegetation. Impacts should be considered both alone, and in combination with the retained existing crossing and with any other relevant projects.	With regards the Environment Agency's comment on 'shading' in their response at Deadline 2 (REP2-019), the Applicant will explore this issue further with Environment Agency following completion of the river metric survey (see response box below) to inform discussions to confirm the compensatory measures, if any, required for loss of riparian vegetation in this area of the Tud due to shading.
6.7 We also stated that there must be certainty that the outlined ecological measures, and the areas identified across the scheme within which such measures will be accommodated, will be sufficient to appropriately compensate and mitigate all adverse impacts. This is relevant to those impacts arising from the new structure over the Tud, but also applies to the impacts of the new and extended culverts on the ecology of the Oak Farm and Hockering watercourses.	The Applicant is working with the Environment Agency to provide further assessment information/surveys on the baseline characteristics of the area in question with a view to establishing that the proposed compensatory, mitigation and enhancement measures for the specific ecological impacts and water courses are appropriate to the level of impact likely to occur.
6.8 The Applicant has confirmed, through discussions, that further survey and assessment work is being undertaken on the River Tud and the Hockering and Oak Farm tributaries. This work will consider in more detail the scale of ecological impacts and opportunities for mitigation and enhancements and will be completed during the Examination. We welcome this confirmation and look forward to reviewing the results of the assessments and considering the measures proposed.	A river condition survey is planned in October 2021 to enable the biodiversity river metric to be used to quantify baseline habitats, habitats lost, restored and created. The ExA will be kept informed of the outcome of this exercise during the DCO Examination process. The outcome will also be recorded in the Statement of Common Ground with the Environment Agency. If required, appropriate updates will be made to the DCO application documents and submitted to the ExA.
6.9 In respect of groundwater resources and quality, our Relevant Representation included (from sections 6.12 – 6.22) a number of comments and observations on ES Chapter 13 and accompanying Appendices. We also highlighted the occasions when it should be ensured that we are consulted. We await to see how the points raised have been addressed.	Please see responses RR-066.36 to RR-066.46 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as illustrated by their
	response at Deadline 2 (REP2-019). The Applicant also confirms an updated EMP (APP-143) will be issued
addi 6556d.	by Deadline 5 to include the commitments ahead of the development of



ExA Question	Guidance
	iteration 2 under Requirement 4 of the dDCO (REP2-005).
	The Applicant has further amended Requirement 8 so that the Environment Agency is a named consultee in part (2) as well.
6.10 Our Representation included, at section 6.19, a request that 'drainage basins' as well as filter drains are excluded from areas where groundwater is within 1m of the ground surface or within Source Protection Zone 1 (SPZ1). For clarity, 'drainage basins' should be taken to include any drainage feature that has the capacity to create a pathway to an unconfined aquifer for potentially contaminated water (even if that water is partially treated). Any such features should not be located in these areas without a clear demonstration that groundwater quality would not be affected.	Please see response RR-066.43 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as illustrated by their response at Deadline 2 (REP2-019). The Applicant also acknowledges the additional clarification and shall continue to work with the Environment Agency to develop a SoCG to agree the position on drainage basins and clarify the interpretation of the term 'drainage basins'.
6.11 Section 6.21 of our Relevant Representation stated that we would wish to review the Preliminary Risk Assessment for GWDTE (Groundwater Dependent Terrestrial Ecosystems) and groundwater abstractions, and any subsequent Hydrogeological Impact Assessments for sites in proximity to underground works, along with water features surveys for drainage at cuttings. For clarity, we can confirm that the consideration of GWDTE in the Groundwater Assessment (APP-129 6.3 ES Appendices Appendix 13.4) is sufficient at this time. However, we would wish to see the further assessments that are referred to in paragraph 4.2.11 of the Groundwater Assessment. This states that these are to be undertaken after the supplementary ground investigation has been completed. If significant impacts are subsequently anticipated, a risk assessment will be needed in order to determine and agree the relevant mitigation measures from the EMP.	Please see response RR-066.45 in the Applicant Responses Relevant Representatives (REP1-013). As stated in the RR response, the applicant shall continue to share the results of further assessments with the EA. Response accepted by the Environment Agency, as illustrated by their response at Deadline 2 (REP2-019).
6.12 In respect of surface water quality, we previously highlighted that we are generally satisfied with the consideration of potential issues and with the principles of the proposed mitigation measures for construction and operation. It should be made clear that there will be no deterioration in the status of any of the Water Framework Directive quality elements, in addition to the overall WFD status. We should be provided with the opportunity to review and comment on the detailed proposals.	Please see response RR-066.47 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as illustrated by their response at Deadline 2 (REP2-019).
7.0 Document 7.4 Environmental Management Plan	Please see responses RR-066.6 and RR-066.7 in the Applicant's
7.1 Our Relevant Representation re-emphasised that we should be included as a named consultee in respect of Requirement 4, and outlined the specific plans, strategies and assessments that we should be consulted on.	Responses to the Relevant Representations (REP1-013). Requirement 4 of the dDCO (APP-017) has been updated accordingly. Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).
7.2 We also highlighted that dewatering can only be undertaken without a licence at the rates quoted in section RD5 of Table 3.1 and Table 4.1 if the dewatering works for the whole scheme will last for a period of 6 consecutive months or less. If dewatering will occur over a longer time frame, the maximum rate at which dewatering can be undertaken without an abstraction licence is 20 m3/d	Please see response RR-066.56 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).
7.3 Additionally in respect of table 4.1, we highlighted that the Environment Permitting (England and wales) regulations from 2007 onwards replaced the permitting system in the pollution Prevention and control Act. And that the consenting authority for certain mobile plant permits such as concrete crushers is the local authority and therefore they should be listed along with the Environment Agency.	Please see response RR-066.59 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).
7.4 We previously stated that the EMP does not currently appear to consider how catastrophic spills affecting the surface water drainage systems will be dealt with. We note that emergency procedures are to be included within Appendix D, which should address this concern, and we look forward to reviewing that section of the EMP prior to construction.	Please see response RR-066.58 in the Applicant Responses Relevant Representatives (REP1-013). Response accepted by the Environment Agency, as per their response at Deadline 2 (REP2-019).

14 HISTORIC ENGLAND

14.1.1 The below Written Representation from Historic England has been reviewed and the Applicant welcomes the feedback provided by Historic England.

The Applicant has heeded the advice provided by Historic England, with any advice on Grade II listed buildings, undesignated heritage assets (including archaeology) and the archaeological mitigation strategy has been deferred to Norfolk County Council and the relevant Local Planning Authorities.

Overall, Historic England considers the significance of these designated assets and the impact on them has been appropriately assessed.

Historic England has accepted the assessment that no significant harm would result from the development as regards the grade I and II* listed buildings, with the exception of the grade II* listed St Andrew's parish church at Honingham and the grade I listed



parish church of St Peter's in Easton. Thus, Historic England is in agreement with the Applicant that there would be a degree of harm to the historic significance of both these churches due to changes in their settings.

However, Historic England agrees that this would be less than substantial harm in terms of the NPSNN and National Planning Policy Framework; Section 7 in the Case for the Scheme (APP-140) provides a review of heritage NNNPS compliance.

 https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000448-D1_Historic%20England%20-%20Written%20Representations%20(WRs).pdf

15 BROWN & CO ON BEHALF OF HONINGHAM AKTIESELSKAB

- 15.1.1 The following representation made by Easton Estates has been reviewed. Moreover, any outstanding queries have been provided with an appropriate level of guidance as seen in the table below.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000491-D1_Brown%20&%20Co%20for%20Honingham%20Aktieselskab%20-%20Written%20Representations%20(WRs).pdf
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000492-D1_Brown%20&%20Co%20for%20Honingham%20Aktieselskab%20-%20Summaries%20of%20all%20WRs%20exceeding%201500%20words.pdf

Comment Gu

We have received summary advice from Messrs Create Consulting to the effect that further noise mitigation is required. This and the visual mitigation could sensibly be combined.

2. Mitigation issues

2.1 Reduced land take

Having tried to persuade the Applicant to realign the route to the south more in keeping with the original route alongside the A47, the estate has had grudgingly to accept the current alignment but remains concerned that it is more difficult to mitigate the damage on this alignment.

Throughout the survey process land has not been well reinstated so we aren't optimistic that the future will be different.

The contractors indicate they cannot release any land from the temporary use category until they have completed their survey work, but as there is a significant area of land acquired between the works and the existing A47, it would be more sensible to use this.

The added advantage of use of other land is that the Applicant can reinstate their own land rather than leaving landowners to reinstate land almost certainly very badly affected by the scheme. These poorly undertaken reinstatement works impact significantly upon ongoing agricultural activities and finances where the Applicant does not have the same financial pressures as the land in question is likely to be used for landscaping rather than financial return.

Guidance

The Applicant has sought to reduce land take throughout the scheme development process and has engaged with all affected landowners during that process. The design considerations are reported in the Scheme Design Report, Rev.1 (AS-009), in particular Chapter 11 which explains the reasons for the landtake due to the construction compounds and material storage / processing areas. Though land is available between the existing and proposed A47 alignments, this is area has extensive woodland habitat and the loss of this habitat compared to use of the arable fields north of the Scheme is not justified for the temporary storage of excavated soils from the Scheme.

ES Chapter 9 Geology and Soils (APP-048) assesses impacts and mitigation for permanent and temporary agricultural landtake.

The Applicant acknowledges the concerns of the landowner with regards reinstatement challenges. Site restoration as part of the Scheme construction would be controlled by soils management plans and actions in table 3.1 of the Environmental Management Plan, such as Action LV5 'Site restoration'. Action LV5 requires preworks photography to be undertaken prior to any construction works to provide a detailed baseline record to be used during and following site restoration works to make the conditions match the baseline record. The photographs will further be used to demonstrate site restoration and replanting has been successful once vegetation has been established.

Delivery of these commitments are secured through Requirement 4 'Environmental Management Plan' of the dDCO (**REP2-005**).

2.2 Embankment/screening

The current road is screened by established high hedges and woodland and is situated at a much lower elevation. Although the noise from the A47 is significant in places, the road is not visible, and the noise dissipates as you penetrate northwards away from it.

Locating the road further north not only requires more land and brings the carriageway further into the estate but also elevates it higher onto the plain leading to significantly greater impact from visibility, noise, reduced tranquility, and general disturbance. This is demonstrated in the report from create attached.

As it became clear the route was not to be realigned to the south, we have requested significant embankments combined with cutting in of the carriage way.

The current scheme has we understand an approximately 2-metre-high embankment on the north side between Honingham village and Wood Lane, but no earth works screening between Easton roundabout and Taverham Lane.

Mitigation measures include tree planting which it is suggested will block much of the traffic and noise from view within approximately 15 years. However, we are aware that 15 years is a long time, and that tree cover does not screen visual intrusion or noise to the same extent as a bank.

Having repeatedly requested detailed drawings for the scheme works and levels, the Applicant kindly provided these recently, since when we have endeavored to establish the sections of the road which will cause the greatest intrusion. Without this detail we can only recommend a similar height bank along the whole route, but we remain flexible about where the screening is required most.

As per response RR-023.3 in the Applicant's Responses Relevant Representatives (**REP1-013**), the proposed A47 mainline is in cut along the northern aspect from Chainage 5+650m to 6+100m, with the proposed 2m screening bund located at the top of the A47 mainline cut slope.

This results in a higher screening height from the edge of carriageway to the top of screening bund through this section of the Scheme.

A meeting was held between the Applicant and representatives of Easton Estate on 30 September 2021 to discuss the screening provision.

Screening for visual and noise purposes is provided where required as identified by the assessments undertaken. The assessment process undertaken, proposed mitigation and design decisions are detailed within the ES, in particular Chapter 7 Landscape & Visual (APP-046) and Chapter 11 Noise & Vibration (APP-051).

Screening for visual and noise purposes is provided where required as identified by the assessments undertaken. In this location the assessments indicate that there is no requirement for the provision of such mitigation infrastructure. The assessment process undertaken, proposed mitigation and design decisions are detailed within the ES, in particular Chapter 7 Landscape & Visual (APP-046) and Chapter 11 Noise & Vibration (APP-051).

The requirement for a noise barrier is considered further in light of the Create Consulting report within this Written Representation.



Comment Guidance

The Create report makes reference to the noise contours within the ES Figures for Chapter 11 in terms of the change in road traffic noise upon Scheme opening and the construction noise impact magnitude for specific phases of work. The Create report also makes reference to impacts on large areas of the estate. The identified noise impacts within the ES Figures for Chapter 11 can result in potentially significant effects where these impacts occur at noise-sensitive receptors (as defined within DMRB LA111). These receptors primarily include dwellings and other noise-sensitive occupied buildings since the defined noise effect levels within DMRB relate to human response to noise. DMRB LA111 does not identify woodland, arable land, marshes or plantations as noisesensitive receptors (unless within a statutory designated site). The significance of effects at noise-sensitive receptors within the estate have been considered within ES Chapter 11 with proportionate or reasonable mitigation identified as appropriate.

A noise barrier was considered at the vicinity of Hall Farm/Hall Cottages, as discussed in paragraph 11.9.29 of ES Chapter 11. The effect of the barrier of 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 significance of operational noise effects. Therefore, an additional barrier was not proposed at this location since it is not a proportionate or reasonable mitigation measure.

Mitigation in the form of a low-noise surface along the length of the Scheme has been included along with landscaping bunding in this locality. However, this is not sufficient to avoid significant adverse effects due to perceptible changes in road traffic noise in this location; see paragraph 11.9.29 in ES Chapter 11 Noise and Vibration (APP-051).

With the Scheme, road traffic noise levels are expected to range from 55 to 58 dB $L_{\rm A10,18hr}$ at these Hall Farm/Hall Cottages and are therefore below the SOAEL.

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 circa 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.

We are advised that the Development Consent Order has been drafted to enable the height of embankments to be increased to cater for extra material and for the footprint to be enlarged if further estate land is required from within the red line to enable higher banks. The estate is willing for more land to be used to enable increased protection from the use of the works.

We understand it is likely that more material will be available, so we have confirmed that the estate would be very pleased to receive a 3.5 to 4-metre-high embankment along the entire southern edge, or failing that, between Wood Lane and Honingham Church at least.

If no embankment is possible on the north side of the works between Lower Easton and Taverham Road, we would welcome more robust landscape planting and particularly a mechanism to screen the very high new overbridge which will overlook this section of the farm.

On a detailed point, the embankment should be realigned to the north of the attenuation lagoon near Hall Farm to screen headlights and visual intrusion as vehicles travel in a north westerly direction towards the higher elevation of the road immediately south of Hall Farmhouse, buildings and the four cottages.

Please could the Inspector ensure the Applicant, Galliford Try and Sweco engages with the estate to establish the most effective use of available material to create a mitigation scheme that suits both the estate and the Applicant. To date we suspect the views of the estate have lead to internal deliberations within the Applicant team but with no outwards discussion on this point.

We wish to reconfirm an offer to the Applicant that the estate is prepared to source material from a large bank of earth at Hall Farm to contribute to this work.

2.3 Re-routed public right of way

The re-routing of the public right of way is a concern as it in part shares a farm track. We would welcome discussion about the specification of the path and an agreement about hedging and fencing to separate it from the farm traffic and general access routes.

The Applicant confirms Article 8 'Limits of deviation' in the dDCO (REP2-005) allows the height of the embankments to be increased, but only up to a maximum limit of +1m. The DCO boundary had been designed at this location to allow for 1 in 10 slope profile (compared to standard 1 in 3) on the north slope to aid integration of the embankment into the landscape if there is spare suitable material arising from the Scheme.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, it was confirmed that the Scheme has an earthworks balance and that the material excess mentioned is not structural material but in fact topsoil.

As per the above, regarding the noise barrier provision, and in RR-023.4 in the Applicant's Responses Relevant Representatives (**REP1-013**), there is no requirement to provide Easton Estates with additional screening for visual and noise at Hall Farm and between Lower Easton and Taverham Road.

It was agreed that if the landowner wishes to provide the earth bund extension at their own cost on their own land, the Applicant would be willing to work with Easton Estate to manage any interaction of the Scheme with those works.

The Applicant met representatives of Easton Estate on 30 September 2021 and clarified that the concern relates to the potential increased use of the RB1 byway due to the improved walking, cycling and horse-riding connectivity created by the Scheme. As the detailed design of the RB1 byway re-alignment is subject to whether the NWL proceeds and the landowner's concern extends beyond the diversion of RB1, it was agreed that any provision of hedging and fencing to separate users of the byway from farm traffic and general access to the Easton Estate could be



Comment Guidance addressed specifically through the land agreement between the

2.4 Hall Farm Underpass

The scheme drawings show an underpass of 4.5 metres in height. The estate advised the Applicant in early discussions that the new underpass needs to be 5 metres in height to enable articulated lorries to access the main farm complex as they must.

The proposal is to separate the public right of way for safety purposes, and this should be with galvanised steel barriers or similar.

Access to the estate is currently unrestricted in height terms and many vehicles, such as straw trailers, are significantly higher than 5 metres.

We haven't pressed for unrestricted height, whether we should have because the most important issue in this respect is to allow articulated lorries into the farm complex. The alternative will be a new road across the estate from the north running for a minimum of 2 miles at significant cost.

We understand unofficially that this request may be accommodated, but it would be helpful for the Applicant to confirm this so we can discuss other things.

We have provided photographic evidence that the height of an articulated lorry is 4.65 metres and an extract from the DMRB standards which indicates that an access underpass should be 5 metres in height in the Appendices. We assume the Applicant is aware of this.

The Applicant has agreed with representatives of Easton Estate that this issue has been resolved.

Applicant and Easton Estates.

Response RR-023.6, in the Applicant Responses Relevant Representatives (**REP1-013**), confirms the design of Structure S04 (Hall Farm Underpass), as shown on drawing

TR010038/APP/2.7(AU) in the Engineering Drawings and Sections (APP-010), will be amended to provide a 5m vertical headroom within the overall box structure dimensions (i.e. not affecting any assessments of effects). This amended drawing will be submitted to the ExA at Examination Deadline 4.

The Applicant has also agreed to the provision of a pedestrian guardrail through the underpass (note that the current design drawings shows a Vehicle Restraint System (VRS) in error, but this will be changed to a pedestrian guardrail in the updated drawing).

2.5 Fencing

There are two areas we are aware of where screening fencing could add significantly to mitigation measures, but until now the Applicant has declined to discuss them. These are shown approximately in the Appendices.

Area 1: Hall Farm underpass is situated across a low area in the landscape, so the carriageway will be elevated leaving the estate and the carriageway highly visible. We understand the Applicant doesn't intend to overlap embankments around the access to screen this elevated section, possibly for wildlife reasons.

We have been advised it is not possible to construct a fence on the edge of the carriageway due to wind loading, but a higher-than-normal solid edged safety barrier or a screen fence situated on the adjacent embankment or the edge of the carriageway and carefully designed is likely to mitigate impact from what is a relatively short section of road.

Area 2: A second area which would benefit the residential properties at Hall Farm significantly is from the edge of the woodland west of Honingham Church, traveling west bound directly on the north side of the works.

This would screen headlights and vehicles before the proposed bank has any impact unless the embankment is made significantly taller.

As mentioned earlier, ideally the embankment would be realigned to the north of the attenuation lagoon near Hall Farm to protect Hall Farmhouse, the buildings and the four cottage.

As per response RR-023.4, in the Applicant Responses Relevant Representatives (**REP1-013**), confirms the assessments undertaken indicate that there is no requirement for the provision of screening for visual and noise mitigation in these locations.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, it was agreed that matter could be addressed as part of a land agreement between the Applicant and Easton Estates.

3. Local road network changes

3.1 Taverham Road/Ringland Road closure

The estate and other businesses use Taverham Road/Ringland Road in the normal course of their farm activities, travelling from one block of owned farmland to another. The estate plan shows the separated parcel of land to the north.

The Applicant has determined to close this link in the final 12 months of the period of works and states the future responsibility for whether the closure remains will rest with Norfolk County Council.

It is difficult to know whether this is a reasonable proposition, to close a local road some distance away from the works and transfer the obligation for the impact of the action to another party because the road falls within the recipient's remit.

However, the farm needs to use the road due to be closed. The suggested alternatives are inadequate, but the applicant has not been prepared to discuss this point.

A simple inspection makes it clear that agricultural traffic with say 3m attachments or trailers and trailer sprayers cannot take evasive action from oncoming traffic and neither party has anywhere to pull in or reverse to.

On the plan attached in the appendices, the current route is shown with a purple line progressing northwards to Ringland village along the blue route. The alternative turns east along the purple line and then north on the pink line.

The turn east into Weston Road leads to a very narrow lane, with a particularly difficult junction to turn north into Ringland Road and pass over Ringland Hills which is too narrow for large agricultural vehicles.

The Applicant has closed all direct accesses to the Scheme and provided access to the strategic road network through the proposed Wood Lane junction and Norwich Road junctions as part of the Scheme design to improve safety and achieve a free flowing network.

Statutory consultation feedback raised concerns related to safety and disturbance from increased traffic passing through Ringland, via Honingham Lane and onto Taverham Road during the period between the Scheme opening and NWL opening. As an outcome of this process and engagement with the Local Liaison Group, the Applicant's dDCO allows for the implementation of the temporary closure of Honingham Lane to through traffic during the interim period between the A47 Scheme and NWL opening. If the NWL scheme does not obtain planning consent, the Applicant would continue to engage with the local highway authority, Norfolk County Council, on the implementation of this proposal. This commitment is stated within Section 9.2 of the Scheme Design Report, Rev.1 (AS-009); see paragraph 9.2.10.

Alternative access would be available, but the Applicant continues to engage with the landowner's estate manager and land agent to respond to and mitigate concerns where possible and within reason.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, the nature of the access constraint was explored and potential options identified to maintain access for agricultural traffic. A possible solution was identified and is currently being explored further by the Applicant and representatives of Easton Estate.



Comment Guidance

Please could the Inspector ensure that at least the agricultural traffic which can't contend with the alternative road network remains able to pass any temporary or permanent road closure.

During the meeting the Applicant explained the approach to the temporary closure of Honingham Lane and how it was not the intention to provide a gated access and permit restricted access to any party as this would lead to enforcement issues.

During the discussion, a representative of Easton Estate suggested mitigation measures to prohibit use of the route by cars / vans; but permit access for agricultural vehicles.

The Applicant is exploring this mitigation measure with the Local Highway Authority (Norfolk County Council) and will report back.

3.2 Closure of Church Lane, Lower Easton

The farm has two main premises, Hall Farm as discussed before, and another at Easton Lodge, comprising the main house, Easton Lodge, a range of farm and estate buildings and several houses.

Access to the premises at Easton Lodge itself is along Church Lane, immediately accessible from the Easton roundabout which is to be closed. This is shown with a short blue line which takes less than 1 minute to travel safely along.

The alternative is a full 3.25 kms further and far narrower and more tortuous, shown by the long purple route north along Taverham Road, east into Weston Road and then south. This is much longer and much less safe for any vehicle type.

We don't suggest property values are a matter for the Examination, but highways safety and the resulting impact of closing the link should be and due to the length of the intended extra journey time and the narrower lanes, this closure is likely to cause increased incidents as well as affecting the property value significantly.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, it was agreed that any impact on Easton Lodge would be addressed as part of a land agreement between the Applicant and Easton Estates.

4. Farming accommodation

There are a few issues that need to be resolved, whether with accommodation works or financial contributions including:

4.1 Concrete pad

The concrete pad near Wood Lane will be severed from the access by the works, so either internal roadways are required to be improved or the pad needs to be replaced.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, it was agreed this matter could be addressed as part of a land agreement between the Applicant and Easton Estates.

4.2 Farm buildings at Easton Lodge

Even though the designers have stated the local road network is not suitable for agricultural use, it is the only road network the estate can use. There is a small but important old-fashioned store at Easton Lodge which will become largely inaccessible with the link to the current Easton roundabout being severed and no private access provided. The farm will need to replace the capacity elsewhere.

4.3 Access to land north of works between the current Easton roundabout and Taverham Road.

We have requested access for the farm along the private means of access we understand may be proposed for Orsted from the main eastern Taverham Road junction.

It would require a limited extension to continue the PMA to Church Lane which would enable the highways authority to maintain restrictions on local traffic cutting through the area but would ensure the estate could remove some of the larger farm vehicles from the network that the applicant suggests is unsuitable for farm vehicles.

As per response RR-023.8, in the Applicant Responses to the Relevant Representations (REP1-013), access to the fields north of Lower Easton would be off Ringland Road, using the existing verge access south of Ford Cottage, accessed from Norwich Road junction via Taverham Road, Weston Road and Ringland Road or a field new access from Church Lane, Easton. These routes provide access into all field parcels in the Lower Easton area.

However, the Applicant continues to engage with the landowner's estate manager and land agent to respond to and mitigate concerns where possible and within reason.

During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, the extent and requirement to provide a temporary haul route for Orsted was explained and access constraints on Easton from closure of Church Lane explored. A possible solution was identified and is currently being explored further by the Applicant and representatives of Easton Estate.



Comment	Guidance
5. Summary	These issues are discussed above.
The scheme appears to have advanced further in the DCO process than the Applicant and contractors are prepared for, which may go some way to explain why they are unable to finalise the landscaping and access arrangements. We wish to work with both the Applicant and the contractors if we are able and the main points at issue for resolution include:	
Reducing the temporary land taken	
Agreements about farm access throughout the works as the current access will be severed.	
Increasing the height, even if it means increasing the footprint of the protective embankments, either to a standard height, or if material is limited, to where is most required to afford greatest protection of the visual and noise amenity of the estate and the properties.	
Continue the embankment beyond the attenuation lagoon south-east of Hall Farm for protection of the houses.	
Including more robust screening between the current Easton roundabout and Taverham Road if the addition of embankments is not possible in this location.	
Increasing the Hall Farm underpass to minimum 5m height, with steel fenced separation for the public right of way for safety of users.	
Suggested 3m fencing along two sections of road, whether at highway edge, highway boundary or on retained estate land as best suits the situation.	
Confirmation that the local roads network restrictions will allow for farm access to continue to use these routes in future as the alternatives available are unsuitable.	
The owner needs to be able to access the fields on the north side of the works, so access along the Orsted PMA is required. This has not been discussed or confirmed.	
Collaboration about a replacement concrete pad because of the scheme.	
A contribution for building replacement due to the road to Lower Easton being cut off. If the PMA proposed for access to Orsted is extended, this should partly mitigate this issue.	
Discussion and the provision of a made-up footway or path for the diverted public right of way accessed from Hall Farm underpass to prevent shared use with large farm equipment and with hedging to separate the two.	
We understand responses to at least some of our enquiries are expected on 1st September, and we hope some of these points can be agreed. However, we request the ability to speak at any or all the hearings in conjunction with the client's solicitors Irwin Mitchell LLP.	
5. Ancillary issues	The Applicant is working with Anglian Water to identify all affected
- The estate requests the applicant implement a stop cock on the Anglian Water supply situated on the north of the works to serve Hall Farm.	water supplies at risk of being cut off and will make sure all required water supply networks, including meters are relocated accordingly to avoid existing water supplier to properties being cut-off.
	The Applicant has located the meter for Hall Farm and agreed with representative of the Easton Estate to relocate the meter to north of the A47, such that Easton Estates will only be responsible for the pipeline north of the A47.
	The Applicant has included the power to place, alter, remove or maintain apparatus within the Order limits in Schedule 1 of the dDCO (REP2-005), so is able to divert a short section of water pipeline under the new A47 dual carriageway if necessary.
- The estate wishes to collaborate with the applicant to develop and agree upon a landscape and fencing plan	The Applicant can confirm that a final landscape design will be developed during the detailed design stage for approval under DCO Requirement 5 'Landscaping'. That design will reflect any landscaping and fencing provisions agreed with Easton Estates.
	Additionally, the landscape plan will be managed and maintained in accordance with the Landscape Environmental Management Plan to be approved under DCO Requirement 4 'Environmental Management Plan'.
- The estate wishes to contribute to the revised crop storage facility.	During a meeting between the Applicant and representatives of Easton Estate on 30 September 2021, it was agreed this matter could be addressed as part of a land agreement between the Applicant and Easton Estates.

16 NATIONAL GRID GAS



- 16.1.1 The below Written Representation by National Grid Gas has been reviewed and the Applicant's response to the key issues raised has been presented in the following table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000525-D1_National%20Grid%20Gas%20plc%20-%20Written%20Representation.pdf

ExA Question	Guidance
1.1 National Grid Gas plc ("NGG") is a statutory undertaker for the purposes of the Planning Act 2008. NGG assets which have been identified as being within or within close proximity to the proposed Order limits are: High Pressure Gas Pipeline: Feeder 3 – Felthorpe to Hardingham (the "High Pressure Gas Pipeline").	Please see RR-075 in the Applicant's Responses to the Relevant Representations (REP1-013).
1.2 These submissions supplement NGG's relevant representations which were received by the ExA on 17 June 2021.	
2.1 Article 10(11) provides that the consent of the Secretary of State is not required where the transfer or grant is made to NG for the purpose of undertaking Works Nos. 84.	The Applicant confirms they are actively working with NGG representatives responsible for the diversion of the existing gas pipeline to agree the methodology of working, including working
2.2 Work No. 84 is for the "diversion of a high pressure gas pipeline, potable water pipeline and overhead electronic communications and low voltage	with other statutory undertakers to make sure access from Berrys Lane is suitable for the vehicles accessing at this point.
electricity utility cables along Wood Lane, the existing A47, Berrys Land and Dereham Road, Honingham, affected by Works Nos. 1, 17, 18, 29, 24, 26, 27, 28 and 32 shown on sheet numbers 9 and 10 of the works plans". This is the High Pressure Gas Pipeline.	The Applicant is aware that subsequent to this Deadline 1 Written Representation submission, NGG have written to the ExA confirming they are comfortable that the land required for the diversion is included within the order limits and that they have
2.3 NGG is currently liaising with the Promoter regarding the extent of the land required for the diversion of the High Pressure Gas Pipeline.	withdrawn their comment made at paragraph 2.4 of the Deadline 1 Submissions.
2.4 NGG is also liaising with the Promoter regarding the access that is currently proposed to facilitate the diversion. The field where the HDD apparatus will be located will require a better access than the existing farmer's access provides. This is because (a) there are overhead cables that cross in parallel to Berry's Lane; and (b) there will be a steady flow of tankers in and out transporting bentonite and the treated arisings from the drill will also need to be removed. The proposed access is not suitable for the type and volume of traffic required.	
2.5 NGG and the Promoter will continue to work together to resolve these points and NGG will update the ExA as to progress at subsequent deadlines.	
3.1 NGG welcomes the inclusion of protective provisions for its benefit in the dDCO. NGG is liaising with the Promoter regarding the protective provisions and intends that these be secured by way of a side agreement. NGG is confident that agreement will be reached and will update the ExA in due course.	The Applicant acknowledges the NGG's ongoing cooperation and support to reach an agreement.

17 NORFOLK COUNTY COUNCIL

- 17.1.1 The Applicant has reviewed the below Summary Written Representation, Written Representation and Further Written Representation by Norfolk County Council.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000523-D1_Norfolk%20County%20Council%20-%20Written%20Representation%20Summary.pdf
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000524-D1_Norfolk%20County%20Council%20-%20Written%20Representation.pdf
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000552-Norfolk%20County%20Council%E2%80%99s%20written%20representation.pdf
- 17.1.2 As indicated below, many of the comments in the detailed Written Representation have previously been answered within RR-037 in the Applicant's Responses to the Relevant Representations (**REP1-013**). Therefore, only the Applicant's response to any new comments is presented in the following table.
 - 4.2 Overview RR-037.3
 - 4.3 De-trunking RR-037.4
 - 4.4 Norwich Western Link RR-037.5 to RR-037.11
 - 4.5 Highways Impacts RR-037.12 and RR-037.13
 - 4.6 Food Enterprise Park RR-037.14
 - 4.7 Socio-Economic Impacts RR-037.15
 - 4.9 Air Quality RR-037.16
 - 4.10 Cultural Heritage RR-037.17 to RR-037.21
 - 4.11 Landscape RR-037.22 to RR-037.33
 - 4.13 Geology and Soils RR-037.54



- 4.14 Material Assets & Waste RR-037.55
- 4.15 Noise and Vibration RR-037.56
- 4.16 Population and Human Health RR-037.57 to RR-037.59
- 4.18 Climate RR-037.63

ExA Question	Guidance
4.12 Biodiversity 4.12.1 Comments, para 4 Similarly, in line with CIEEM (2019) guidelines on EcIA, the ES should consider the known barbastelle maternity colony at ROARR! Dinosaur Park/Morton-on-	The ExA is directed to Common Response 'I' in the Applicant's Responses to the Relevant Representations (REP1-013).
the-Hill, which uses the woods between the A47 at Easton/North Tuddenham in the south, and the A1067 Fakenham Road to the north.	
4.12.1 Comments, para 7 Please also note that a request for an EIA Scoping Opinion (reference	The Applicant is updating ES Chapter 15 to reflect the NWL scheme as a Tier 2 development under Advice Note Seventeen
20211198) has been submitted to Broadland District Council for an extension to the Roarr! Dinosaur Adventure Park, and should be considered within the CEA.	guidance. The amended ES Chapter 15 will be provided by Deadline 4 and will include consideration of the extension to the Roarr! Dinosaur Adventure Park.

4.17 Road Drainage and Water Environment

4.17.2 The LLFA considers there to be an issue regarding the requirements section for surface and foul water drainage. The LLFA would like the draft DCO to be updated to recognise the right organisations by naming them rather than the planning authority (which does not normally have involvement in these aspects).

Please see the proposed wording below;

Requirements Surface and foul water drainage:

- 8.—(1) No part of the authorised development is to commence until for that part written details of the surface water drainage system, reflecting the drainage strategy and the mitigation measures set out in the REAC including means of pollution control, have been submitted to and approved in writing by the Secretary of State following consultation by the undertaker with Norfolk County Council as Lead Local Flood Authority on matters related to its function as statutory consultee
- (2) No part of the authorised development is to commence until for that part written details of the foul drainage system, reflecting the drainage strategy and the mitigation measures set out in the REAC including means of pollution control, have been submitted to and approved in writing by the Secretary of State following consultation by the undertaker with Anglian Water on matters related to its function.
- (3) The surface water drainage system must be constructed in accordance with the approved details, unless otherwise agreed in writing by the Secretary of State following consultation by the undertaker with the Norfolk County Council as Lead Local Flood Authority on matters related to its function as statutory consultee, provided that the Secretary of State is satisfied that any amendments to the approved details would not give rise to any materially new or materially different environmental effects in comparison with those reported in the environmental statement.
- (4) The foul water drainage system must be constructed in accordance with the approved details, unless otherwise agreed in writing by the Secretary of State following consultation by the undertaker with Anglian Water on matters related to its function, provided that the Secretary of State is satisfied that any amendments to the approved details would not give rise to any materially new or materially different environmental effects in comparison with those reported in the environmental statement.
- 4.17.3 It is noted that there is no mention of the ordinary watercourse consenting process. Therefore, the LLFA would like to include the proposed wording below into the DCO:

Works in a watercourse(s)

- x.—(1) No stage of the works involving the crossing, diversion, alteration, replacement and installation of new structures of any designated main river or ordinary watercourse may commence until a scheme and programme for any such permanent or temporary crossing, diversion, alteration, replacement and installation of new structure in that stage has been submitted to and, approved by the Secretary of State in consultation with Norfolk County Council, the Environment Agency, relevant drainage authorities and Natural England.
- (2) The designated main river or ordinary watercourse must be crossed, diverted, alteration, replacement and installation of new permanent or temporary structures in accordance with the approved scheme and programme.
- 3) Unless otherwise permitted under paragraph (x.1), throughout the period of construction of the works, all ditches, watercourses, field drainage systems and

The dDCO was updated at Deadline 2 (**REP2-005**) to incorporate the changes requested by Norfolk County Council.

However, as no foul water drainage is required for the highway scheme, parts (2) and (4) proposed by Norfolk County Council have not been included in the updated dDCO.

The requirement to secure an ordinary watercourse consent is secured in RD8 of the REAC table in the Environmental Management Plan (**APP-143**).

It is also listed as an additional consent which must be secured in addition to the DCO in table 4.1 of the Environmental Management Plan.

Compliance with the REAC is secured by Requirement 4 of the dDCO (REP2-005) and the local lead flood authority are now listed as a consultee for matters relevant to their functions.



ExA Question	Guidance
culverts must be maintained such that the flow of water is not impaired or the drainage onto and from adjoining land rendered less effective	
4.17.4 Furthermore, we note that there is no mention of the need to involve the LLFA in relation to the review of the temporary surface water drainage plan as part of the EMP. This needs to be addressed. We request that this be added as a requirement, maybe as a part 3 to 8 for the temporary works.	The requirement to prepare a temporary surface water drainage strategy is secured in the Environmental Management Plan (APP-143) (and specifically referenced in RD1 and RD2 of the REAC table).
	It is also listed as strategy which must be prepared in Requirement 4 of the dDCO (REP2-005) and the local lead flood authority are now listed as a consultee for matters relevant to their functions.

18 NORFOLK COUNTY COUNCIL (AS SCHEME PROMOTER OF NORWICH WESTERN LINK)

- 18.1.1 The Applicant has reviewed the Written Representation provided by Norfolk County Council as Scheme Promoter of the Norwich Western Link. The Applicant's response to the key issues raised has been presented in the following table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000522-D1_Norfolk%20County%20Council%20as%20NWL%20Promoter%20-%20Written%20Representation%20and%20Comments%20on%20Relevant%20Representations.pdf

%20Written%20Representation%20and%20Comments%20on%20Relevant%20Representations.pdf		
ExA Question	Guidance	
5. In the meantime, and since NCC's Report to the Planning and Highways Delegations Committee meeting on 3 June 2021 ("Report") was published, it has come to light that the information on its 126191157.1\222904 2 page 85 (at paragraph 3.35 of the Report) as referenced in each of the relevant representations listed in Appendix A, contains a number of factual errors and omissions in relation to the commentary relating to bats.	The Applicant welcomes this clarification, which supports the Applicant's response to the colony of barbastelle bat issue covered by Common Response 'l' in the Applicant's Responses to the Relevant Representations (REP1-013) and the response to Q3.0.16 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014).	
6. In order to rectify those factual errors and omissions, an amended Report has been prepared and was considered and agreed by NCC's Planning and Highways Delegations Committee at a meeting held on 27 August 2021.		
7. That Report1 corrects the aforementioned factual errors and omissions to enable a Written Representation to be submitted for the A47/A11 Thickthorn Junction scheme which reflects the correct and properly reported position in relation to assertions about the presence of a barbastelle bat super-colony in the area of the NWL and the A47 dualling schemes.		
9. In addition to the relevant representations listed in Appendix A to this submission, all of which seek to rely upon the erroneous elements in the above mentioned Report to NCC's Planning and Highways Delegations Committee, a number of relevant representations – as listed in Appendix B to this present submission – also seek to assert the presence of a nationally significant barbastelle bat colony in the NWL area, and/or to allege that NCC has acknowledged and/or is in receipt of evidence demonstrating that the colony size would qualify for pSAC or notified SSSI status. As has been explained in paragraph 8 above, these representations do not accurately reflect NCC's position. NCC would therefore be grateful if the ExA would take this explanatory submission into consideration when deciding how much weight to afford to the relevant representations listed in Appendices A and B to this submission.		
Update on Matters Raised in NCC's Relevant Representation [RR-069] 10. NCC has continued to discuss the matters raised in its Relevant Representation [RR-069] with the Applicant since it was submitted. NCC is also mindful of question 7.0.18 of the ExA's First Written Questions ("ExQ1") which focuses on the nexus between the Applicant's design at the Wood Lane junction and the linkages with the NWL (referred to in paragraph 11 below as "the proposals").	Please see to response Q7.0.18 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014). This response has been agreed with Norfolk County Council and will be recorded in the Statement of Common Ground (TR010038/EXAM/8.4) to be issued before the hearing in November.	
11. To assist the ExA, NCC wishes to clarify that in relation to the concerns raised by the ExA in ExQ1 7.0.18, and further to NCC's discussions with the Applicant, NCC's position is as follows: 1 Available here: https://tinyurl.com/ym7w3mfw 126191157.1 \\222904 3		
11.1 Fundamentally, the proposals put forward under Work No. 26a were not initially discussed with NCC by the Applicant; and had they been discussed:		

part of NCC's NMU strategy for the NWL project);

(a) NCC would have proposed an alternative arrangement that it considers the Applicant could potentially have delivered as part of the A47 scheme; and

(b) NCC would never have proposed or supported a non-motorised user ("NMU") connection crossing the NWL at this location (i.e. the proposal is not

11.2 If the proposals are to remain in the DCO, then the Applicant should provide certainty within the DCO as to what the position would be in both a 'non-NWL world' and a 'NWL world'. In particular, should the NWL come



ExA Question Guidance

forward, NCC would not expect to have to provide design solutions for a NMU connection on its network that it does not support; and

- 11.3 as such, NCC expects the Applicant to amend the draft DCO to provide for:
- (a) ideally, a replacement NMU route to that proposed by Work No. 26a; or
- (b) if this is not possible and Work No. 26a is to be only a 'temporary' connection before the NWL is operational, then there should be a defined trigger for its removal when the NWL is brought forward coupled with drafting in the DCO that expressly displaces the legal presumption that a way laid out by a highway authority in exercise of its statutory functions is to be treated as a highway; and
- (c) if it is required to remain in place once the NWL is in place, that specific proposals within the DCO are put forward for crossing of the NWL, which is likely to require a bridge.
- 12. NCC recognises that the latter course of action would have procedural implications for the Applicant, so it is making its concerns as clear as possible now to allow the Applicant to consider an appropriate way forward.
- 13. Finally, NCC would re-emphasise its view that the 'NWL stub' that forms Work No. 98 to the DCO should be included within the Rights of Way and Access Plans as a highway to be created.
- 14. This is important to ensure that the handover of that work is dealt with in the same way as the rest of the works that are to be handed over to NCC as part of the DCO, i.e. in a manner that is consistent with NCC's ability to operate and maintain the assets as part of its highway network.
- 15. As the rest of the roundabout to which the NWL stub connects is to form part of NCC's highway network (as confirmed by the Classification of Roads Plans [APP-014]), NCC cannot see that there is any disbenefit to the Applicant in having to complete the NWL stub to NCC's satisfaction as relevant highway authority (as is required by article 12 of the DCO), in handing over the assets in that location as a whole.

As stated in response RR-077.3 in the Applicant's Responses to the Relevant Representations (**REP1-013**), the Applicant does not propose to dedicate the Norwich Western (NWL) Link arm as a public highway.

The Scheme has been designed to facilitate a link from the Wood Lane junction northern roundabout to the NWL, but it will be for Norfolk County Council to dedicate this link as part of the NWL scheme, if and when it is delivered. There is no benefit to either NCC or the Applicant in creating a stub of highway which will need to be maintained at public expense, unless and until there is certainty that the NWL scheme is deliverable.

The design of the NWL stub will be confirmed as part of the detailed design, to be approved through dDCO Requirement 3.

Updated Classification of Roads Plans (APP-014), Traffic Regulations Plans (AS-002) and Schedule 3, Part 1A, of the dDCO (REP2-005) have been issued at Deadline 3 to align with the Rights of Way and Access Plans (APP-008) and a highway classification is no longer assigned to the NWL stub by the A47 Scheme.

19 NORFOLK GARDENS TRUST

- 19.1.1 The Applicant has reviewed the below Written Representation by the Norfolk Gardens Trust and responded to the key issues raised in the below table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000441-Norfolk%20Gardens%20Trust%20-%20Written%20Representations%20(WRs).pdf

ExA Question Guidance

Norfolk Gardens Trust is the primary body concerned with the conservation and enhancement of outstanding gardens and landscapes in Norfolk, The Trust is consulted, via the Gardens Trust national body, on development proposals likely to affect gardens and parklands which have been formally designated by Historic England in the Register of Historic Parks and Gardens of special historic interest. Berry Hall's grounds are not formally registered. However, there are many examples of parks and gardens which are are not registered but are nevertheless of significant historic and/or landscape interest. In national planning policy these are termed non-designated heritage assets. In many cases, NGT is not consulted on development proposals affecting these places but is able to make representations on such cases. The grounds of Berry Hall are extensive and provide the immediate setting for the Grade II listed Hall. They include lawns extending towards the River Tud and eastwards towards Berry Lane. There are more enclosed and screened gardens to the north and west of the Hall. In my view the significance of these grounds, both in their own right and in contributing to the Hall's setting, is sufficient for them to be considered a non-designated heritage asset. The Cultural Heritage assessment prepared by Highways England explains that existing planting currently helps to mitigate the noise and visual effects of the existing A47 on the Hall and its grounds. While there would be no direct physical effect on Berry Hall, the proposed dualling scheme would have a significant effect on its surroundings. The proposed new junction to the north of the Hall would make the new road more prominent in that part of its setting. Work areas and a concrete batching plant would also be sited near the gardens. Although the Highways England Cultural Assets

The effects on Berry Hall Estate and its listed buildings as Heritage, Visual and Landscape constraint were considered in ES Chapter 6 – Cultural Heritage (APP-045) and ES Chapter 7 Landscape and Visual Effects (APP-046).

The heritage significance of Berry Hall is taken into account and set out in ES Chapter 6 and the estate is assessed as part of the setting of the listed buildings. Berry Hall was assessed as of "High value" and the setting was assessed as making a moderate positive contribution to that value. The Slight residual adverse effect on the setting Berry Hall Grade II Listed Building has been identified as a result of construction and operation activities.

With regards the scenic status, ES Chapter 7 identifies, assesses and proposes mitigation for the likely effects (both adverse and beneficial) of the Scheme on landscape character, landscape features and visual receptors.

Though the Applicant acknowledges ES Chapter 7 does not specifically mention the Berry Hall Estate designation, it does consider Berry Hall in the visual assessment and the effects on the host landscape character areas that Berry Hall Estate forms a part of. Berry Hall Estate falls within the published Landscape Character Areas (LCAs) A2 and D2.

The ExA is also directed to Section 4 of this document that provides further information in response to the Written Representation submitted by Savills UK on behalf of the owner of Berry Hall Estate.



ExA Question	Guidance
assessment refers to proposed additional planting, it is not clear that the harm to the Hall and its grounds would be effectively mitigated. The NGT was not consulted by Highways England on this scheme. Had there been consultation I consider that the Trust would have lodged an objection in respect of the effect on Berry Hall and its grounds.	

20 NORWICH GREEN PARTY GROUP OF CITY AND COUNTY COUNCILLORS

- 20.1.1 The Applicant has reviewed the below Written Representation by the Norwich Green Party Group and City Councillors. The Applicant has responded to the issues raised in the below table.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000481-D1_Norwich%20Green%20Party%20Group%20of%20City%20and%20County%20Councillors%20-%20Written%20Representations%20(WRs).pdf

ExA Question	Guidance
1. The proposed A47 North Tuddenham to Easton scheme (A47NTE) represents business as usual in a world and a future that no longer exist due to the climate and ecological emergencies. We need to face reality and to develop a transport future based on traffic reduction and making best use of the existing road transport infrastructure.	Please see Common Response B in the Applicant's Responses to the Relevant Representations (REP1-013) which details the traffic modelling and economic appraisal undertaken for the Scheme including how changes due to COVID-19 were considered.
2. Underlying assumptions around national traffic growth forecasts used for A47 NTE fail to recognise paradigm shifts such as the changes in working and travel patterns hastened by the covid pandemic. The A47NTE also fails to address the policy shifts needed to not exceed 1.5C or 2C of global warming which the Intergovernmental Panel on Climate Change agrees will happen unless deep cuts in carbon dioxide and other greenhouse gas emissions occur within the coming decades. ³	Please see Common Response H in the Applicant's Responses to the Relevant Representations (REP1-013) which outlines how the Scheme has been tested against inter/national legislation and guidance, including the Paris agreement, and the legally binding target under the Climate Change Act 2008 to meet net-zero carbon emissions by 2050.
3. The Department for Transport's modelling and appraisal tools adopt a linear view of society and the economy. 'Decarbonising Transport': A Better Greener Britain' ⁴ commits the government to a review of the National Networks National Policy Statement (2014) (NNNPS) in the light of fundamental changes to commuting, shopping and business travel within the last 18 months as well as the government's legal commitment to net zero and the 6th Carbon Budget. The review due to start later this year and complete by Spring 2023 will include 'a thorough examination of the modelling and forecasts used to support the need for development and the environmental, safety, resilience and local community considerations that planning decisions must take into account'. ⁵ This timescale appears to exclude schemes in Road Investment Strategy 2 2020-2025.	Please see Common Response H in the Applicant's Responses to the Relevant Representations (REP1-013) regarding carbon emissions. The Applicant has assessed the likely significance of emissions against all published carbon budgets in ES Chapter 14 Climate (APP-053). In response to the release of the Sixth Carbon Budget (https://www.theccc.org.uk/publication/sixth-carbon-budget/) and a number of relevant representations received on this matter, the Applicant has provided an updated ES Chapter 14 at Deadline 3.
4. The government would be vulnerable to legal challenge over individual RIS2 schemes such as A47NTE if it gives approval without including them in a root and branch review.	As stated in paragraph 1.1.3 of the Case for the Scheme (APP-140) "The NPS NN has a particular weight in the consideration of this DCO application as, under Section 104(3) of the PA 2008, the SoS is required to determine the application in accordance with the
5. The HE states that the low traffic growth scenario undertaken can be used as a proxy for uncertainties which may result in the reduction of traffic demand such as the impact of covid-19 and under this scenario, the scheme still represents medium value for money. However, in-built assumptions in the traffic demand forecasts are unlikely to capture the full range and extent of new trends which might be addressed in its review of the NNNPS. Neither has the low growth scenario as applied to A47NTE been considered in combination with policy changes in line with net zero and the 6th Carbon Budget which should lead to further traffic reduction.	relevant NPS, subject to the exceptions set out in Section 104 (4 to (8). The Scheme's compliance with the NPS NN is assessed it the NPS NN Accordance Tables (TR010038/APP/7.2) (APP-141
Potential for Traffic Reduction Along A47 North Tuddenham to Easton	The Case for the Scheme (APP-140) details the need for the
6. We need to cut demand for road transport and not encourage new demand by providing new road capacity. The A47 between North Tuddenham and Easton has a number of characteristics which provide scope for traffic reduction in line with changes in work and travel patterns and with new strategic priorities in the government's 'Decarbonising Transport' plan to achieve modal shift to public transport and active travel and lower car travel.	Scheme taking into account the transport modelling and assessment (see Chapter 4), economic appraisal (see Chapter 5) and review of support for growth in the local planning policies (see Chapter 6).
7. The A47 between North Tuddenham to Easton is close to a major urban centre. The A47 Feasibility Study in 2014-15 found that a significant proportion of trips are made along relatively short sections, rather than long-distance trips	

³ Para B1 in 'Climate Change 2021, The Physical Science Base, Summary for Policy Makers', IPCC, Aug 2021 https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009448 /decarbonising-transport-a-better-greener-britain.pdf

⁴ Department for Transport, 2021

⁵ 'Road and rail schemes must consider net zero, says Shapps', Local Transport Today 828 26 July – 5 August 2021.



ExA Question Guidance

along the entire route.⁶ Norwich attracts a significant number of commuters; in 2011, around 46,000 people commuted into Norwich, most of them by car. The majority of commuters lived in Broadland and South Norfolk; smaller numbers came from Breckland and Great Yarmouth and a very small number from King's Lynn (where working residents look to the south and west for employment outside the town rather than to Norwich). Outward flows of commuting from Norwich are far lower than flows into Norwich from surrounding districts.⁷

- 8. Consequently, there is potential for shifting a proportion of existing and future peak period commuter trips along the A47 to improved public transport, for example, between Dereham and Norwich, with benefits for congestion reduction. There is scope for greater car sharing in line with the aim of draft Norfolk Local Transport Plan 4 to reduce the number of single occupant car journeys. Planned new growth is concentrated in or close to Norwich where it can be more easily served by sustainable transport. If new development is designed in a way that promotes sustainable travel choices, the number of short unnecessary car journeys on the strategic road network would be minimised.
- 9. Also, home working in Norfolk is likely to increase which would help to reduce peak period commuting and congestion. In 2011, around 13% of Norfolk's working population worked mainly at or from home.⁸ Following Covid-19, several large employers are reassessing their accommodation needs. For example, Aviva announced plans to close its office at Broadland Business Park and relocate around 1,500 staff to its Norwich city centre office to enable staff to choose a mix of home and office working.⁹ South Norfolk and Broadland Councils are also re-thinking their accommodation needs in the light of flexible working.¹⁰ Planned improvements to rural broadband in Norfolk may see a further increase in home working.¹¹
- 10. Current traffic flows on the A47NTE do not justify dualling . Annual average daily traffic flows (24,000 vehicles) on A47 Hockering to Honingham in the base scenario are modest compared to many parts of UK strategic road network. The present A47 between North Tuddenham to Easton A47 is operating just below the available capacity during the AM (94%) and PM peaks (89%) in eastbound direction. 12
- 11. Traffic reduction measures would manage traffic demand whilst meeting transport need using sustainable modes. Packages of travel and demand management measures should be accompanied by low cost road safety measures such as safety treatment of side roads and reducing the speed limit to 50mph.

Climate Change

- 12. We support the submission from Dr Andrew Boswell of Climate Emergency Policy and Planning regaring the underestimate of greenhouse gas emissions generated by the A47NTE and the lack of assessment of the cumulative impacts from three A47 schemes currently undergoing examination together with local road schemes being promoted by Norfolk County Council.
- 13. The scale of Norfolk's road transport contribution to carbon emissions is shockingly high and reflects long standing policies to accommodate growth in road traffic as a sign of a strong economy. Forty per cent of Norfolk's emissions derive from surface transport compared to 27% in 2019 for UK domestic greenhouse gas emissions. Norfolk's transport emissions have barely fallen over the last fifteen years and the planned construction of seven major road projects in Greater Norwich/ East Norfolk including four A47 schemes within the next five years, would drive emissions higher still. A large number of rural neighbourhoods in Norfolk fall into the 10% worst in England for carbon dioxide emissions per capita for car driving; they include Easton through which the A47 North Tuddenham to Easton section passes. 13 The Intergovernmental Panel on Climate Change (IPCC) report finds that mean sea levels have risen faster over any preceding century. 14 Norfolk's soft low-lying coastline and coastal communities are particularly vulnerable to sea level rise. The ban on the purchase of new diesel and petrol cars and vans which comes into effect in 2030 will see growth in vehicle emissions in the meantime, assisted by the government's large road building programme which is explicitly designed to facilitate road traffic growth. Every tonne of carbon emitted will stay in the

Please see Common Response H in the Applicant's Responses to the Relevant Representations (**REP1-013**), plus Section 7 of this document provides further information in response to the detailed Written Representation submitted by Dr Andrew Boswell, of Climate Emergency Policy and Planning (CEPP).

⁶ A47-A12 Corridor Feasibility Study Summary, DfT March 2015.

⁷ Table 14 in 'Numbers commuting to Norwich', Norfolk 4th LTP, Norfolk County Council, Oct 2019.

⁸ 2011 Census reported in Figure 1 Method of Travel to Work, Norfolk 4thLTP, Evidence Base Review, WSP for NCC, Oct 2019.

⁹ 'Norwich-based insurance firm Aviva announces closure of one of its offices', Eastern Daily Press 25 March 2021.

¹⁰ 'Consultants brought in as councils consider selling headquarters', Eastern Daily Press, 14 Aug 2021.

¹¹ 'Thousands of rural homes (in Norfolk and Suffolk) to benefit from broadband funding', Eastern Daily Press, 2 Aug 2021.

¹² Para 4.6.6 in Case for the Scheme 7.1, Highways England.

¹³ Map of Carbon Emissions reveals Norfolk neighbourhoods fuelling climate change, Eastern Daily Press, 13 August 2021.

¹⁴ A.2.4 In 'Climate Change 2021, The Physical Science Base, Summary for Policy Makers', IPCC, July 2021.



ExA Question	Guidance
atmosphere for decades. We need to save greenhouse gas emissions by not building new roads as opposed to gain time savings by building new roads	
14. Phil Goodwin, professor emeritus of transport policy at UCL and UWE writes, 'the speed of climate change is now faster than the implementation of measures to limit it' and that we are faced with two real alternative futures: 15	
15. In conclusion, to take account of new trends in society that include an increase in hybrid working changes and to achieve deep cuts in transport carbon emissions, we invite the planning inspector to recommend dismissal of this scheme and to ask the Secretary of State to include RIS2 schemes in the National Networks National Policy Statement review.	

21 ORSTED HORNSEA PROJECT THREE (UK) LIMITED

- 21.1.1 The Applicant has reviewed the below Written Representation from Orsted Hornsea Project Three (UK) Limited.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000487-D1 Orsted%20Hornsea%20Project%20Three%20(UK)%20Limited%20-%20Position%20Statement.pdf
- The Applicant welcomes the support for the Scheme provided by Orsted Hornsea Project Three (UK) Limited and confirms a 21.1.2 high level of positive engagement between both parties.

22 RICHARD HAWKER

- 22.1.1 The submission provided by Mr Richard Hawker has been examined and responses to the questions and concerns are provided in the table below. For those questions and concerns which have been raised previously, we have referred to previous responses.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000478-D1 Richard%20Hawker%20-%20Written%20Representations%20(WRs).pdf

ExA Question	Guidance
Air quality It is inevitable that greater vehicle speeds will produce greater emissions. This exceeds any claimed 'excess emissions' due to current congestion, as engines produce much less pollution when stationary. I cannot produce scientific evidence to prove this, but my garden runs the length of an HGV route; when lorries go by at high speed, fumes are always experienced, but this never happens when lorries are stationary for some time to let other large vehicles pass due to narrowness of the road. It will be years before electric power is used for most cars, and use of electric power is many years away for large diesel vans and probably many decades for large lorries.	ES Chapter 5 Air Quality (APP-044) presents the air quality assessment and concludes there would be no significant effects on air quality at human and ecological receptors as a result of the Scheme. Please see response RR-037.16 in the Applicant's Responses to the Relevant Representations (REP1-013) regarding further clarity on the air quality assessment.
Loss of natural environment As the route is off-line, some way from the existing road, considerable loss of natural environment is inevitable. My particular interest is in the area south of Hockering, where the scheme effectively remodels the whole flood plain to the north of the river Tud. This is a mix of carr woodland, reedbeds, grassland and some pasture. The cutting and embankment	As part of the DCO application, an Environmental Impact Assessment (EIA) was undertaken for the Scheme. EIA is a process that identifies the likely environmental effects (both adverse and beneficial) of a proposed development. As part of the EIA, the impacts on the natural environment were fully assessed. The Scheme design has been developed to maximise opportunities for biodiversity, flood storage and landscaping. The mitigation design for the Scheme, informed by the EIA

required to position the wide road in this sloping area means that a large part of this area will be dug up; in addition lagoons and a lay-by are planned, which will take even more of the natural environment. My calculation from the plans shows that 3.5km of hedges will be removed, 1.7km of which are classed as 'important'. When hedgerows around the country have been decimated over the past decades, this is too much to lose.

HE claimed that one reason for the choice of this route, option 3, was its least effect on the environment. Yet the route actually detailed as the preferred route is closer to the river than option 3, though this was hidden in the text, and not made obvious. Therefore the claim has not been substantiated.

landscaping. The mitigation design for the Scheme, informed by the EIA process, is presented in the Environmental Masterplan, Rev.1 (AS-007).

Please see Common Response F in the Applicant's Responses to Relevant Representations (REP1-013) which responds to concerns about the Scheme's effects on habitats and protected species. ES Chapter 8 Biodiversity (APP-047) identifies that hedgerow habitat will be lost during construction of the Scheme, however, with the proposed re-instatement and enhancement measures, there will be a positive gain of hedgerow habitat provided across the Scheme.

Furthermore, Table 8-11 of ES Chapter 8 summarises the ecological design and mitigation measures proposed during construction of the Scheme. The table states "Any hedgerow deemed species rich or 'important' will be translocated and not lost. New species rich hedgerows with trees will be planted in addition to areas of deciduous woodland".

Please see response RR-055.3 in the Applicants Responses to the Relevant Representations (REP1-013) regarding the preferred route alignment and announcement in response to Mr Hawker's relevant representation about the proximity of the preferred route to the River Tud south of Hockering.

¹⁵ We are now facing two alternative futures (plus an untenable one), Local Transport Today, 829 6 August – 19 August 2021.



ExA Question

Climate change

Dr Andrew Boswell, an expert in this field, covers this fully in his submission. I cannot add anything technical to what he writes. This is a subject on which the scientific and most of the political world is united; we have few years remaining in which we must halt and reverse greenhouse gas emissions. Britain led the way in industrialising the world, with all the benefits that has brought. It is incumbent on her to lead the way to mitigate its disastrous drawbacks, and indeed UK government has committed to ambitious targets, which means that every possible increase in emissions must be resisted, however small compared to the countrywide emissions. A big new road will inevitably increase emissions, and so alternatives must surely be put in its place.

Guidance

Please see Common Response H in the Applicant's Responses to the Relevant Representations (**REP1-013**) and the ExA is directed to Section 7 of this document that provides further information in response to the detailed Written Representation submitted by Dr Andrew Boswell, of Climate Emergency Policy and Planning (CEPP).

5) dDCO

I wrote to HE and PINS at the start of this examination, to draw attention to the difficulties I had with, amongst other things, the structure of the DCO. Initially, when made available on the HE website (and I believe, the PINS website) there was no index, and so no straightforward way of finding the particular information one was seeking, until the Examination Library was available (which is a great help). The organisation of the documents within the DCO is illogical, which does not help; one surely would expect the very first part to be description of the problem which the scheme was trying to solve, i.e. the need for the scheme. This would include reports of consultation with locals and experts in the field. Then the outline description of possible solutions, and where they had originated; basic analysis of solutions. This is essentially the process described in the government's publication 'The Transport Business Cases', so it would seem logical for the DCO to follow this sequence.

The nomenclature of the sections of the document is very confusing:

The contents page, giving the overall view of the application, appears on an unnumbered page from Section 5? Volume 1, section 1.3. This lists numbers 1 to 12, but does not give these names, e.g. are they to be called chapters, sections, paragraphs, or what? When there are so many number regimes used within the documents, this makes it very difficult to navigate.

Against numbers 4 - 11 in this contents page are listed 'Volumes 1 - 7'; still more numbers to confuse. The appendix A is not listed in the contents. Why not?

Volume 6 (section? 10) Environmental Impact Assessment does not mention the Environmental Statement (ES), which is a crucial component of this issue.

This whole application has been referred to in most places as 'the DCO'. But on delving into the morass of documents, it seems that the DCO itself is actually just one document, which appears as Volume 3. All the other documents are those referred to within that DCO, or background to its creation, and so are NOT the DCO proper, but the supporting documentation.

PINS' examination library, giving shortform numbers such as 'APP-003' to documents has helped a good deal, but it is a major difficulty that these documents cannot be searched-for, and when closing such a document, one is not returned to the location of the link for that document, but back to the top of the list. It is also confusing that the letters APP, chosen by PINS for their referencing, is also used by HE in several of their document references. There are many more ways in which this set of documents is made unnecessarily confusing, especially to a layman, but it would be tiresome for me to list them all. I have spent much of my working life dealing with, wrestling through and interpreting many British, European and Defence standards, mostly in engineering. None was as difficult to understand as this.

Perhaps the easiest difficulty to fix would be that of page numbering. Please can it be made a requirement that every page of a document, including the front page and contents page AND any appendix or annex, is numbered from number 1? Then the search facility on that document will reflect the page numbers listed in the contents. This would save considerable frustration, in always having to remember to add a certain number to the page required.

Having all documents available on line for all to access is a huge benefit, but when things are organised in such a strange way, it would be a great help to have access to printed documents, and especially large maps and plans, which have not been made available anywhere. This has been a major drawback.

An application for an order to grant development consent (DCO) for the A47 North Tuddenham to Easton Dualling Scheme was submitted to the Planning Inspectorate (PINS) in accordance with Section 37 of the Planning Act 2008 and the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

The DCO was submitted on the 15 March 2021 and was duly accepted by PINS on the 12 April 2021.

As referred to in Annex G of the Rule 6 letter, the Examination Library can be used to access and review all documents submitted during the course of the examination. Since acceptance of the DCO, PINS and the Applicant consistently refer to submitted documents using the Examination Library references.

The order of the application documents follows the suggested order of information set out in Table 1 of Advice Note Six: Preparation and submission of application documents published by the Planning Inspectorate.

Volume 1, Document 1.2 Covering Letter and Section 55 Checklist and Volume 1, Document 1.3 Introduction to the Application (referred to as **APP-002** and **APP-003** respectively in the Examination Library) were provided to list out and detail all the documents provided in the DCO application.

Due to the number of documents that were required to be submitted, the documents were organised into seven volumes. For example, Volume 6 provides the Environmental Impact Assessment (EIA) information. The Environmental Statement (ES) is the document which reports the findings of the EIA and can be found in Volume 6, Documents 6.1 to 6.9 (APP-040 to APP-139).

8) Landscape and visual effects

The area around the River Tud south of Hockering (described in 2), above) will be massively changed. This rural area, relatively unspoilt by new

Please see response RR-055.7 in the Applicant's Responses to the Relevant Representations (**REP1-013**) regarding Mr Hawker's relevant representation concern about the Scheme's effects on the landscape,



ExA Question

building, still retains a delightful mix of grazing and marshland, and tree cover, with a meandering river through its centre. There are two footpaths, either side of the River Tud, from which the public can admire the varied and peaceful countryside landscape.

Please can there be one or more selected viewpoints from this area?

These views would be utterly destroyed were this road to be built. The road, with its lagoons, and access road, and layby, would be seen from so many points. The enhanced viewpoint from the wooden bridge over the Tud would be drastically devalued by sight of the busy road, just yards away, on an embankment. And of course, there would be incessant noise.

As there is so little information in the application regarding lighting, it is impossible to judge the effects this will have, but any lighting in the area will be detrimental to the rural aspect, so I would be opposed to it.

Guidance

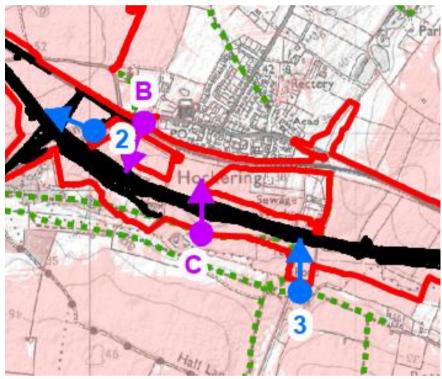
especially the Tud Valley.

20 representative viewpoint locations have been selected and agreed with Breckland Council and Broadland District Council (who also represented South Norfolk District Council) to assist in understanding the appearance and visual effects of the Proposed Scheme; see ES Chapter 7 Land Landscape and Visual

Effects (APP-046), ES Appendix 7.5 Representative Viewpoints (APP-093) and associated ES figures (APP-060 to APP-070). The assessment considered visual effects on all agreed viewpoints.

Viewpoints 2, 3 and C from ES Chapter 7 are located in the vicinity of Hockering; see below extract from ES Figure 7.4 (**APP-060**). In addition to the photomontages and photographs, these viewpoints are assessed in detail in Appendix 7.5. With reference to Appendix 7.5, from a visual perspective:

- At Viewpoint 2 the Applicant assessed a Large adverse (Significant) effect at Construction and Year 1, reducing to Minor adverse (not significant) at Year 15 following establishment of mitigation.
- At Viewpoint 3 the Applicant assessed a Moderate adverse (Significant) effect at Construction and Year 1, reducing to Minor adverse (not significant) at Year 15 following establishment of mitigation.
- At Viewpoint C the Applicant assessed a Moderate adverse (Significant) effect at Construction and Year 1, reducing to Minor adverse (not significant) at Year 15 following establishment of mitigation.



Please see Responses RR-017.02, RR-017.03 and R-055.11 in the Applicants Responses to the Relevant Representations (**REP1-013**) regarding lighting. As detailed in these Responses, a lighting assessment was undertaken as part of the EIA and the design of scheme lighting requirements is in line with DMRB TA-501 - Road Lighting Appraisal. Artificial lighting is only required on the approach to and through the proposed junctions, slip roads and associated roundabouts.

10) Noise and vibration

I have found very little noise information in the application. It seems that up-to-date baseline surveys have not actually been done, but old information relied upon, with some estimates for updating. Monitoring points have only been chosen for places which would be likely to experience increased operational noise. One of the benefits assumed for this route was its greater distance from Hockering village than others, one benefit assumed to be that of reduced noise. But this needs to be evaluated in order to assess the size of benefit to Hockering residents. I cannot see that this has been done. I understand that NO mitigation against construction noise will be offered to some sensitive locations. I requested information on noise well over a year ago, but was denied it, being told that it would all be in the DCO; this really should have been part of the consultation, as it is crucial for local people.

Please see response RR-055.12 in the Applicant's Responses to the Relevant Representations (**REP1-013**), in this case Mr Hawker's, regarding the noise and vibration assessment undertaken near Hockering.

11) Population and human health

The maps have been created on sheet size A1, and it is extremely difficult to discern detail when printed on A4, and when viewing on a standard TV screen, enlarging is very tiresome. Viewing actual documents, even it meant travelling to see them, would be much preferable. This has not

The A47 North Tuddenham to Easton Dualling Scheme was submitted to the Planning Inspectorate (PINS) in accordance with Section 37 of the Planning Act 2008 and the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 and as reflected in the Rule 6 letter which specify scales for particular maps/ plans.

The Examination process is defined by the Planning Act 2008, The



ExA Question Guidance

been possible.

Infrastructure Planning (Examination Procedure) Rules 2010 and The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015.

Non-motorised users and public rights of way

Roads and other rights of way are proposed to be stopped up. Of particular concern is FP7 in Hockering, which uses Gypsy Lane to access FP8 and the bridge over the river Tud, to footpaths in East Tuddenham. This would sever a major means of access by foot to parts further south. No substitute is provided. It is not clear what is planned for the cycleway recently constructed by the north side of the A47 between Heath Road, Lyng (Lyng Road) and Hockering Street. From the description in the DCO p68, this is to be eliminated, and the map is not detailed enough to discover what is proposed. Nor is it clear what would happen to the pond at the junction of the old A47 (NOT B1147, as described) and Lyng Road. I cannot find point A2, and point A4 is actually on sheet 4, not sheet 2.

Church Lane, East Tuddenham, is proposed to be stopped up, where the new road would traverse it.

From Hockering it would only be possible to get to the properties around Rotten Row and Traps Lane by a long detour via Hockering, Mattishall Lane Link, or via Wood Lane junction. This may be just acceptable for vehicular traffic (and this elimination of motorised traffic has received much support from local residents), but it is prohibitively-long for pedestrians and cyclists, whom we are surely trying to encourage. Also, this route currently does give access to the No4 Konect bus route from Dereham via Mattishall and East Tuddenham to the hospital; the buses on the A47 do NOT go to the hospital.

At the Easton end of the road, the current pedestrian/cycle 'at grade' crossing across the A47 is considered quite dangerous. Certainly it is intimidating, as it is so far from the roundabout that traffic has either picked up speed, or has not slowed down very much. The proposed alternative is a bridge much further west. For cyclists and pedestrians making the journey from Lower Easton (and other parts further north) to Easton, this is a considerable detour, and will surely be almost as off-putting as the current crossing, when we should be encouraging cyclists and pedestrians. I have already suggested a simple underpass here; this would not be expensive and has been very successfully used on the A14 at Quy, Cambridgeshire. When the North Tuddenham by-pass was built, around 1992, the inspector would not insist on an underpass, and instead an expensive bridge was built, but is hardly used; thus North Tuddenham has been split in two.

FP7 access to FP8

Please see Response R-055.6 in the Applicants Responses to the Relevant Representations (**REP1-013**) regarding FP7. Furthermore, the decision not to provide a walking, cycling and horse-riding (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, it would be expected that the usage information collected is representative of the average use and is sufficient to inform the assessment of the Scheme.

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.

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.

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.

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 accommodate Hockering FP7.

The existing combined footway/cycleway linking Main Road and The Street (on the north side of the A47) will be lost to the Scheme. However, the 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.

Point A2 is situated on Lyng Road and shown on Sheet 2 of the Rights of Way and Access plans (APP-008) and the stopping up between point A3 and A4 is listed under both Sheet 2 and also Sheet 4 in Schedule 4 of the dDCO (REP2-005) because it spans several sheets. The pond will be removed and it has been assessed as part of the ecology surveys. The Environmental Masterplan, Rev.1 (AS-007) shows replacement ponds are proposed to the east.

Church Lane, East Tuddenham

WCH surveys were conducted at the junction of Church Lane / A47 / Sandy Lane 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, it would be expected that the usage information collected is representative of the average use and is sufficient to inform the assessment of the Scheme.

The WCH surveys recorded very low usage of Church Lane with only 25



ExA Question Guidance

movements being record over the 14 day survey period, of which, only one movement was a pedestrian. On the majority of days, only two to three cycle movements were record but there was a peak of four cycle movements on Thursday 23 July 2020.

The very low usage of Church Lane by pedestrians and cyclists is not sufficient to justify the construction and maintenance costs associated with providing an additional WCH underpass at this location. Furthermore, the journey lengths for cyclists using the alternative routes to travel between Hockering and the properties around Rotten Row and Traps Lane are all very much less than 5 miles (8km), which is widely regarded as an achievable distance to cycle for most people.

With regards to the loss of access to the No4 Konect bus route, it is noted that the No 4 bus service travels east – west through East Tuddenham along the Mattishall Road corridor. The nearest bus stops to Hockering are located approximately 50m and 100m to the west of the Mattishall Road/Church Lane junction, a walking distance of approximately 2.6km from the centre of the village via the existing A47 and then via Church Lane. With regard to those properties located off Sandy Lane to the north of the existing A47, the walking distance to the bus stops would be in excess of 1.3km. These walking distances are much greater than the generally accepted desirable walking distance to a bus stop of around 400m and no pedestrian facilities are provided along Church Lane.

Given the large walking distances required to access the existing bus stops on Mattishall Road, it can be assumed that the demand for a pedestrian connection along Church Lane to access a bus serving the hospital is not significant. As noted above, the WCH surveys recorded only one pedestrian movement on Church Lane during the 14 day survey period.

Easton Crossing

The existing crossing point on the A47 does not comply with current design standards or provide accessibility for all users due to steps down both embankments to the at grade crossing; as part of the Scheme this at grade crossing will be closed and a new segregated crossing point constructed to the west.

It was not feasible to provide an overbridge at the location of the existing route as it was not possible to achieve the required vertical clearance to the A47 dual carriageway with the alignment and constraints of the existing embankment and residential properties on the south side. The next available route option was selected which is slightly west of the existing Easton roundabout.

At this location three alternatives were considered as part of the design process to provide a safe segregated connection:

Option 1 An Underpass below the A47 to the west of Easton

A proposed continuous curved route linking Dereham Road with Church Lane via an underpass below the A47.

It was not possible to achieve a vertical connection from Dereham Road to an underpass below the A47 whilst adhering to the required maximum gradients required within UK DMRB CD 195 Clause E/3.9. (Designing for cycle traffic).

Table E3.9 shows that the maximum length of 5% gradient (maximum permitted) is 30m, and would require (Clause E/3.0.1) "Level sections of 5.0m minimum length should be used between gradients to achieve compliance with Table E/3.9".

This option was discounted as it was not possible to achieve a compliant design in accordance with the UK DMRB; a non-compliant design would result in significant gradients which would compromise user safety and act as a deterrent to potential users.

Option 2 An underpass below the A47 to the west of Easton

A variation of Option 1 was developed which contained a series of "switchbacks" to achieve a vertical connection from Dereham Road to an underpass below the A47.

This was discounted on safety grounds as the switch backs required tight curves with short lengths on sections of steep 5% gradients on approach to the underpass.

This proposal required greater land take and included buildability impacts for construction which would have resulted in an increased impact on customers (road users) and construction programme. Route Length: 400m.

Option 3 An overbridge over the A47 to the west of Easton.

This proposed route complies with CD 195 and provides a safe



ExA Question Guidance segregated crossing over the A47 dual carriageway. The solution includes a ramped access on the southern side linking Dereham Road with the overbridge; on the northern side a ramped access is provided for cyclists, with a stepped access also provided for pedestrians offering a shorter connection to Church Lane, Easton. Route Length: 440m (cyclist route following ramp). Route Length: 240m (pedestrian route using stepped access on norther side to connect to Church Lane). The Applicant consulted Norfolk County Council, as the Local Highway Authority, and their appointed Public Rights of Way officers; Easton Parish Council Representatives were also consulted as part of the design process. Lighting Please see Responses RR-017.2, RR-017.3 and RR-055.11 in the Applicant's Responses to the Relevant Representations (REP1-013) I have not found detail of lighting in the documents yet (there is so much to regarding lighting. As detailed in these Responses, a lighting assessment read!), but to many of us, (both in the country and towns) there is a was undertaken as part of the EIA (see ES Chapter 7 Landscape and concern over possible loss of the beauty of 'dark skies', and any lighting Visual Effects (APP-046) and Appendix 7.7 Lighting Assessment (APP-

12) Scope of development and Environmental Impact Assessment

The need for the proposed development is mainly based on the current level of traffic and that predicted for the future. I dispute the need for this intervention. Less disruptive alternatives exist. There are at least four other road schemes being promoted in this area, and the full cumulative effect of them on this area has not been assessed. Other than the A47 schemes, they are the Yarmouth third crossing, and the Long Stratton Bypass, and the Norwich Western Link.

The need case for the Scheme is described in the Case for the Scheme (APP-140) and summarised in Common Responses A and B in the Applicant's Responses to the Relevant Representations (REP1-013).

095)) and the design of scheme lighting requirements is in line with

DMRB TA-501 - Road Lighting Appraisal.

Please see Common Response G in the Applicant's Responses to the Relevant Representations (**REP1-013**) regarding cumulative assessment of the Scheme with other highway schemes.

13) Transportation and Traffic

a) Baseline surveys

would be unacceptable.

In 'The case for the scheme', Volume 7 (Other documents) part 7.1, it is stated that the base year model is from 2015. I understand that Norfolk County Council are using a 2019 model, and the two agencies say they are working together. There is no justification given for using an out-of-date model. Government guidance requires the most recent to be used. Even 2019 is two years out of date, and it is known that surveys have been done much more recently, from which data surely should be used for a model.

Given that proviso, a look at table 4.9 on p69 of 7.1 shows:

The road is currently operating considerably below 100% capacity, mostly around 70%, and in only 5 out of 32 readings is it running above 80% capacity. But it is not clear how the capacity of the road is assessed. Only in the future scenarios is it predicted that many situations will be near or above 100%. No predictions are given for the scenario that the Norwich Western Link is not built and this section of the A47 is not dualled. Surely this information is an essential part of the case for intervention. The NWL is a separate scheme, of course, and its 'non-construction' should surely be considered in any 'what-if' scenario.

On 12 May 2021, I counted vehicles between 8 and 9 am on the eastward approach to the 'Norwich roundabout' (no-one calls it that – it is usually referred to as the Honingham or Mattishall Road roundabout). Total figures were quite similar to those quoted in the 2015 base year data – 1008 actual vehicles in 2021 vs 1085 in 2015. (1173 Passenger Car Unit equivalents, vs 1233 in 2015).

Admittedly these figures are just one count, unofficial and unchecked, but it was significant that passenger cars were 679 compared with 839 in 2015. This may be due to more working from home, or flexible working since the pandemic, and this could well be a permanent feature, as reported in the media. Light Commercial Vehicles were 199 compared with 132 in HE figures, again possibly indicating the surge in home deliveries and a resurgence of home repairs after enforced shut-down. This could decrease over time, as delivery systems increase in efficiency (one hopes) and journeys are reduced. What is clear to me (and could have been checked by HE before issuing this application) is that growth has not been what would have been expected before the pandemic hit, and the figures need to be revisited. Surely it does not take a huge resource to mount a survey and/or liaise with NCC to share data.

The total numbers of vehicles in a 24-hour period is around 18,000. I understand that 20,000 per day is considered the minimum to justify investment in a new road in the MRN; on that basis the A47 cannot justify massive investment.

What is essential in order to validate the predictions for the future,

Please see Common Response E in the Applicant's Responses to the Relevant Representations (**REP1-013**) regarding use of the 2015 NATS data for the traffic modelling.

Please see Chapter 4 of the Case for the Scheme (**APP-140**) which details the transport case for the scheme with regards to policy compliance, baseline data and model development and impact of the scheme. Chapter 4 of the Case for the Scheme also details the methodology for the baseline data collection.

Please see Common Response C in the Applicant's Responses to the Relevant Representations (**REP1-013**) regarding use of traffic modelling baseline data in the environmental impact assessments.

The Norwich Area Transport Strategy (NATS) traffic model has been developed based on a range of traffic surveys undertaken along the A47 Scheme section and across the surrounding network in 2015 and 2016. The traffic surveys in 2015 and 2016 provide the input traffic flow data for the development of the base year strategic highway model and as such the was validated against these data in accordance with the Department of Transport's (DfT's) transport analysis guidance (TAG).

In June 2015 12-hour Manual Classified Turning Counts (MCTC) were undertaken to observe traffic movements in the local area between North Tuddenham and Easton. The location of the 2015 traffic survey sites is shown in Figure 4.2 of the Case for the Scheme (APP-140). The MCTC surveys recorded the number of vehicles and their classifications by turning movement. In addition to the MCTCs, as shown in Figure 4.2 of the Case for the Scheme an Automated Traffic Count (ATC) was undertaken on the A47, near Honingham.

To supplement the traffic movements across the wider area, both on the A47 and the surrounding local road network, additional MCTC's and ATC's were undertaken during the months of May, June and July 2016. Figure 4.3 of the Case for the Scheme (APP-140) shows the extent of the 2016 traffic flow data collection. In summary, the 2015 data collection study was focused primarily on the local vicinity of the Scheme, whereas the 2016 data collection covered the wider surrounding area. The ATC surveys were undertaken over a 14-day period, for 12 hours a day collecting traffic flow data in 15 minutes intervals.

In October 2019, further traffic surveys were undertaken to inform the local network and junction modelling. Figure 4.4 of the Case for the Scheme (APP-140) shows the location of the 2019 survey sites, this data exercise involved collecting traffic data on the local roads as well as recollecting data on a number of sites included in 2015 and 2016.

It should be noted that the traffic modelling assessment is therefore built on a large data set of observations, over a wide area, with ATC surveys extending over a two-week period. Individual traffic surveys, especially those collected manually, can be subject to day-to-day variation, individual counting errors or other data collection issues. By considering



ExA Question

especially when considering the impact of the NWL, is origin-and-destination data, and comprehensive turning counts at junctions, which we do not have, despite my regularly requesting it (from NCC and HE) since 2017.

Guidance

a wider range of data over multiple days and months this minimises the impact of bias on the data set as a whole and produces a robust basis for the assessment. Thus, undertaking the transport modelling assessment based on a comprehensive data set requires considerable resources and updating it with the latest data is not always feasible within the wider project delivery timescales.

Therefore, with respect to the individual manual traffic survey detailed at 'Norwich roundabout', it is not suitable to draw in-depth conclusions other than the two data points are within a similar order of magnitude. However, it is recognised that the impacts of Covid-19 will have caused short term implications to the magnitude and distribution of traffic demand.

In line with DfT recommendations and uncertainty of forecasting the future, scenario analysis has been undertaken supplemented with sensitivity tests. The economic appraisal has been undertaken for the core scenario as this is viewed as the 'most likely' future scenario.

In assessing the value for money of this Scheme, two sensitivity tests have been undertaken to include both high and low growth traffic scenarios in accordance with TAG. The low growth scenario undertaken should allow for uncertainties in the future national trends, such as GDP growth, fuel prices, etc which may result in a reduction of traffic demand. Therefore, under the low growth scenario, which potentially could act as a proxy for uncertainties such as the impact of COVID-19, this Scheme still represents medium value for money.

Further sensitivity testing will be undertaken, upon the release of the latest DfT TAG in line with normal process.

With regard to the total numbers of vehicles in a 24-hour period, please refer to Figure 4.18 of the Case for the Scheme (APP-140).

The two-way annual average daily traffic (AADT) flows on the A47 to the western extent of the Scheme (Location 25), between Hockering and Honingham, are forecast to increase from 24,000 in the base scenario (2015) to 32,000 in 2025 and 36,000 in the 2040 in the Do Minimum (DM) scenario. This represents an approximate increase of 33% from 2015 to 2025 DM and a 50% increase from 2015 to 2040 DM.

In the DS scenario AADT traffic at location 25 is forecast to further increase to 42,000 in 2025 and 52,000 in 2040 in the Do Something (DS) scenario due to the presence of the Scheme. This represents an approximate increase of 31% in 2025 and 44% in 2040 in the DS compared to the DM.

Please also see Table 4.15 of the Case for the Scheme (**APP-140**) which presents the 2015 base year, 2025 & 2040 DS and DM journey time comparison.

Considering traffic flow impacts of the scheme is just one aspect of its appraisal. Analysis of the journey time results clearly show the Scheme will provide substantial journey time savings for both eastbound and westbound traffic movements in both the AM and PM peaks. These journey time savings are as a result of the Scheme and the upgrading of the A47 alignment to dual carriageway.

Furthermore, from section 5.5 of the Case for the Scheme (**APP-140**), the Scheme produces an adjusted Benefit Cost Ratio (BCR) of 2.2. This represents a 'high' value for money (VfM).

The NATS model base year has been calibrated to represent a 2015 base year, utilising the data collected as part of the Scheme assessment as well as the Highways England Regional model "SERTM" network and mobile phone data.

Mobile phone data, from SERTM, is the primary source used for deriving the distribution of trips in the base year prior demand matrices in the schemes impact area. Traffic count data is used to calibrate the model based on a matrix estimation (ME) procedure. The SATURN 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 (APP-140), 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:

- flows across screenlines
- individual link flows
- journey time comparison
- model convergence.

The base model was developed in accordance with the DfT's TAG Unit M3.1: Highway Assignment Modelling (2020). The strategic base year



ExA Question Guidance model development process is outlined in Figure 4.8 of the Case for the Scheme (APP-140). 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. 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).

b) Alternative design solutions

When the idea of dualling the A47 rose higher up the government's agenda, in around 2012, I suggested HE discuss with local people, particularly Hockering, possible designs for a scheme, knowing that there were many obstacles to be overcome in this area. I was told that HE would be in contact when they had something to offer. That turned out to be March 2017, when HE presented just four options for the road. I summoned a meeting of local parishes for us to determine a collective response. Clearly none of the options was ideal, and further ideas emerged. HE did get involved, but they certainly did not take the lead in looking at design solutions.

They have continually altered designs since, and praise is due for a welcome willingness to be flexible, but there are still major objections; much of this could have been avoided with early consultation before HE had effectively committed itself to four options. Even those which they did look at before 'going public' with their four options, later claiming they were a comprehensive survey of all possible options, did not anticipate some design ideas which have come forward since 2017.

A preferred route was announced; Option 3. One reason for choosing this was stated as the fact that it was environmentally the least destructive. This may have been true for Option 3, but in fact the route which was published as the preferred route was nearer the river Tud than Option 3, though this was 'hidden in the small print'.

Alternatives have been suggested for further investigation, by Weston Longville PC, Honingham PC, myself, and others, but I have not seen appraisals of these by HE. They are not fanciful; they may prove to be unworkable, but they are surely worthy of proper investigation.

Journey delay times are listed, although it is not clear how these are measured or calculated. Anyone travelling this route will agree that the largest cause of delay and congestion on this stretch of the A47 is the Honingham roundabout. Until 2007 there was a simple T-junction for Mattishall Road to meet the A47. There were some tailbacks from the roundabout at Easton, but not excessive. Fatal accidents in the space of 5 years caused a rethink of the junction. Hockering Parish Council ran a campaign to promote a closure of the junction and rerouting of Norwichbound traffic down Berry's Lane to an improved junction (preferably lightcontrolled) at Wood Lane. A major extra benefit would have been that the B1535 would have been provided with a good junction with the A47 for all turning movements. This was backed by local councillors, the MP and the public. We held a meeting with HE, warning of problems of putting a roundabout to replace the T-junction, but they ignored our advice and built the current roundabout. The queues were horrendous, and many vehicles caused problems by rat-running through Honingham Village. Eventually part-time traffic lights were installed (HE had rejected another idea of simply putting lights on the previous T-junction, saying that lights 'would not work'). Things have improved, but this is still a major hold-up on the route. I mention this, because it is an example where local people DID offer the solution, but unfortunately HE would not take advice. As a result, thousands of man-hours have been spent unnecessarily in traffic queues every morning and evening for over ten years, and thousands of pounds were spent unnecessarily. I do not think lessons were learned from this. Congestion on the A47 is still mainly caused by this junction, yet nothing has been done over the past several years to improve the situation.

c) Operational effects on the surrounding highway

This has been a major source of friction, and alteration of the designs, without wide consultation, has exacerbated the situation. The closure of the Easton roundabout, which would lead to the welcome cessation of traffic through Lower Easton, has been proposed with little thought to where the c4500 vehicles per day which use that route would travel instead. It is proposed that the Norwich Western Link, which would join the A1067 to the A47 at the Wood Lane junction, would take all this traffic. This may be the case, but this road may be delayed, or not built at all. The success of the A47 scheme in curing problems, not causing them, must

Please see responses RR-055.3 and RR-055.5 in the Applicant's Responses to the Relevant Representations (**REP1-013**), in reply to Mr Hawker's relevant representation, that outline how the Applicant considered and, where appropriate, adapted the preferred route alignment design in response to consultation feedback, including alternative design ideas presented since 2017.

Please see responses RR-004.2 and RR-055.5 in the Applicant's Responses to the Relevant Representations (**REP1-013**) regarding the review of alternatives designs proposed by Weston Longville Parish Council and Mr Hawker, respectively.

Please see Chapter 4 of the Case for the Scheme (**APP-140**) for an overview of the strategic modelling and assessment of journey delay times.

Chapter 3 of the Case for the Scheme also confirms one of the key objectives of the Scheme is to provide a more free-flowing network.

The Scheme will increase resilience in coping with incidents such as collisions, breakdowns, maintenance and extreme weather.

It would also support the smooth flow of traffic and improve journey times reliability by maximising the operational capability at the junctions and along the 9km carriageway. The Scheme design includes a new junction between the A47 and the B1535, plus removing Honingham roundabout from the new A47 mainline (retaining it only for the local side road network).

Please see Common Response A in the Applicant's Responses to the Relevant Representations (**REP1-013**).

The single carriageway section of A47 between North Tuddenham and Easton lies between two dual carriageway sections of the A47.It acts as a bottleneck, resulting in congestion and leading to longer and unreliable journey times.

This section of the A47 is also currently operating over capacity and has a poor safety record. The A47 is ranked 2nd nationally for fatalities on A roads and the accident severity ratio is above average.

During the period 2014 to 2018 a total of 2 fatal, 15 serious and 76 slight accidents have been recorded along the 11km length of the existing A47 from North Tuddenham to Easton.

In developing this Scheme, the Applicant addresses these safety, congestion and journey time issues by upgrading the existing section of 7.9km of single carriageway to a high-quality dual carriageway.

The Scheme will provide additional capacity for future regional traffic growth up to 2040. The improved journey times will support employment and housing growth in the local area as well as across the A47 corridor linking Peterborough and Norwich, such as the Easton residential and food enterprise park developments.

Easton roundabout closure

c4500 is referring to Dereham Road in Figure 4-18 of the Case for the Scheme (APP-140), Box 15 2040. The 2040 model forecasts show 4500 AADT vehicles using Dereham Road in two-directions in the Do Minimum (DM) situation. A proportion of this traffic will be using Easton roundabout to make north-south movements. In the Do Something (DS) scenario, this connection is closed as north-south movements will use the new two-tier junction intersections of Norwich Road junction. Based on DfT guidance, the strategic traffic highway assignment model will reassign the traffic demand according to the new network arrangement to achieve a new



ExA Question

surely not rely on a different scheme going ahead at the same time.

To surmount this problem, the A47 scheme proposes a temporary traffic order to redirect all traffic running from the A1067 via Ringland Lane (and which would have gone through Lower Easton), to turn sharp right onto Weston Lane, a very narrow rural road currently carrying around 130 vehicles per day, and then left onto Taverham Road, another narrow lane with a few passing places. A dumbbell roundabout onto the dualled A47 is proposed at Taverham Road. At present, the flow through the road is around 400 per day. This surely could never justify its expensive connection to a dualled trunk road. So one is forced to the conclusion that this connection is proposed simply to accommodate this traffic diverted from Lower Easton.

Certainly an extra 4500 vehicles would cause great damage to this route. But not all would travel that route, as many would find that other routes, which, though further west, may be quicker: from the A1067 through Marl Hill and Weston Longville, adding to their current c3000 vehicles per day through narrow lanes; or through Weston Hall Road (B1535) and Hockering parish, especially if going in a westerly direction. Neither of these parishes were involved in any consultation about the above proposed traffic orders.

If traffic levels on the A47 were to increase due to dualling, the effect on the junction at Longwater, already very congested, would surely be severe. Further towards the city, by far the most congested route is the A1074 past Norwich Road, Costessey and Larkman Lane, yet the effect on this area does not seem to have been assessed in the HE consideration.

The closure of the connection to Berry's Lane from the Wood Lane junction has been promoted by a group (the 'south of the A47 task force'), formed by George Freeman MP, which is concerned about a possible increase in traffic along Barnham Broom Road, and through Barnham Broom to Kimberley, and Wymondham and the A11. This is considered likely because the ability to cross the A47 at the Wood Lane junction would indeed have been made much easier and safer with the proposed gradeseparated arrangement. No convincing predictions have shown that the new junction itself would increase this traffic significantly; nor is there clarity on where the traffic which DOES currently use the Barnham Broom Road originates from or is going to (lack of origin-and-destination data). It is therefore unclear whether this closure would encourage drivers heading for, say, Wymondham and the A11 to use the A47 instead to join the A11 at Thickthorn. Neither have I seen figures detailing the numbers of vehicles going to the very busy Barnham Broom country club, vehicles which will never have any alternative other than to use Barnham Broom Road. There is also a valid concern that drivers wanting to access Barnham Broom Road may drive through Honingham village and then Colton Road to get to Mattishall Road and thus back to Barnham Broom Road. This would be an unnecessary imposition on the village, and extra mileage for the vehicles, with no benefit to residents of Barnham Broom or Wymondham.

The land taken for the Wood Lane junction is unnecessarily large, and it is placed too near the village of Honingham. A double-roundabout design has been proposed, rather than a simple single roundabout, as is currently used at Thickthorn, and which would surely use less land and offer less deviation from a straight route for any buses travelling into Honingham from the west.

The case for the scheme rests mainly on the increase in speed, reduction in accidents and ability to promote economic growth. The increase in speed from, say 50 mph to 70 mph (assuming that were consistently achievable), for the c4.7miles length, would result in a saving of 1.6 minutes. It is difficult to believe that this small difference is preventing business investors from coming to Norfolk. The considerable congestion caused by the Honingham roundabout has not spurred HE to plan changes, apart from an ill-fated 'express-lane' idea, so it is difficult to understand the importance placed on this dualling.

d) Safety

Serious accidents have been few since the Honingham junction was changed (in fact they were few in that location until those very unfortunate incidents). Regarding the prevention of accidents, it is ironic that it took me over two years of letter—writing and eventually a local radio programme to get HE to repaint safety white lines and arrows on the A47 at Hockering. It took a further two years to get reflector posts renewed. Also, HE initially did not object to a residential development outside Hockering, despite the parish council having concerns about access onto the A47, near Sandy Lane, where several mostly minor (thankfully) crashes have occurred. Following talks, HE did agree that the area would not pass a safety audit, and that they would enact modifications to improve safety before the homes were occupied, but still no design has been agreed, yet the houses are now almost all occupied. Thankfully there have been no serious

Guidance

equilibrium, as follows:

Traffic arranges itself on networks such that the cost of travel on all routes used between each origin-destination (OD) pair is equal to the minimum cost of travel and all unused routes have equal or greater cost.

From the traffic forecast results shown in Figure 4-18 of the Case for the Scheme (APP-140), in the 2040 DS scenario traffic on Dereham Road will increase to 5,300 AADT (Box 15) and around 400 AADT will use Taverham Road (Box 10). In total 4,700 AADT will connect to\from the northern dumbbell via the southern underbridge roundabout (Box 11), 2,900 AADT is forecasted on the new eastern link road accessing Dereham Road (Box 16) and 2,400 AADT forecasted on the new western Link accessing Norwich Road (Box 19).

Thus, the results indicate that traffic demand will not be focused entirely on Taverham Road and that demand for the northern dumbbell is not just derived from traffic diverting from Lower Easton as it would also accommodate traffic from Norwich Road as well as the wider area.

In addition, Tables 4.18 to 4.21 of the Case for the Scheme (APP-140) show the results of the ARCADY junction operational assessment for both the AM and PM 2040 DS scenarios.

In summary, analysis of the ARCADY results clearly shows that all four junctions are operating well within capacity with minimal queuing. This indicates that in the 2040 design year the grade separated scheme junctions are operating satisfactorily.

Longwater junction

Please see document A47/A1074 Longwater Junction Impact Analysis (REP1-014), submitted at Deadline 1, that demonstrates the Scheme would create no significant adverse impacts on traffic at the A47/A1074 Longwater junction.

Berrys Lane closure

During statutory consultation, feedback raised concerns about increased traffic using Berrys Lane as a shorter route from Norwich Road junction to reach Mattishall Road and communities to the south.

In response to these concerns various design options and traffic modelling scenarios were undertaken to assess the impact of the north – south traffic movements running from the Barnham Broom corridor in the south to Weston Longville in the north. These were discussed extensively with Norfolk County Council, the Local Liaison Group and South of the A47 Taskforce. As a result of this engagement, to mitigate the north – south movement on local villages and through traffic in Honingham the design was amended to close Berrys Lane to through traffic directly to/from the A47 and will be only for local access from the south.

The local highway authority (Norfolk County Council) were involved in this process throughout, undertook independent traffic modelling and support the closure of Berrys Lane.

Wood Lane junction design

The justification for the Wood Lane junction design and alternatives considered has been addressed in detail in the response to Q1.0.6 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (**REP2-014**).

Need case

Section 3.5 of the Case for the Scheme (**APP-140**) presents the Scheme's objectives and how the Scheme design achieves these objectives. Section 6 demonstrates how the Scheme supports the Local Plans development growth needs.

The Scheme will deliver its objective to improve safety and operational issues.

The existing single carriageway A47 has 41 direct connections from existing side roads, farm, field and property accesses between North Tuddenham and Easton. In order to meet the objective of creating a more free-flowing and safe A47 there will be no direct connections to the dualled A47 in the Scheme.

Access will be solely via the proposed junctions. This is presented within Section 5 of the Scheme Design Report, Rev.1 (**AS-009**). In total, over a 60-year timeframe the Scheme's improvement will save a total of 291 accidents and 47 KSIs (killed or seriously injured).

Sandy Lane connection to the existing A47 will be unchanged; but will connect to the new A47 mainline via a new side road providing access to



ExA Question	Guidance
accidents there to date.	the new Wood Lane junction.
e) Bus users The government's stated aim is to encourage 'modal shift' to more environmentally-friendly means of transport, of which the bus is one. Local people have pressed hard to ensure that the scheme does not prevent the operation of a bus service through all villages on the A47 from Dereham to Norwich. I am very encouraged and grateful that HE have heeded this request, and no stopping-up of a road has rendered such a bus service impossible. However, the creation of two double-roundabout junctions means that a bus travelling west to east will have to negotiate four roundabouts in its journey. This slows the journey down considerably and further increases the difference between the time taken by a car at 70 mph, not having to stop in each village, and a bus negotiating a labyrinth of roundabouts and the odd twisty road, when already being restricted to 60mph maximum. In conclusion, there are cheaper and less disruptive ways of reducing holdups and increasing safety, especially of junctions, without enacting the	Please see response RR-055.9 in the Applicant's Responses to the Relevant Representations (REP1-013) regarding Mr Hawker's relevant representation enquiry about effects on public transport.
current plan, and these options should be looked at.	
As mentioned above, the road would run very close to the River Tud, and it is difficult to believe that contamination of this rare chalk river could be prevented by installing lagoons, especially when scientists are telling us that flash floods are becoming more prevalent. There is probably even more concern about the control of pollution during construction, especially where the road would cross the river Tud near Honingham.	Please see responses RR-055.8 and RR-053.2 in the Applicant's Responses to the Relevant Representations (REP1-013) regarding the assessments undertaken and mitigation proposed together with good construction practice with respect to managing risks to the water environment of the River Tud during construction and operation of the Scheme. The Scheme design has also been informed by ES Appendix 13.1 Flood Risk Assessment (APP-124 and APP-125) and ES Appendix 13.2 Drainage Strategy Report (APP-126 and APP-127) that have taken account of current guidance on climate change allowances.
15) Costs Although this may not be an official aspect of investigation for PINS, it is one which is very relevant to the scheme and its 'value for money'. There	Please see response RR-055.13 in the Applicants Responses to the Relevant Representations (REP1-013), in this case Mr Hawker's, regarding costs for the Scheme.
appears to be little or nothing in the documents about costs.	
Consultation I was disappointed that the ExA did not add to the Principal Issues the issue of consultation. The public was not given adequate notice of the statutory consultation in early March 2020. More than that, although (it later transpired) HE had planned that consultation some weeks ahead, and booked Hockering village hall for it, they refused to announce the nature of the meeting they had planned, until it was too late for the parish council to publicise the event as widely as we would have wanted to. We had around 14 days to do so. In investigating whether there was a statutory minimum notice period which HE should give, I discovered that there had been created, as required by planning law, a Statement of Community Consultation (SoCC). But the communities to be most affected by the scheme were not made aware of this, nor were they invited to contribute; only the District and County Councils were given that privilege, not parish councils, and those councils were apparently content with the notice period of just 2 weeks. This may be the 'Letter of the law' but it is certain not in the spirit of openness and transparency.	Please see response RR-055.1 in the Applicants Responses to the Relevant Representations (REP1-013), which responds to this consultation and SoCC process comment previously raised in Mr Hawker's relevant representation.
Difficulty of accessing and using the documents (see also 5), above) I realise that the Examination in Public is primarily a written procedure; I am not sure whether this has been a recent change, forced by the COVID pandemic, and the prevention of in-person meetings, or whether it was a planned change in procedure. I also realise that PINS' intention has been to be inclusive and give everyone an opportunity to contribute, with which I wholeheartedly agree. However, the complexity of the arrangements has, I believe, daunted many people who are unfamiliar with such arrangements, and less so with the computer technology which is essential to contribute to the online hearings which are being held.	The process is defined by the Planning Act 2008, The Infrastructure Planning (Examination Procedure) Rules 2010 and The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015. The 'Planning Act 2008: Guidance for the examination of applications for development consent' are available at: https://www.gov.uk/government/publications/planning-act-2008-examination-of-applications-for-development-consent .
Submission on behalf of a local resident (and friend) A resident of the area who would be badly affected by the scheme (but is not subject to compulsory purchase), I think has been 'beaten down' by the complexity of the system, and dealings with HE over the past few years, and has asked me to submit the following text. I realise this is 'out-of-order' but I think that many people come into this category, and I hope that you will consider reading it:	ES Chapter 11 Noise and Vibration (APP-050) presents the noise and vibration assessment. The assessment includes a review of the existing baseline conditions, consideration of the potential impacts, identification of proportionate mitigation and evaluation of residual effects and their significance. Design interventions and mitigation measures have been introduced to reduce the potential for significant effects due to noise and vibration from the construction and operation of the Scheme. These design, mitigation and enhancement measures are presented in Section



ExA Question Guidance

We object to the routeing of the A47 North Tuddenham to Easton Dualling.

[Redacted] has been in [Redacted]'s family for over 70 years. We have put up with increased noise after the by-pass was built in the 1970s, and the loss of our bus service, which used to stop at the stop of Church Lane. Now we are being told we will have a four-lane dual carriageway right next to our property. We know there will be much more noise, although we don't know how much, but we have been told that we cannot have any noise-abatement while the road is being built. It will be awful here for at least 2 years, and we will not be able to have any compensation for that. Where is the justice? When the road is finished we will have constant increased noise, day and night. Before it is built, while this plan is in place we cannot sell our property, so we are stuck, not knowing exactly what will happen. We will have a lagoon opposite our house, and although we would be happy not to have vehicles along Church Lane, we will not be able to walk or cycle to Hockering any longer; our link to the north of the A47 will have gone. Why? We have always been able to get to Hockering and if this road is built, even if the Hockering bus service is retained, we will not be able to get to it.

How can this country afford to pay for these unnecessary roads, while the NHS is on its knees, not seeing the patients it should. People are suffering every day from lack of medical attention, and yet all this money is to be spent on roads. It makes no sense.

The way this examination/public enquiry has been run has left a lot of people out of the system. [Redacted] does not use a computer, and so a friend has typed this for her.

11.9 of ES Chapter 11 (APP-050).

Table 11.13 in ES Chapter 11 and ES Figure 11.2 (APP-074) confirm a permanent noise barrier is proposed between the Scheme and properties along Church Lane, East Tuddenham. Paragraph 11.9.5 in ES Chapter 11 confirms "Where possible, it is recommended that the permanent noise barriers that form part of the embedded mitigation for operational noise shall be built as early as possible in the construction programme so that they can offer noise mitigation during the construction stages. This would avoid the need for temporary barriers in the same location."

This commitment is confirmed in Action NV1 of the Environmental Management Plan, delivery of which would be secured through Requirement 4 of the dDCO (**REP2-005**).

At statutory consultation, the initial design presented a direct connection between Church Lane and the proposed Wood Lane junction, plus a walker, cyclist and horse rider underpass to maintain the north-south connection across the new A47 dual carriageway; see drawing on page 9 of Consultation Report Annex J - Section 47 Consultation Materials (APP-034). However, statutory consultation feedback, including from affected local residents, raised concerns regarding unnecessary need and limited benefit of the connections, plus increased safety and amenity impacts on local residents from increased traffic using Church Lane; see Consultation Report Annex N (APP-038).

In response to these concerns and following further engagement, including the Local Liaison Group and South of the A47 Taskforce, the Scheme design was amended to remove these connections. This change is reported in Table 4.12 (item no. 4) of the Consultation Report (APP-024) and section 5.8 of the Scheme Design Report, Rev.1, (AS-009).

A link to Hockering is provided from Church Lane south to Rotten Row and connecting to the existing Public Right of Way (PRoW) network south of the Scheme (FP9 or FP7-FP8); with a segregated crossing facility provided at the Mattishall Lane Link Road, providing a safe route across the A47.

With regards justifying the Scheme, please see the Case for the Scheme (APP-140), while the Funding Statement (APP-022) demonstrates that the Scheme will be adequately funded through the Road Investment Strategy.

Please see above response regarding the DCO Examination process.

23 SALLY WATTS

- 23.1.1 The below written representation received has been analysed and responded to accordingly, through the applicants guidance given below.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000487-D1_Orsted%20Hornsea%20Project%20Three%20(UK)%20Limited%20-%20Position%20Statement.pdf

ExA Question	Guidance
We write to ask Highways England to relook at their plans which propose to destroy some beautiful tree shelter belts near Honingham Berry Hall - it appears that a minor adjustment to the alignment of the route could move the road through bare arable land rather than removing the protection the shelter belts currently afford to the Grade II listed building and bringing the road nearer to the River Tud a valueable environment. Please take this email as an objection to the proposals currently published.	The ExA is directed to Section 4 of this document that provides further information in relation to effects on Berry Hall and consideration of the route alignment in response to the Written Representation submitted by Savills UK on behalf of the owner of Berry Hall Estate.



24 WESTON LONGVILLE PARISH COUNCIL

- 24.1.1 The applicant welcomes the written representation from the Weston Longville Parish Council and duly notes a number of points raised. In response, the applicant has provided appropriate guidance in the table below.
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000451-D1_Weston%20Longville%20Parish%20Council%20-%20Comments%20on%20Outline%20Traffic%20Management%20Plan.pdf
 - https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-000447-
 D1 Weston%20Longville%20Parish%20Council%20-%20Written%20Representations%20(WRs).pdf

ExA Question Guidance

A commitment from Highways England to consult WLPC in respect of road closures and diversions which may impact on the parish. Paragraph 3.20.2 states that 'All (diversion) routes will be discussed with the local highways team, the Regional Operations Centre and with the local councils that will be affected'. To date HE's definition of the local councils which will be affected has tended to be narrow. The diversion proposals set out in Figure F1 Appendix F give rise to the concern that much light local traffic will ignore the official lengthy diversions south of the A47 and instead opt to the use the single track roads which run parallel and to the north of the A47, and which include Breck Road, and Weston Green Road in Weston Longville, and the blind junction at Weston Green. This is what happens now if there is an accident on the A47. Accidents at the crossroads most often occur when traffic has been diverted by the closure of the A47. WLPC would wish to be consulted by HE and measures put in place to ensure that this consequence is avoided.

The Applicant's Outline Traffic Management Plan (APP-144) contains a commitment (Section 3.20.2) to discuss all routes with the Local Highways Team, the Regional Operations Centre (ROC) and with the local councils that will be affected.

The definition of local councils in this document relates to the Lead Local Authority, (Norfolk County Council), and the three affected District Councils, Broadland District Council, Breckland Council and South Norfolk Council.

In accordance with section 3.20.6, the Applicant confirms that a dedicated stakeholder team form a key part of the construction team and will be ensuring that all affected parties are kept up-to-date on proposed works through regular engagement.

The case for review and an Issue Specific Hearing (ISH) Weston Longville Parish Council recognises that a review and any potential changes to the design of the Wood Lane Junction would represent a significant amendment to the DCO. Nonetheless we believe that the rationale for the design choices needs to be made explicit and those choices interrogated. WLPC also recognises that the choice of route by Norfolk County Council (NCC) for the Norwich Western Link (NWL), the fact that two major interconnecting roads are being managed by different authorities, and the disconnect in terms of timescales has built in problems and restricted options. For example, if NCC had chosen Option D for the NWL, with a connection to the new Norwich Road roundabout, the old A47 could have been kept open and there would have been no need for a roundabout at Wood Lane or new side roads. However, the choice of Option C for the NWL, and the need to retain the B1535 as an HGV connection to the A1067, puts us where we are now, but HE could have taken steps to mitigate the problems this may create and thus prevented them from becoming endemic.

the scheme development works undertaken during Stages 1 & 2 (December 2015 to November 2017) of the route options assessment. Appendix N outlines the four shortlisted Scheme options assessed, which demonstrates that two junctions were considered as required by the A47 Scheme as a standalone scheme prior to the NWL Scheme being considered:

The Applicant's Scheme Assessment Report (SAR)¹⁶ summarises

- <u>Junction 1</u> On the axis of Berrys Lane and Wood Lane
- <u>Junction 2</u> west of Easton to replace the existing Easton atgrade roundabout, which the Scheme removes.

It is also important to note that Norfolk County Council held consultations on the four Norwich Western Link route options in late 2018 / early 2019, with the preferred route announced in July 2019.

The design of the proposed grade separated Wood Lane junction is based on the scheme design year (2040) traffic flows. The traffic flow varies according to road type, junction location, sideroad network, local traffic movements and consideration of local constraints.

The junction design takes into account local user traffic movements, future traffic growth, future developments and provides safe access to and from the Strategic Road Network for users (villages) north and south of the A47 in a form consistent with junctions on this section of the A47 corridor.

The proposed Wood Lane Junction has been designed in accordance with the 'UK DMRB, CD 122 – Geometric design of grade separated junctions' and follows the junction hierarchy presented in Appendix A, which outlines layouts based on increasing traffic flows.

The design year mainline flows are in excess of 30,000 AADT* with the minor road flows in excess of 3,000 vehicles AADT 2-way**, therefore a fully grade separated option was developed.

The Applicant has undertaken traffic modelling of the proposed junctions and can confirm that no issues were reported with regards to capacity impacts on the single lane link road. Section 4.10 of the Case for the Scheme (APP-140) provides information on the Operational Modelling Assessments undertaken for both AM and PM 2040 Design Year scenarios. A Ratio of Flow to Capacity (RFC) value of 0.85 or lower indicates the junction arm is operating within capacity. The link road is modelled to have an RFC of 0.57 in the 2040 design year.

The applicant has responded to Norfolk County Council in Response RR-037.6 in the Applicants Responses to the Relevant Representations (REP1-013).

Constraints and problems

- 1. The NWL route is a dog leg from the A1067 to the A47 at Wood Lane which means that traffic traveling Northwest to Southeast and vice versa is forced back on itself by using the road. Vehicles may therefore continue to use the C167 and B1535. Traffic modelling indicates that even with the NWL in place 700 vehicles per day will still use the C167 through the Weston Longville village centre. The roundabout design means that the first choice for traffic leaving the dualled A47 will be the B1535 and the C167.
- 2. Assuming the A47 and NWL go ahead, Wood Lane will become a major junction equivalent to the A47 / A11 or A47 / A140 and if it lacks the capacity to deal with the volumes of traffic using it, and traffic starts to build up and back up then it may shift back to using the B1535 and C167. NCC suggested that the roundabout should be dualled, a suggestion rejected by HE.

Alternative options

The parish councillors of Weston Longville are not road engineers, but we do

Please see Responses RR-004.1 and RR-004.2 in the Applicant's Responses to the Relevant Representations (**REP1-013**) submitted

¹⁶ This report is available amongst the Consultation 2020 documents at: https://highwaysengland.co.uk/ourwork/east/a47-north-tuddenham-to-easton-improvement/



ExA Question

know a lot about how our local roads are used and by whom. This has been a live issue for us for more than 20 years. Recognizing the significance of the Wood Lane junction we first proposed an interchange rather than a roundabout. The design, together with the email setting out the case, was submitted to HE in January 2020 and is set out in Appendix A. Also included is the response from James Powis (Project Manager). None of the proposals made by WLPC were reflected in the March 2020 HE consultation, other than an offer of improved signage and making the access to the B1535 a spur off the northern roundabout at Wood Lane. When, at the consultation event in Hockering, WLPC queried the decision to reject an interchange we were told the predicted traffic volumes did not justify the cost. WLPC went back to the drawing board. The proposal was amended to take account of HE's reservations about an interchange. WLPC's objective is to separate the B1535 from any direct access to the roundabout at the Wood Lane junction and thus make the Norwich Western Link the default route. The design and justification are attached as Appendix B. Again, nothing in the subsequent DCO application reflected our concerns or our submission and WLPC have had no direct contact with HE since January 2021. WLPC are not alone in being concerned about the impact of the Wood Lane junction design and we understand that the Berry Hall Estate is looking at a proposal for a single roundabout. Such a proposal has its merits if only on the grounds of simplicity. However, it is not one we could support if it made access to the B1535 easier and hence likely to lead to an increase in traffic through the parish with or without the NWL. WLPC's objective of separating the B1535 from the roundabout could be achieved by moving the location of the roundabout and running the B1535 under the new road to connect to the old A47. In rejecting options which increased the number of underpasses on the grounds of cost HE has ended up with an over engineered, sprawling design more appropriate to an urban rather than a rural setting. Conclusion WLPC accepts that we are where we are, and that there has to be a junction at Wood Lane but nonetheless believes that an ISH is required so that Highways England, and all other interested parties - WLPC being one - have the opportunity to examine the rationale for the current design, and for HE to demonstrate to what extent the advantages and disadvantages of other options have been considered. In terms of consultation Highways England has focussed primarily on the parishes adjacent to the A47. Nonetheless WLPC has attempted to engage constructively with HE at every stage of the process but remains seriously concerned that the combination of the design of the Wood Lane Junction and road closures will confer few benefits and many unacceptable consequences.

Guidance

by Weston Longville Parish Council.

The Scheme is independent of the proposed Norwich Western Link (NWL) road scheme and would proceed without the NWL coming forward. However, if the Scheme was built without the NWL a junction is still required to connect the A47 with the B1535 (Wood Lane), which is the assigned local highway authority heavy goods vehicles (HGV) route and also provides access for Hockering and parishes north and south to the Strategic Road Network.

The locally appointed HGV route (B1535 Wood Lane) would be replaced by the NWL scheme if planning is granted.

The Applicant notes that there is currently a Local Highway Authority proposal being discussed with Weston Longville Parish Council comprising a series of measures to provide mitigation measures to further discourage vehicles from travelling through Weston Longville.

The Applicant will be attending a scheduled Parish council meeting in October 2021 and will continue to support Norfolk County Council with the assessments and Parish Council engagement regarding localised mitigation measures north and south of the A47 corridor.

ANNEX A - EXISTING AND PROPOSED ROUTES TO THE FARMLAND OWNED BY MR ALSTON.

See attached drawing references:

- HE551489-GTY-LLO-000-SK-BL-30001
- HE551489-GTY-LLO-000-SK-BL-30002

