

# A47 North Tuddenham to Easton Dualling

Scheme Number: TR010038

Volume 8 8.4 Statement of Common Ground Norfolk County Council

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

Planning Act 2008

February 2022



# Infrastructure Planning

## Planning Act 2008

# The Infrastructure Planning (Examination Procedure) Rules 2010

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

#### STATEMENT OF COMMON GROUND - NORFOLK COUNTY COUNCIL

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Rev.0	November 2021	Deadline 4
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#### STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) Highways England Company Limited and (2) Norfolk County Council

Signed
Chris Griffin
Programme Manager
On behalf of National Highways (previously Highways England)
Date: INSERT DATE
Signed
David Cumming
Strategic Transport Team Manager
On behalf of Norfolk County Council, as a Local Authority
Date: INSERT DATE
Signed
David Allfrey
Infrastructure Delivery Manager
On behalf of Norfolk County Council, as the Promoter / Developer of the Norwich Western Link
Date: INSERT DATE



#### **CONTENTS**

1	INTRODUCTION	1
1.1	Purpose of this Document	1
1.2	Parties to this Statement of Common Ground	1
1.3	Terminology	2
2	RECORD OF ENGAGEMENT	2
3	ISSUES	20
3.1	Introduction	20
3.2	NCC Issues as a Local Authority	20
3.3	Norwich Western Link Issues Raised by NCC (as the Local Authority)	25
3.4	Norwich Western Link Issues Raised by NCC (as the Promoter / Developer)	25
APPEN	IDIX A – Detailed Responses to Issues Raised by NCC (as the Local Authority)	26
APPEN	IDIX B – Detailed Responses to Norwich Western Link Issues Raised by NCC (as Local Authority)	
APPEN	IDIX C – Detailed Responses to Norwich Western Link Issues Raised by NCC (as Promoter / Developer)	



#### 1 INTRODUCTION

#### 1.1 Purpose of this Document

- 1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed A47 North Tuddenham to Easton ("the Application") made by Highways England Company Limited ("Highways England" or "HE") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").
- 1.1.2 This SoCG does not seek to replicate information which is available elsewhere within the Application documents. All Application documents are available on the Planning Inspectorate website.
- 1.1.3 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it, and where agreement has not (yet) been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.

#### 1.2 Parties to this Statement of Common Ground

- 1.2.1 This SoCG has been prepared by (1) Highways England as the Applicant and (2) Norfolk County Council (NCC).
- 1.2.2 Highways England became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing Highways England made provision for all legal rights and obligations, including in respect of the Application, to be conferred upon or assumed by Highways England.
- 1.2.3 As per the notification to the Examining Authority in the Applicant's Deadline 5 submission cover letter (**REP5-001**), on 8 September 2021 (during the course of the Examination) Highways England Company Limited changed its name to National Highways Limited. The Applicant's company number and registered office remains the same.
- 1.2.4 The Applicant has amended the dDCO (and Explanatory Memorandum) to reflect the change of name, but the Applicant continues to use Highways England branding where appropriate. This is to ensure consistency within the application and to avoid the need for a wasteful and unnecessary exercise of arranging to have all documentation re-issued and re-branded in the new company name.
- 1.2.5 Within the borders of Norfolk there is a hierarchy of county, district and parish councils. Norfolk County Council provide the strategic and more costly services such as social services, trading standards, fire and rescue, transport and education.



#### 1.3 Terminology

- 1.3.1 In the table in the Issues section of this SoCG:
  - "Agreed" indicates area(s) of agreement
  - "Under discussion" indicates area(s) of current disagreement where resolution remains possible, and where parties continue discussing the issue to determine whether they can reach agreement by the end of the examination
  - "Not agreed" indicates a final position for area(s) of disagreement where the resolution of divergent positions will not be possible, and parties agree on this point.
- 1.3.2 In this SoCG, the issues raised by the Council are presented alongside a response from Highways England. "Agreed" signifies that there is agreement between the parties that there are no further points to discuss as regards that particular issue, and the Council is satisfied by the Highways England response.
- 1.3.3 It can be taken that any matters not specifically referred to in the Chapter 3 of this SoCG are not of material interest or relevance to Norfolk County Council and therefore have not been the subject of any discussions between the parties. As such, those matters can be read as agreed, only to the extent that they are either not of material interest or relevance to Norfolk County Council.

#### 2 RECORD OF ENGAGEMENT

2.1.1 A summary of the meetings and correspondence that has taken place between Highways England and Norfolk County Council in relation to the Application is outlined in Table 2.1.

Table 2-1 - Record of Engagement

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
March and April 2017	Public consultation material	Consultation feedback on the route options
Non-statutory public consultation		
09/08/2018	Microsoft Teams Meeting (Local Liaison Group)	LLG meeting chaired by Councillor Martin Wilby and minutes recorded by NCC.
		HE Project Team provide updates to LLG on progress of A47 Scheme and respond to stakeholder queries.
07/05/2019	Microsoft Teams Meeting (Local Liaison Group)	LLG meeting chaired by Councillor Martin Wilby and minutes recorded by NCC.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
		HE Project Team provide updates to LLG on progress of A47 Scheme and respond to stakeholder queries.
21/10/2019	Email attached to PINS Scoping Opinion	Comments on proposed Scoping Opinion on the EIA received from Broadland District Council and South Norfolk Council jointly.
06/11/2019	Microsoft Teams Meeting A47 / Norwich Western Link Liaison Meetings (Monthly - Ongoing)	Commencement of the Monthly engagement / design meetings with A47 Delivery Team and the NWL Delivery Team.  Chris Fernandes, Rob Holl - NCC
19/11/2019	Microsoft Teams Meeting (Local Liaison Group)	Monthly LLG meeting chaired by Councillor Martin Wilby and minutes recorded by NCC.  HE Project Team provide updates to LLG on progress of A47 Scheme and respond to stakeholder queries.
16/12/2019	Meeting County Hall Norfolk (Road Design)	Initial meeting with Julian Fonseca from NCC Network Safety & Sustainability Team. Barrie Arthur presented both the Thickthorn and Tuddenham proposed schemes to provide an overview, touching on the key departures on Local Authority assets and establish a line of communication and liaison process going forward.
13/01/2020	Meeting County Hall Norfolk (Road Design)	Meeting with HE Project Team and NCC (David Allfrey and Rob Holl) to outline and discuss the emerging A47 scheme design.
February 2020 Statutory Consultation	S42 1B consultation material	Statutory consultation material sent
20/03/2020	Email (Traffic Modelling)	Forecast traffic flow figures were sent to NCC infrastructure development team (Ian Parkes) for them to inform consultation response.
27/03/2020	Email (Road Design)	Initial engagement with NCC Network Safety team on the proposed scheme Design.  Sweco Highways Lead (Jamie McConachie) issued design pack via email to Julian Fonseca for NCC review & comment.  Purpose was to discuss applicability of the DMRB and application to Local Authority Roads in the area in lieu of a specific NCC Design Standard.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
02/04/2020	Email (Archaeological Trenching)	Email from the Project Team to NCC County Archaeologist (John Percival) providing a copy of the proposed Trial Trenching Specification for NCC review & comment.
07/04/2020	Call / Email (Road Design)	Email following up a call to confirm receipt or Proposed Design Drawings issued on 27th March and to request a meeting with NCC to review.
08/04/2020	Email (Road Design)	Response received from NCC Network Safety Team (Julian Fonseca) outlining NCC review comments, proposals, and explaining the departure review and approvals process which is specific to the project.
		Email also contained approval in principle to proposed sideroad departures and some amendments to be considered.
15/04/2020	Microsoft Teams Meeting (Traffic Modelling)	Initial engagement with NCC and their NWL scheme consultant WSP on exchanging the respective traffic assumptions adopted on HE's A47 Tuddenham scheme and NCC's NWL scheme.
15/04/2020	Email (Archaeological Trenching)	Email from NCC County Archaeologist (John Percival) requesting the download link for the trial trenching specification be resent as it had expired. Revised link provided for NCC to download and review.
16/04/2020	Email (Archaeological Trenching)	Email from the Project Team to NCC County Archaeologist (John Percival) providing updated drawings showing rationalised trench layouts that avoid spanning differing landowner boundaries where possible.
17/04/2020	Email (Archaeological Trenching)	Email from NCC County Archaeologist (John Percival) providing feedback on proposed Trial Trenching specification.
Received before end of consultation	Online comment	Consultation response from NCC online stating their support to the scheme with a few considerations detailed in the issues section.
(April 2020)		Detailed within Section 3 of the SoCG
30/04/2020	Email (Lighting Design)	Email from Barrie Arthur to Chris O'Connell, NCC Lighting Officer to introduce Sweco and our lighting designer, Designs for Lighting to NCC.
		Email indicated contact routes and requested provision of NCC Lighting Standards.
05/05/2020	Email	Email from the Project Team to NCC County Archaeologist (John Percival) providing a copy of



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
	(Archaeological Trenching)	the finalised Trial Trenching Specification incorporating previous NCC Feedback.
08/05/2020	Email (Archaeological Trenching)	Email from NCC County Archaeologist (John Percival) providing approval for the Trial Trenching Specification (WSI) to proceed.
14/05/2020	Email (Lighting Design)	Email received from Chris O'Connell, NCC Lighting Officer outlining points of contact and information required for NCC review.
14/05/2020	Microsoft Teams Meeting (Traffic Modelling)	A follow-up meeting held between WSP and SWECO to go through the comparison made between the two models and the issues found with the WSP forecast. Also discussed the differences in the base WSP model and the assumptions made so that discrepancies in results could be explained.
27/05/2020	Email (Traffic Sign Strategy)	Traffic Sign Package issued to NCC Network Safety team for review and comment to be provided back to the Design Team.
		Issued to Phil Reilly, David Cumming, Julian Fonseca
27/05/2020	Email (Road Design)	Email from Sweco Highways Lead (Jamie McConachie) to NCC Network Safety Lead (Julian Fonseca)
		All NCC comments were transferred from email onto a Project Review Record Sheet and Design Team responses provided for NCC review.
		Email requested a call to review and close out comments between both parties.
06/06/2020	Meeting through Microsoft Teams	Call between Sweco Highways Lead (Jamie McConachie) and NCC Network Safety Lead (Julian Fonseca) to discuss and agree the responses, proposed cross sections, geometry standards and LA departures for Design Fix B.
08/06/2020	Email (Traffic Sign Strategy)	NCC (Julian Fonseca) provided feedback comments on the Traffic Sign Consultation Package
12/06/2020	Teams Meeting (Side Road Strategy)	A discussion on the A47 side road strategy between NCC and HE.
16/07/2020	Microsoft Teams Meeting (Traffic Modelling)	A follow-up meeting held between NWL project team and HE Project Team to reconvene traffic modelling discussion and inform the latest changes on the A47 TUD scheme.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
23/07/2020	Meeting through Microsoft Teams	Meeting with NCC and the Norwich Western Link Delivery Team to discuss the A47 Tuddenham scheme, Stat Con Feedback with a focus primarily on Local Authority Roads (existing & Proposed) and summary of feedback provided.
12/08/2020	Microsoft Teams Meeting (Traffic Modelling)	A follow up meeting with NCC Infrastructure Development Team (Ian Parkes) to examine the new traffic flow forecast on the side roads due to proposed changes on the A47 TUD scheme
18/08/2020	Email	James Powis (Highways England) shared the design draft for stakeholder consideration following feedback from the statutory consultation.
		This was sent for information only and not for comment.
		Sent to Simon Wood and the Planning Department inbox.
18/08/2020	Microsoft Teams Meeting (Local Liaison Group)	Monthly LLG meeting chaired by Councillor Martin Wilby and minutes recorded by NCC.
	(Loodi Eldioon Group)	HE Project Team provide updates to LLG on progress of A47 Scheme and respond to stakeholder queries.
19/08/2020	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery Team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
20/08/2020	Call / Email (Lighting Design)	Initial engagement with NCC Lighting Officer Chris O'Connell to present scheme proposals and discuss NCC requirements for Local Authority owned assets within the proposed design.
		Email issued following design call between Paul Southcombe (Designs for Lighting) and Chris O'Connell (NCC).
20/08/2020	Microsoft Teams Meeting (South of the A47 taskforce)	South of the A47 Taskforce meeting, chaired by George Freeman MP, and attended by HE and NCC. Session focuses on parishes south of the A47 corridor.
		Session covered latest Wood Lane junction design, interaction with Honingham and summary of modelling proposals with & without NWL.
24/08/2020	Microsoft Teams Meeting (Flood Risk and Ecology)	Joint meeting with NCC Lead Local Flood Authority and Environment Agency. Meeting covered both A47/A11 Thickthorn Junction



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
		Scheme and A47 North Tuddenham to Easton Scheme.
25/08/20	Microsoft Teams Meeting (WCHR / PRoW)	Meeting with NCC PRoW officers to present the proposed WCHR scheme design and explain the changes made as a result of Statutory Consultation feedback.
25/08/20	Email	Confirmation from NCC Lighting Officer, and Network Safety Team that the local roads and footbridges to be handed over to NCC did not require lighting.
26/08/20	Email	Confirmation from NCC Lighting Officer that lighting was not required on the proposed Mattishall Underpass (Structure S16) and Matishall Lane link road which will be handed over to NCC.
10/09/2020	Microsoft Teams Meeting (Flood Risk)	A meeting focussing on the Oak Farm and Hockering Culverts. The new culvert at Hockering should be designed to convey a 1 in 100year event plus an allowance for climate change with a 600mm allowance for freeboard.
		No freeboard required at the Oak Farm culvert as the proposal is to retain the existing culvert.
		It was agreed to relocate a number of attenuation features outside of areas of existing surface water or fluvial flood risk.
		Confirmation of NCC requirements for drainage mitigation.
		Confirmation that cross drains/dry culverts to maintain surface water flow path connectivity should be designed for a 1 in 100year event plus an allowance for climate change.
		NCC requested details on proposed flood compensatory storage.
		NCC requested any proposed watercourse diversions that provides opportunities for water environment improvement whilst addressing flood risk.
15/09/2020	Email (Flood Risk)	Email from NCC (Highways) and Lead Local Flood Authority confirming no historical records flooding of NCC highways in the area.
16/09/2020	Email (Flood Risk)	Email letter from NCC (LLFA) summarising discussions at 10/09/20 meeting.
13/10/2020	Microsoft Teams Call	South of the A47 Taskforce meeting, chaired by George Freeman MP, and attended by HE and



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
	(South of the A47 taskforce)	NCC. Session focuses on parishes south of the A47 corridor.
		NCC provided an update on traffic modelling on local roads, including survey proposals and received feedback from local parishes.
		HE provided a progress update on A47.
20/10/2020	Microsoft Teams Meeting (Local Liaison Group)	Monthly LLG meeting chaired by Councillor Martin Wilby and minutes taken by NCC.
		HE Project Team provide updates to LLG on progress of A47 Scheme and respond to stakeholder queries.
21/10/2020	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery Team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
23/10/2020	Microsoft Teams Meeting (Detrunking Working Group)	Commencement of the HE / NCC fortnightly A47 North Tuddenham to Easton de-trunking meeting.
	(	Meetings focus on existing and proposed assets to be handed back to NCC upon completion of scheme:
		Purpose is to identify communication lines and commence working towards agreements for handover documentation and requirements.
28/10/2020	Email (Lighting Design)	Confirmation from NCC Lighting Officer (Chris O'Connell) that lighting was not required on the proposed Honingham Underpass (Structure S18) and proposed footway which will be handed over to NCC.
04/11/2020	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
06/11/2021	Microsoft Teams Meeting  NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.
13/11/2020	Microsoft Teams Meeting (Flood Risk)	Confirmation from NCC LLFA that minor realignment of the watercourse at Hockering would be acceptable in order to remove the skew of the culvert. Offline culvert constructions requiring full watercourse diversion would not be acceptable.
17/11/2020 (Meetings held quarterly	Microsoft Teams Meeting (Statement of Common Ground Discussion)	Meeting held between Highways England, NCC, Broadland District Council, Breckland District Council and South Norfolk Council:



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
throughout 2020)		Discussed the preparation of Statements of Common Ground, Food Enterprise Park access, the Local Liaison Group meetings and the new joined up approach, the draft design changes following stat con feedback, draft plan proposals for Walking, Cycling & Horse Riding, the updated lagoon strategies & drainage proposals and the A47 North Tuddenham to Easton update brochure planned for distribution December 2020.
		Attendees included: James Powis (HE), Edwin Bechtle (HE), Glen Owen (HE) Philippa Harris (HE), Phil Courtier, David Cumming and Stephen Scowen.
17/11/2020	Microsoft Teams Meeting (Flood Risk)	Update meeting with Sarah Luff (NCC LLFA) on flood risk impacts at Oak Farm, Hockering and River Tud crossing. Also included discussions on Water Framework Directive assessments.
18/11/2020	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery Team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
20/11/2020	Microsoft Teams Meeting (Flood Risk)	Discussions with Sarah Luff (NCC LLFA) around the requirements for a precast box culvert on the Hockering watercourse. Confirmation from the Lead Local Flood Authority that the culvert must be designed to convey a 1 in 100year flood event (plus a 65% allowance for climate change) and should not prevent passage of mammals.
20/11/20	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
02/12/2020	Email	Design Fix C pack for proposed scheme issued to NCC Network Safety Team for review of proposed scheme and acceptance of local authority departures.
03/12/2020	Email (Drainage Strategy Report)	Drainage Strategy Report issued to Sarah Luff at NCC for review and comment to be provided by the LLFA) team.
04/12/2020	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
8/12/2020	Email	James Powis (HE) sent email to Simon Wood and David Allfrey (NCC) in regard to the impact of the A47 North Tuddenham to Easton Scheme on a Public Open Space in North Tuddenham.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
15/12/2020	Microsoft Teams Meeting (Local Liaison Group)	LLG meeting chaired by Councillor Martin Wilby and minutes taken by NCC.
	(Traffic Sub-Group)	Sub-group meeting focusing primarily on traffic modelling for both NWL and HE proposed schemes.
15/12/2020	Email (WCHR / PRoW)	Email to NCC PRoW officers outlining the summary position of the meeting held on 25 <sup>th</sup> August 2020 for the SoCG.
		This position is summarised within the project WCHR Assessment Report.
17/12/2020	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
18/12/2020	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
2020 and 2021	Email	Consultation with Norfolk County Council to confirm the approach and identify any additional projects to be considered in the Cumulative Effects Assessment. Additional projects were added as a result.
05/01/2021	Email (WCHR / PRoW)	Follow up email to NCC PRoW officers requesting a response to email provided on 15 <sup>th</sup> December 2020 outlining the summary position of the meeting held on 25 <sup>th</sup> August 2020 for the SoCG.
05/01/2021	Email (WCHR / PRoW)	Response received from NCC PRoW officer "Michelle Sergeant" confirming a response would be issued by 8 <sup>th</sup> January.
08/01/2021	Email (Drainage Strategy Report)	Drainage Strategy Report re-issued to Sarah Luff at NCC, review and comment to be provided by the LLFA team.
		Report issued on 2 <sup>nd</sup> December 2020 had not been downloaded and the link had expired.
14/01/2021	Email (Flood Risk)	Provision of the updated (baseline and proposed) flood modelling to NCC and the Environment Agency for review.
15/01/2021	Microsoft Teams Meeting (Drainage Strategy Report)	Meeting with Sarah Luff (NCC, LLFA) to give an overview of the Tuddenham Scheme in addition to the Drainage Strategy Report which had been issued for review.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
15/01/2020	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
22/01/2021	Email (Road Design – LHA Departures)	Response received from Julian Fonseca on the Local Highway Authority departures package. Response outlined NCC position on the departures and indicated acceptance or comments to be addressed.
22/01/2021	Email (Road Design – LHA Departures)	Project team response provided to NCC comments on the LHA departures for review and acceptance
26/01/021	Email (Drainage Strategy Report)	Review comments provided by Sarah Luff (NCC LLFA), to Project Design Team for review and incorporation.
28/01/2021	Email (Road Design – LHA Departures)	Response received from Julian Fonseca accepting the provided clarifications and stating formal receipt from NCC will follow.
28/01/2021	Microsoft Teams Meeting (Local Liaison Group) (Traffic Sub-Group)	LLG meeting chaired by Councillor Martin Wilby and minutes taken by NCC. Sub-group meeting focusing primarily on traffic modelling for both NWL and HE proposed schemes.
29/01/2021	Microsoft Teams Meeting (Detrunking Working Group)	Fortnightly meeting of the HE / NCC Detrunking Working Group
03/02/2021	Email (Road Design – LHA Departures)	Email received from Julian Fonseca (NCC) confirming that NCC were happy to sign off all of the proposed Local Highway Authority Departures and that formal confirmation letter will be issued shortly.
05/02/2021	Email (Road Design – LHA Departures)	Email to Julian Fonseca outlining an alternative design for Dereham Road as a result of discussions with St Peter's Church on consecrated land to the east of the church. Email requested NCC review and comment on proposal.
05/02/2021	Microsoft Teams Call (Road Design – LHA Departures)	Call to discuss email sent to Julian Fonseca on the alternative design for Dereham Road and to discuss the technical proposal, review proposed mitigation and receive NCC feedback.
08/02/2021	Email (Road Design – LHA Departures)	Email from Julian Fonseca confirming NCC were happy with revised proposals for Dereham Road and would prepare the departure information in



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
		the background pending HE confirmation on option after meeting with St Peter's church.
09/02/2021	Microsoft Teams Meeting (Traffic Modelling)	Meeting with HE Project Team and NCC NWL Project team to discuss the traffic modelling of both schemes, to provide a response to local MP.
09/02/2021	Email (Flood Risk)	Email received from NCC LLFA providing feedback on proposed compensatory flood storage requirements at Hockering and Oak Farm culverts.
12/02/2021	Microsoft Teams Meeting (Flood Risk)	Meeting between Jason Ball, and Sarah Luff (LLFA) to discuss the written feedback received on 9th February from LLFA with regard to Oak Farm culvert.
16/02/2021	Email (Road Design – LHA Departures)	Email from Julian Fonseca, providing formal acceptance of proposed Local Highway Authority departures, via provision of an attached letter. Letter appended to Departures Checklist for governance submission.
22/02/2021	Email (Road Design – LHA Departures)	Email from Julian Fonseca, providing revised letter to cover off 1 No. proposed departure which had been missed from initial acceptance letter. Letter appended to Departures Checklist for governance submission.
23/02/2021	Microsoft Teams Meeting (Local Liaison Group)	Meeting with NCC and Highways England project teams in advance of the Local Liaison Group meeting. Meeting focused on the finalisation of slides for the upcoming LLG meeting.
23/02/2021	Microsoft Teams Meeting (Local Liaison Group)	Local Liaison group meeting, Highways England presented an update to the LLG, and fielded questions on the proposed scheme design and DCO process.
23/02/2021	Email (Orsted DCO)	Email to NWL team highlighting the conditions within the submitted Orstead DCO for sideroad mitigations for consideration as part of the wider local sideroad measures.
24/02/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
01/03/2021	Email (Drainage Strategy Report)	Final version of report issued to Lead Local Flood Authority, Sarah Luff, for acceptance.
08/03/2021	Email	Email from HE requesting clarification of existing Local Traffic Regulation Orders (TRO) for shared



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
	(Road orders)	use footway at Lyng Road and the existing 30mph speed limit on approach to Easton.
11/03/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.
12/03/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group
08/04/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.
09/04/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group
22/04/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Meeting between HE and NCC NWL Delivery team discussing the traffic modelling ensuring a collaborative approach to the completion of the Statement of Common Ground.
27/04/2021	Email (Points of contact)	Email to David Allfrey to confirm and establish the technical points of contact going forward for future HE / NCC workshops.
29/04/2021	Microsoft Teams Meeting A47 / NCC	Meeting between HE and NCC to discuss the Food Enterprise Zone and potential sideroad connection to the proposed scheme.
05/05/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
06/05/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.
21/05/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group
01/06/2021	Microsoft Teams Meeting (Local Liaison Group)	Local Liaison group meeting, Highways England presented an update to the LLG, and fielded questions on the proposed scheme design and DCO process.
02/06/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)	
10/06/2021	Microsoft Teams Meeting A47 / NCC (NWL)	Initial discussion with NCC on potential of some Designated funding opportunities within the vicinity of the proposed schemes.	
14/06/2021	Microsoft Teams Meeting A47 / NCC Statement of Common Ground (SoCG)	Meeting with NCC (David Cumming) to discuss the approach to the population and review of the DRAFT SoCG between He and NCC.	
15/06/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.	
18/06/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group	
07/07/2021	Microsoft Teams Meeting A47 / NCC (NWL)	Follow up discussion with NCC on potential of some Designated funding opportunities within the vicinity of the proposed schemes.	
08/07/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Norwich Western Link Ecology liaison (stakeholder) group meeting	
08/07/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.	
12/07/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.	
21/07/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Meeting between HE and NCC NWL Delivery team discussing the traffic modelling ensuring a collaborative approach to the completion of the Statement of Common Ground.	
20/07/2021	Microsoft Teams Meeting A47 / NCC Statement of Common Ground (SoCG)	Meeting with NCC (David Cumming) to clarify the efficient approach to the population and review of the DRAFT SoCG between HE and NCC across the 3 East DCO schemes.	
23/07/2021	Microsoft Teams Meeting A47 / NCC Statement of Common Ground (SoCG)	Meeting with NCC (David Cumming) to clarify the efficient approach to the population and review of the DRAFT SoCG between HE and NCC across the 3 East DCO schemes.	
26/07/2021	Microsoft Teams Meeting A47 / NCC (NWL)	Discussion on proposed ideas for Designated funding opportunities within the vicinity of the proposed schemes.	



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)	
29/07/2021	Email A47 / NCC Statement of Common Ground (SoCG)	Email to NCC (David Cumming) confirming the agreed timeline between NCC and HE for the population of the DRAFT SoCG.	
30/07/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group	
July 2021	Relevant Representation to the Planning Inspectorate (PINS)	Submission of comments by the Council on DCO application documents to PINS.	
04/08/2021	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.	
09/08/2021	Microsoft Teams Meeting (Flood Risk)	Meeting between Jason Ball, and Sarah Luff (LLFA) to discuss responses to their relevant representations.	
10/08/2021	Microsoft Teams Meeting & Email Record Highways Speeds Review	to agree amendments to Traffic Regulation Pla	
12/08/2021	Microsoft Teams Meeting NWL Project Board	Monthly NCC meeting for the Norwich Western Link (NWL) project Board. Highways England attend to provide an A47 Progress Update.	
17/08/2021	Microsoft Teams Meeting (Flood Risk)	Meeting between Jason Ball, and Sarah Luff (LLFA) to agree format and timing of the responses to their relevant representations.	
18/08/2021	Microsoft teams Meeting A47 / NCC Statement of Common Ground (SoCG)	Meeting with David Allfrey to discuss the SoCG delivery for Deadline 1.	
18/08/2021	Microsoft teams Meeting A47 / NWL Technical Meeting	Meeting to discuss emerging mitigation strategrate for Weston Longville.	
27/08/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group	
08/09/2021	Microsoft Teams Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach	



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
	A47 / NWL Technical Meeting	to works being undertaken where there are interactions between the two schemes.
10/09/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group
20/09.2021	Microsoft Teams Meeting (Local Liaison Group)	Meeting with NCC and Highways England project teams in advance of the Local Liaison Group meeting. Meeting focused on the finalisation of agenda and topics for the upcoming LLG meeting.
20/09/2021	Email (Local Road Drainage)	Query submitted to NCC on ownership of an existing ditch on Berrys Lane. After a search of HE asset databases it is not a Highways England asset.
20/09/2021	Email from David Allfrey (Local Road Drainage)	Email confirming request for ownership information and been escalated to the Boundary Search team within NCC for response.
24/09/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group
27/09/2021	Email (NRSWA Spacings)	Email to David Allfrey / David Cummings to discuss proposal to incorporate NRWSA spacings in adopted WCH routes to reduce land take for Statutory Undertaker corridors.
29/09/2021	Microsoft Teams Meeting (Local Liaison Group)	Local Liaison group meeting, Highways England presented an update to the LLG, and fielded questions on the proposed scheme design and DCO process.
04/10/2021	Email (Road Design – LHA Departures)	Email outlining a proposed mitigation measure suggested by a landowner to permit restricted agricultural access to Honingham Lane.
12/10/2021	Microsoft Teams Meeting A47 / NWL Buildability Workshop	First meeting between the A47 Project Team and NWL Project Team inc Ferrovial (NWL Contractor). Meeting focused on establishing lines of communication for the Contractor and information sharing between the parties.
13/10/2021	Email from David Cumming (NRSWA Spacings)	Response from NCC confirming acceptance in principal to proposal to utilize NRSWA spacings in adopted WCH routes.
14/10/2021	Email from David Jacklin (Local Road Drainage)	Email confirming that no existing ditches or drainage infrastructure are owned by NCC on Berrys Lane within the area requested.



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)	
14/10/2021	Email from Alex Cliff (Road Design – LHA Departures)	Confirmation from NCC on the requirement for Ghost Island provision in accordance with CD 123 at 2 locations previously discussed at meeting on 10 <sup>th</sup> September 2021.	
		Confirmation that proposed mitigation measure for agricultural access through a road closure (suggested by landowner on 04/10/2021) would not be acceptable for use on the local road network.	
15/10/21	Microsoft Teams Meeting A47 / NWL Technical Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.	
21/10/2021	Weston Longville Parish Council Meeting	In person meeting at WLPC to support NCC in the discussion of traffic mitigation measures in the interim period between the opening of the A47 and NWL schemes. Discussion focused on how this commitment will be progressed and included within the planning submission.	
22/10/2021	Letter from LLFA	LLFA review of Additional Information for LLFA and EA submitted at Deadline 3 (REP3-026)	
25/10/2021	Letter from LLFA	LLFA review of draft SOCG	
01/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Highway Design)	Teams meeting to discuss outstanding issues and whether the applicants response is adequate to agree the item.	
01/11/2021	Microsoft Teams Meeting (Statement of Common Ground – PRoW)	Teams meeting to discuss outstanding issues and whether the applicants response is adequate to agree the item.	
02/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Ecology)	Teams meeting to discuss outstanding issues and whether the applicants response is adequate to agree the item.	
03/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Flood Risk and Drainage)	Teams meeting with the LLFA to discuss outstanding issues and whether the applicants response is adequate to agree the item.	
05/11/2021	Microsoft Teams Meeting (Detrunking Working Group)	Meeting of the HE / NCC Detrunking Working Group	
08/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Ecology)	Teams meeting to discuss outstanding issues and whether the applicants response is adequate to agree the item.	



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
08/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Flood Risk and Drainage)	Teams meeting with the LLFA to discuss outstanding issues and whether the applicants response is adequate to agree the item.
08/11/2021	Letter from LLFA	Agreement of SoCG items and further clarifications on outstanding items.
10/11/2021	Microsoft Teams Meeting	Monthly meeting between HE and NCC NWL Delivery team ensuring a collaborative approach to works being undertaken where there are interactions between the two schemes.
11/11/2021	Microsoft Teams Meeting (Statement of Common Ground – pre Deadline 4)	Teams meeting with David Allfrey and David Cummings to confirm draft SoCG prior to Deadline 4 submission.
11/11/2021	Email	Email to Council with updated SoCG post above call to confirm changes prior to Deadline 4 submission.
24/11/2021	Microsoft Teams Meeting (Statement of Common Ground – Public Rights of Way)	Teams meeting to discuss outstanding issues and whether the applicants response is adequate to agree the item.
01/12/2021	Microsoft Teams Meeting (Statement of Common Ground – NWL Spur)	Teams meeting between Sweco, NCC and Pinsent Masons to progress outstanding NWL Spur issues.
10/12/2021	Letter from LLFA	Comments from LLFA following their review of updated flood modeling report (Hockering model update)
11/01/2022	Microsoft Teams Meeting (Statement of Common Ground – LLFA)	Meeting with LLFA to review updates to SOCG
07/01/2022	Email	Email to LLFA responding to letter of 22/10/2021
11/01/2022	Microsoft Teams Meeting (Statement of Common Ground – LLFA)	Meeting with LLFA to review updates to SOCG
11/01/22	Microsoft Teams Meeting (Statement of Common Ground – Ecology)	Teams meeting with NCC Ecologist to discuss outstanding issues and whether the applicants response is adequate to agree the item.
11/01/2022	Microsoft Teams Meeting	Meeting with LLFA to review updates to SOCG



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues table)
	(Statement of Common Ground – LLFA)	
12/01/2022	Microsoft Teams Meeting	Meeting with NCC to review updates to SOCG
	(Statement of Common Ground – WCHR & De- trunking)	
12/01/2022	Email	Follow up email to meeting of 12/01/22 in relation to WCHR & De-trunking
	(Statement of Common Ground – WCHR & De- trunking)	to Work & De-trumking
17/01/2022	Letter from LLFA	Agreement of remaining LLFA items
19/01/2022	Email	Confirmation of Classification of de-trunked roads.
24/01/2022	Microsoft Teams Meeting (Statement of Common Ground – NWL Spur)	Teams meeting to discuss the status of the draft agreement in relation to the NWL Arm agreement
27/01/2022	Microsoft Teams Meeting (Statement of Common Ground – NWL Team)	Teams meeting to discuss closure of NWL items within the Statement of Common Ground
28/01/2022	Email	Confirmation of Lighting Design
31/01/2022	Microsoft Teams Meeting	Teams meeting to discuss closure of NWL items within the Statement of Common Ground
	(Statement of Common Ground – NWL Team)	within the Statement of Common Ground
03/02/2022	Microsoft Teams Meeting (Pre-sign off meeting)	Discussion around outstanding Ecology items and sign off process.

2.1.1 It is agreed that this is an accurate record of the key meetings and consultation undertaken between (1) Highways England and (2) Norfolk County Council in relation to the issues addressed in this SoCG.



#### 3 ISSUES

#### 3.1 Introduction

- 3.1.1 This section summarises the key issues explored between Norfolk Country Council (NCC) and Highways England. The draft reflects the issues raised: during statutory consultation; during meetings/correspondence on the development of Scheme design and Environmental Statement; following receipt of the Relevant Representations, Written Representation, Local Impact Report and responses to the ExA's first written questions plus the Applicant's responses to all these; and during discussions on issues during August to November 2021.
- 3.1.2 Section 3.2 summarises the issues raised by NCC in their role as the local authority, with each issue and Highway England's response described in detail in Appendix A.
- 3.1.3 Section 3.3 and 3.4 summarise the status of agreement on issues raised by NCC with regards the Norwich Western Link (NWL) scheme, with each issue and Highway England's response described in detail in Appendices B and C.

#### 3.2 NCC Issues as a Local Authority

Ref. No.	Topic	Issue	Status	Date
<u>1</u>	Scheme Support	Economic benefits.	Agreed	17/11/20
<u>2</u>	Scheme Support	Dualling of the A47 with appropriate grade-separation at junctions.	Agreed	23/09/21
<u>3</u>	Scheme Support	Road safety benefits.	Agreed	23/09/21
<u>4</u>	Scheme Support	Reduced congestion benefits.	Agreed	23/09/21
<u>5</u>	Scheme Support	Potential economic benefits during the construction phase.	Agreed	23/09/21
<u>6</u>	Scheme Support	Productivity and other wider economic benefits.	Agreed	23/09/21
<u>7</u>	Construction Standards compliance	Details of construction and compliance with nationally recognised standards.	Agreed	23/09/21
<u>8</u>	Local Road impacts	Managing disruption and traffic on the local highway network during the construction period.	Agreed	23/09/21
<u>9</u>	Local Road impacts	Consultation Preliminary Environmental Information Report (PEIR) limitations.	Agreed	23/09/21
<u>10</u>	Local Road impacts	Scheme impact to traffic volumes on local roads.	Agreed	23/09/21
<u>11</u>	Local Road impacts	Scheme impact to Longwater Junction	Agreed	23/09/21
<u>12</u>	Local Road impacts	Requirement for full Transport Assessment	Agreed	23/09/21



Ref. No.	Topic	Issue	Status	Date
<u>13</u>	Local Road impacts	Wood Lane junction: Single carriageway proposal	Agreed	23/09/21
<u>14</u>	Flood Risk & Ecology	Environmental Scoping Boundary.	Agreed	01/11/21
<u>15</u>	Lighting Design	Multi-scheme lighting interface.	Agreed	01/11/21
<u>16</u>	WCHR / PRoW	Non-Motorised Users (NMU) multi-scheme interfacing.	Agreed	01/11/21
<u>17</u>	WCHR / PRoW	Provision of WCHR / PRoW facilities.	Agreed	01/11/21
<u>18</u>	WCHR / PRoW	Scheme accessibility improvements and enhancements.	Agreed	13/12/21
<u>19</u>	WCHR / PRoW	Connectivity at Mattishall Lane.	Agreed	13/12/21
<u>20</u>	WCHR / PRoW	Honingham Restricted Byway 1 (RB1) crossing.	Agreed	25/10/21
<u>21</u>	WCHR / PRoW	Stopping up of Hockering Footpath 12.	Agreed	25/10/21
<u>22</u>	WCHR / PRoW	Partial loss of Hockering Footpath 7.	Agreed	23/11/21
<u>23</u>	WCHR / PRoW	Clarification of RB1 extension.	Agreed	25/10/21
<u>24</u>	WCHR / PRoW	Usage survey parameters.	Agreed	01/11/21
<u>25</u>	WCHR / PRoW	Suitable surfacing and width for Horses and Carriages.	Agreed	12/01/22
<u>26</u>	Ecology	Air Quality assessments.	Agreed	23/09/21
<u>27</u>	Archaeological Trenching	Below ground impact consideration.	Agreed	23/09/21
<u>28</u>	Ecology	Landscape and Visual assessments during construction.	Agreed	23/09/21
<u>29</u>	Construction	Mitigation Measures during construction and operation.	Agreed	20/10/21
<u>30</u>	Ecology	Additional non-Bat surveys	Agreed	02/11/21
<u>31</u>	Ecology	Additional Bat surveys	Under discussion	
<u>32</u>	Water Quality	Hydrology Assessment and impacts to species.	Agreed	10/11/21
<u>33</u>	Ecology	Aquatic and fish surveys.	Under discussion	
<u>34</u>	Ecology	Biodiversity net gain.	Agreed, subject to final landscape design under draft DCO Requirement 5	02/11/21
<u>35</u>	Ecology	Inter-scheme data sharing (NDR and NWL).	Agreed	02/11/21
<u>36</u>	Ecology	Safeguarded Mineral assets and waste.	Agreed	23/09/21
<u>37</u>	Construction	Noise and vibration impact during construction and operation.	Agreed	23/09/21
<u>38</u>	Flood Risk & Drainage	Road Drainage and the Water Environment.	Agreed	10/11/21
<u>39</u>	Flood Risk & Drainage	Watercourse infiltration in line with the Sustainable Urban Drainage Systems (SuDS) hierarchy.	Agreed	10/11/21
<u>40</u>	Flood Risk & Drainage	Sustainable Urban Drainage Systems and existing drainage schemes.	Agreed	10/11/21



Ref. No.	Topic	Issue	Status	Date
<u>41</u>	Flood Risk & Drainage	Drainage management and maintenance, construction and operation.	Agreed	03/11/21
<u>42</u>	Flood Risk & Drainage	NCC LLFA consenting.	Agreed	03/11/21
<u>43</u>	Climate	Climate assessments and net zero carbon targets.	Agreed	26/10/21
<u>44</u>	Governance	Project meetings.	Agreed	23/09/21
<u>45</u>	Scheme Support	Case for the scheme and issue resolution.	Agreed	01/11/21
<u>46</u>	Scheme Support	DCO conditions and requirements.	Agreed	01/11/21
<u>47</u>	Scheme Support	Dualling of the A47 with appropriate grade-separation at junctions.	Agreed	01/11/21
<u>48</u>	Road Design	Asset Ownership and De-trunking agreement.	Under discussion	
<u>49</u>	Road design	Wood Lane junction – single carriageway link	Agreed	24/09/21
<u>50</u>	Street Lighting	Lighting Strategy for Wood Lane junction	Agreed	28/01/22
<u>51</u>	Road Design	Wood Lane speed limit	Agreed	23/09/21
<u>52</u>	Traffic Modelling	Scheme Interface: Longwater Interchange	Agreed	23/09/21
<u>53</u>	Road design	Suitable access to the Food Enterprise Zone	Agreed	11/11/21
<u>54</u>	Scheme Support	Potential economic benefits during the construction phase.	Agreed	23/09/21
<u>55</u>	Construction	Air Quality improvements.	Agreed	23/09/21
<u>56</u>	Archaeological Trenching	DCO Inclusions: Authorised development	Agreed	26/10/21
<u>57</u>	Landscape and Visual	Arboricultural Impact Assessment.	Agreed, subject to 2 <sup>nd</sup> EMP under draft DCO Requirement 4	20/10/21
<u>58</u>	Landscape and Visual	Arboricultural Wholly Exceptional Development.	Agreed, subject to 2 <sup>nd</sup> EMP under draft DCO Requirement 4	20/10/21
<u>59</u>	Landscape and Visual	Environmental Masterplan: Arboricultural net gain.	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21
<u>60</u>	Landscape and Visual	Tree Compensation Plans.	Agreed	20/10/21
<u>61</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.2 and 7.3	Agreed	20/10/21
<u>62</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.4	Agreed	20/10/21
<u>63</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.6	Agreed	29/10/21
<u>64</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.7	Agreed	20/10/21



Ref. No.	Topic	Issue	Status	Date
<u>65</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.8	Agreed	20/10/21
<u>66</u>	Landscape and Visual	Environmental Assessment: Landscape & Visual effects Chapter 7.9	Agreed	20/10/21
<u>67</u>	Landscape and Visual	Landscape and Visual Environmental Assessment: Landscape & Visual effects Chapter 7.10		20/10/21
<u>68</u>	Landscape and Visual	Cumulative effects assessment.	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21
<u>69</u>	Landscape and Visual	Landscape Planning and mitigation	Agreed	20/10/21
<u>70</u>	Landscape and Visual	Visual Receptors	Agreed	20/10/21
<u>71</u>	Landscape and Visual	Arboriculture Impact Assessment: Landscape Planting	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21
<u>72</u>	Landscape and Visual	Environmental Masterplan	Agreed, subject to final landscape design under draft DCO Requirement 5 and LEMP under draft DCO Requirement 4	20/10/21
<u>73</u>	Ecology	Age of Biodiversity Survey data Biodiversity	Agreed	02/11/21
<u>74</u>	Ecology	Amendment of Site Boundary	Agreed	02/11/21
<u>75</u>	Ecology	Bat Survey Areas	Under discussion	
<u>76</u>	Ecology:	Biodiversity monitoring methodology	Agreed	02/11/21
<u>77</u>	Ecology	Defra Metric 2.0 Calculations	Agreed	02/11/21
<u>78</u>	Ecology	Protected Species Reports: consistency in recommendations.	Agreed – pending updated ecological constraints plan	02/11/21
<u>79</u>	Ecology	Bat Survey Report	Under discussion	
<u>80</u>	Ecology	Need for Collision surveys	Under discussion	
<u>81</u>	Ecology	Bat Crossing point report	Agreed – pending rewording	02/11/21
<u>82</u>	Ecology	Bat Hibernation	Agreed	02/11/21
<u>83</u>	Ecology	Otter & Water Vole Survey	Agreed	02/11/21
<u>84</u>	Ecology	Reptile Survey Report	Agreed	02/11/21
<u>85</u>	Ecology	Barn Owl Survey Report	Agreed	10/11/21



Ref. No.	Topic	Issue	Status	Date
<u>86</u>	Ecology	Bird Survey Report	Agreed	10/11/21
<u>87</u>	Ecology	Nest Boxes	Agreed	10/11/21
<u>88</u>	Ecology:	Terrestrial Invertebrate Survey Report	Under discussion	
<u>89</u>	Ecology	Vegetation and trees	Agreed	10/11/21
<u>90</u>	Ecology	Badger Survey Report	Under discussion	
<u>91</u>	Ecology	County Wildlife Sites	Agreed – subject to EIA Addendum	10/11/21
<u>92</u>	Ecology	Inter-project cumulative effects assessment	Under discussion	
<u>93</u>	Geology & Soils	Geology & Soils	Agreed	
<u>94</u>	Geology & Soils	Mineral Impact Assessment	Agreed	23/09/21
<u>95</u>	Construction	Traffic Management: Noise and vibration.	Agreed	23/09/21
<u>96</u>	WCHR / PRoW	Population and Human Health benefits.	Agreed	23/09/21
<u>97</u>	WCHR / PRoW	Missed Opportunities for additional facility provision.	Agreed	23/11/21
<u>98</u>	WCHR / PRoW	NWL interdependencies and provision	Agreed	23/11/21
<u>99</u>	Flood Risk & Drainage	Flood Risk Assessment and design	Agreed	17/01/22
<u>100</u>	Flood Risk & Drainage	Water Outfall Discharge Strategy	Agreed	10/11/21
<u>101</u>	Flood Risk & Drainage	Ordinary Watercourse Consenting	Agreed	10/11/21
<u>102</u>	Climate	Carbon Neutrality objectives	Agreed	20/10/21
<u>103</u>	Road Design	Ghost Island usage at Mattishall Lane and Dereham Link Road.	Agreed	01/11/21
<u>104</u>	Flood Risk and Drainage	Hockering Culvert	Agreed	10/11/21
<u>105</u>	Flood Risk and Drainage	River Tud flood plain	Agreed	17/01/22
<u>106</u>	Water Environment: Environmental Assessment	Assessment assumptions	Agreed	17/01/22
<u>107</u>	Water Environment: Environmental Assessment	River assessment	Agreed	17/01/22
<u>108</u>	Flood Risk & Drainage	Pond replacement	Agreed	17/01/22
<u>109</u>	Flood Risk & Drainage	Drainage design	Agreed	10/11/21
<u>110</u>	Flood Risk & Drainage	40% climate change allowance	Agreed	10/11/21
<u>111</u>	Flood Risk & Drainage	Flood Storage	Agreed	10/11/21



Ref. No.	Topic	Issue	Status	Date
<u>112</u>	Road Design	Amendments to speed limits at HE request	Agreed	11/08/21
<u>113</u>	Traffic Modelling	NATS model alignment	Agreed	11/11/21
<u>114</u>	Traffic Modelling	2025 traffic routing	Agreed	11/08/21
<u>115</u>	Traffic Modelling	Annual Average Daily Traffic (AADT) factors	Agreed	11/08/21
<u>116</u>	Traffic Modelling	2025 Forecast Year Models	Agreed	11/08/21
117	Road Design	Classification of de-trunked roads	Agreed	25/01/22

## 3.3 Norwich Western Link Issues Raised by NCC (as the Local Authority)

Ref. No.	Topic	Issue	Status	Date
<u>A</u>	Local Road Impacts	Safeguard the Wood Lane junction for the Norwich Western Link connection with the A47.	Agreed	01/11/21
<u>B</u>	WCHR / PRoW  Status of cycle track on sheet 10 of Rights of Way and Access Plans (APP-008), CF1 to CF2a, between Wood Lane & diverted restricted byway (Honingham RB1).		Agreed	11/11/21
<u>C</u>	Local Road Impacts	ocal Road Impacts Honingham Lane Stopping Order		23/09/21
<u>D</u>	Road Design	Implementation of NWL development within the Order Limits.	Agreed	24/09/21
<u>E</u>	Road Design	Norfolk County Council to dedicate as part of the NWL scheme.	Under discussion	
<u>F</u>	Traffic Modelling	A47 & NWL phasing - provision of interim measures to the local road network due to actual impacts from the A47 dualling scheme.	Agreed	11/11/21
<u>G</u>	TTRO Closure	TTRO effects on Honingham Lane and agricultural access	Agreed	11/08/21

### 3.4 Norwich Western Link Issues Raised by NCC (as the Promoter / Developer)

Ref. No.	Topic	Issue	Status	Date
NWL1	Draft DCO Work No.26a	Provision of optional cycle track	Agreed	11/11/21
NWL2	NWL spur	Delivery commitment	Agreed	11/11/21
NWL3	NWL spur	Classification	Under discussion	
NWL4	NMU provision	Provision on Dereham Road, Honingham	Agreed	11/11/21
NWL5	NWL delivery	Delay to NWL delivery and Weston Longville	Agreed	11/11/21
NWL6	Barbastelle bats	Clarification of NCC statement	Agreed	11/11/21
NWL7	Draft DCO Work No.26a	Provision of optional cycle track	Agreed	11/11/21
NWL8	NWL spur	Classification	Under discussion	



# APPENDIX A – Detailed Responses to Issues Raised by NCC (as the Local Authority)

Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
1	Scheme Support: Economic benefits	Statutory Consultation Relevant Representation	Norfolk County Council welcomes the scheme proposals which help to support the economy and economic growth in the area.	help enable regional development and growth in Norwich and its surrounding area      reduce congestion, make journey times more reliable and provide capacity for future traffic growth.	Agreed	17/11/20
2	Scheme Support: Role of NCC.	Statutory Consultation	Norfolk County Council has long supported the full dualling of the A47 together with appropriate grade-separation at junctions. The council has campaigned for this along with other local authorities and organisations through the A47 Alliance. NCC's response to the proposed scheme is balanced between the council's support for full-dualling with consideration of the proposal's impacts on our statutory and advisory role and any impacts from the proposals in delivery of the council's services.		Agreed	23/09/21
3	Scheme Support: Safety improvements	Statutory Consultation	The county council is aware of safety issues related to the single carriageway and the severe congestion issues along the A47 route, especially on the approach to Norwich (at Easton) in the mornings.  Evidence shows that dual carriageways are safer than single and hence we welcome the proposed scheme as it will improve the road's safety.	<ul> <li>ensure the new road layout considers local communities and safe access to the A47</li> <li>provide a safer route between communities for walkers, cyclists, horse riders and other non-motorist groups</li> </ul>	Agreed	23/09/21
4	Scheme Support: Congestion relief.	Statutory Consultation	The county council also welcome the scheme due to the congestion benefits the scheme will bring. Dualling this section will result in more reliable journey times and hence the socio-economic benefits which come with this such as increased investment from businesses, increased productivity and improved health through reducing poor air quality from queues and the stressful environment which comes from this. Norfolk County Council therefore welcomes the benefits the scheme will have.		Agreed	23/09/21
5	Scheme Support: Potential Economic Benefits	Statutory Consultation	There is potential for jobs to be created during the construction phase, together with opportunities for social inclusion type activity such as work experience, internships and ways in which the local community could benefit economically from the investment. The county council will continue to work proactively with Highways England to encourage apprenticeships, work experience and internships being included at an appropriate stage in the project.	Highways England acknowledges the comment.	Agreed	23/09/21
6	Scheme Support: Potential Economic Benefits	Statutory Consultation	Productivity and other wider economic benefits will arise from the completed schemes. These include journey time savings and reliability improvements, benefitting businesses. These are to be welcomed.	Highways England acknowledges the comment.	Agreed	23/09/21
7	Construction Standards compliance	Statutory Consultation Environmental Statement	For the final scheme, the County Council would expect the proposals to include full details of construction and compliance with nationally recognised standards, which would ensure that the road improvement is fit for purpose.	Volume 2 of the DCO application contains engineering drawings (TR010038/APP/2.7) and the Environmental Statement Chapter 2 'Proposed Scheme' (TR010038/APP/6.1) outlines the expected the construction methods. The Scheme is designed in accordance with the Government's highways standards prescribed in the Design Manual for Roads and Bridges. The planning authority will be consulted on the detailed design before approval by the Secretary of State under Requirement 2 of the DCO (TR010038/APP/3.1).	Agreed	23/09/21
8	Local Road impacts: Construction impacts.	Statutory Consultation Outline Traffic	The county council would also expect there to be minimum disruption on the local highway network during the construction period and would want to	An Outline Traffic Management Plan <b>(TR010038/APP/7.5)</b> is presented in the DCO application and, prior to commencing construction, would be developed	Agreed	23/09/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
		Management Plan	work with Highways England, or its contractors, on managing traffic during the works.	into a full plan for managing construction traffic to minimise disruption and disturbance risks.		
				Norfolk County Council, as the local highway authority, would be consulted during the development of the Traffic Management Plan.		
9	Local Road impacts: Limited traffic flows.	Statutory Consultation	The county council acknowledges that the Preliminary Environmental Information Report (PEIR) has been prepared for the purposes of consultation and presents currently available information. Further evidence and supporting material will be presented at the next stage. However, we are aware that the proposal will have an impact on local traffic flows, which is not fully understood at this time due to the limited traffic flow information included.	Chapter 4 of the Case for the Scheme ( <b>TR010038/APP/7.1</b> ) presents a Transport Assessment that assesses the impact of the Scheme on the local road network and walkers, cyclists and horse-riders.	Agreed	23/09/21
10	Local Road impacts: County Road Improvements	Statutory Consultation	One issue the council is aware of is concerns that people have regarding vehicles using local, minor roads between the A47 and other major roads such as the A11. Norfolk County Council would want to continue to work with Highways England to understand the implications and – if necessary – agree any minor improvements required to county roads as a consequence of the scheme.	Highways England continue to engage with NCC on this through the A47 / NWL Technical calls and the Local Liaison Group	Agreed	23/09/21
11	Local Road impacts: Longwater Junction mitigation.	Statutory Consultation	In addition, the county council is aware of issues at Longwater Junction, which is beyond the scope of the current proposals. We would want to understand the impact that the dualling proposals have at this junction and what mitigation, if any, Highways England would be taking forward to address any issues.	Chapter 4, Transport Assessment, of the Case for the Scheme (TR010038/APP/7.1) presents the assessments of impacts on the road network and measures to manage any effects.	Agreed	23/09/21
12	Local Road impacts: Transport Assessment.	Statutory Consultation Case for the Scheme	The county council, as the Local Highway Authority, will require a full Transport Assessment which takes into account the impact of the scheme on the local road network and also the impact on sustainable travel modes.	Chapter 4 of the Case for the Scheme (TR010038/APP/7.1) presents a Transport Assessment that assesses the impact of the Scheme on the local road network and walkers, cyclists and horse-riders.	Agreed	23/09/21
13	Local Road impacts: Wood Lane Junction	Statutory Consultation Case for the Scheme	We have concern about the proposal at the Wood Lane junction to place a single carriageway through an underpass beneath the dualled A47, although we acknowledge that we are awaiting the full modelling analysis to back up the justification for this being single carriageway only.  Despite this, we have concerns that as it is through an underpass it would be difficult and expensive to widen in the future.  There is a resilience concern in the event of an accident on the single carriageway severely impacting flow and the passage of emergency vehicles.	The operational traffic modelling assessments have confirmed that the single carriageway link road between the two roundabouts at Wood Lane junction is appropriate for the anticipated traffic flows. These are presented within Chapter 4 of the Case for the Scheme (TR010038/APP/7.1).  An independent assessment was also undertaken by the NWL Delivery Team working for Norfolk County Council who agreed that the proposed cross section performs operationally within the required parameters for the Design Year (2040) with no capacity issues  The proposed layout has also been subject to Operational safety assessments, Regional Operations reviews and an independent Road Safety Audit.  Highways England have engaged throughout with the Local Highway Authority Network Safety team and no issues in this regard have been raised.  In the event of an incident on this link road that would impede emergency service vehicles then they would be diverted to either the Norwich Road junction (to the east) or the Fox Lane Junction to the West where they can then access the wider strategic and local road network.	Agreed	23/09/21
14	Flood Risk & Ecology: ES Boundary	Statutory Consultation	Consideration might need to be made regarding the Environmental Scoping Boundary which overlaps with the NWL Works Extents Boundary and an NWL drainage lagoon which is also proposed in this area.	The interaction of the Scheme with the Norwich Western Link has been explored through on-going liaison with Norfolk County Council.	Agreed	01/11/21



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			Item is also covered under item 99.			
15	Lighting Design: multi- scheme interfacing.	Statutory Consultation	The A47 junction is expected to have street lights whereas the NWL will not therefore there will be an interface in this regard.  Item is also covered under item 50.	The interactions of the schemes with regards to lighting at the proposed Wood Lane junctions has been discussed within the A47/NWL Working Group and preliminary details shared. This is being progressed via the HE/NCC Detrunking Workshop to detail out operating & maintenance agreements.	Agreed	01/11/21
16	WCHR / PRoW: multi- scheme interfacing.	Statutory Consultation Case for the Scheme	In addition, there is a non-motorised user (NMU) route proposed to go under the dualled A47 just east of the Wood Lane junction which will head west and join with the non-motorised user route along the east side of the NWL. This needs to be coordinated.	The walker, cyclist and horse rider routes have been developed to maintain and, where possible, improve such connections along the corridor. See Section 4.14 of the Case for the Scheme (TR010038/APP/7.1).	Agreed	01/11/21
17	WCHR / PRoW: Facility Provision	Statutory Consultation	The Norfolk County Council public rights of way (PRoW) and Green Infrastructure team is satisfied that walking, cycling and horse-riding provision have been generally considered and opportunities for new provision and routes have been identified.	The walker, cyclist and horse rider routes have been developed to maintain and, where possible, improve such connections along the corridor.	Agreed	01/11/21
18	WCHR / PRoW: Accessibility	Statutory Consultation Case for the Scheme Environmental Statement	However, some observations have been made which should further improve this provision and make the necessary changes to the PRoW network more acceptable for users. All proposed new WCH provision should be included and extended where possible. Any side roads that are being severed and having vehicle rights stopped-up should keep, at the minimum, access on foot. This may mean there are short sections of culde-sac path but in other locations such paths are used, particularly for dog walks, and as the infrastructure is already there, this access should be retained.	Section 4.14 of the Case for Scheme ( <b>TR010038/APP/7.1</b> ) and Chapter 12 of the Environmental Statement, Population and Human Health ( <b>TR010038/APP/6.1</b> ) describe how the Scheme has managed impacts on the existing walking, cycling and horse-riding network, plus integrated new and improved existing routes where possible.	Agreed	13/12/21
19	WCHR / PRoW: Connectivity at Mattishall Lane	Statutory Consultation Case for the Scheme	Norfolk County Council welcomes the proposed WCH route to the Church Lane underpass and want to see this retained as it does open up new and other WCH opportunities by increasing connectivity. However, it is felt that either a replacement footbridge or underpass on the current Footpath 7 alignment, or a facility provided on Mattishall Lane alignment to retain WCH connectivity south and west is required.  Notwithstanding, Footpath 7, and (sections of) the other PRoW in this area need to be upgraded to bridleway status otherwise, cyclists and horses will not be able to access the new WCH route nor will it be linked to the adopted highway network. Both these measures would significantly increase WCH travel and recreation opportunities.	Following Statutory Consultation a new Mattishall Lane Link Road has been included in the Scheme and this has included provision to maintain the WCH connectivity between Hockering and south of the A47.  This resulted in a review of the crossing provision provided along the route of the scheme. Segregated crossing points have been provided at Fox Lane, Mattishall, Hall Farm, Honingham (Church), and Easton.  Section 4.14 of the Case for Scheme (TR010038/APP/7.1) describes the changes to the existing walking, cycling and horse-riding network and provision of new and improved routes.	Agreed	13/12/21
20	WCHR / PRoW: RB1 crossing	Statutory Consultation	Honingham Restricted Byway 1 (RB1) The current RB1 crossing of the A47 (as can be seen in Figure 2 within Section 3.56 below) is problematic and so diverting it through the farm access underpass removes this north/south connectivity barrier.  The proposals appear to suggest that the diversion route of the affected RB1 will be the route of the proposed WCH route connecting Dereham Road to the Wood Lane junction utilising the former A47 carriageway.  If so, the width and surface of this will need to be suitable for horses and carriages. It appears that there is no provision for a graded connection of the new WCH route and RB1 on the north side of the new road and so the embankment will prevent WCH users accessing one from the other.  The council suggest that an additional route for the RB diversion at the foot of the embankment would remove this obstruction.	On the north side of the proposed A47 dual carriageway the restricted byway (RB1) will be diverted and follow the path between the underpass and northern roundabout of Wood Lane junction.  RB1 will then follow a north easterly diversion for a short length before tying back into the existing route.  The existing section of RB1 shown to the south of the existing A47 connecting into Dereham Road will remain unaltered.	Agreed	25/10/21



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21	WCHR / PRoW: Stopping up FP12.	Statutory Concultation	Hockering Footpath 12  Here there is a very short section of footpath leading south from the A47 to a private road just east of Oak Farm. This will need to be stopped up as no diversion is possible.	This short legacy remnant of Hockering Footpath 12 will be permanently removed as part of the proposed Scheme.	Agreed	25/10/21
22	WCHR / PRoW: FP7	Statutory Consultation Case for the Scheme Environmental Statement	Hockering Footpath 7  A relatively short section of this footpath, approximately 40m, will be 'lost' under the dual carriageway, severing it and its connection to Hockering Footpath 8, as can been seen in Figure 2 in Section 3.56.  Footpath 7, also show in Figure 2, currently provides a link south from Hockering to the well-connected PRoW network to the south (East Tuddenham and beyond) and the current opportunities for short and long circular walks on PRoW and minor roads in this area are good. From a PRoW user's point of view these opportunities will be significantly altered as the proposed diversion is not considered satisfactory. A 40m section of footpath is to be replaced with an almost 2km round trip. Section 11.6.5 of the PEIR states: "in proposing a diversion to a route, the objective has been to limit the additional journey time and length to the alternative facilities" which seems contradictory to what has been proposed.	Section 4.14 of the Case for Scheme (TR010038/APP/7.1) and Chapter 12 of the Environmental Statement, Population and Human Health (TR010038/APP/6.1) assess the impacts on public rights of way and proposed mitigation measures.  Since statutory consultation, a new A47 underpass has been included called Mattishall Link Road.  This has had walker and cycle provision included to help provide a replacement connection between Hockering and the circular footpath network south of the River Tud.	Agreed	23/11/21
23	WCHR / PRoW: RB1 extension.	Statutory Consultation PEIR Environmental Statement	We would also like clarification on the proposed extension of RB1 to be delivered. Section 11.6.15 of the states that the Proposed Scheme will "permanently divert a short section of the route lying to the north of the A47" but the Scheme Plan seems to indicate a much longer section south to Dereham Road. This extent does not need to be diverted as it is not directly affected by the new road.	Section 4.14 of the Case for the Scheme ( <b>TR010038/APP/7.1</b> ) presents an overview of the existing PRoW network and potential impact, mitigation measures and improvements due to the Scheme.  The existing section of RB1 shown to the south of the A47 will remain unaltered.	Agreed	25/10/21
24	WCHR / PRoW: Usage Survey	Statutory Consultation	Norfolk County Council suggests the proposed WCH surveys scheduled for April 2020 should ensure different days of the week, including weekends, and different times of day are carried out.  The council also suggests that limiting surveys to one month is not sufficient to gauge usage as this will be variable according to seasons and holiday periods. WCH usage incorporates both travel and recreation and therefore surveys should take this into account.	The WCH surveys were originally scheduled for April 2020 but were postponed until July 2020 due to travel restrictions and school closures associated with the first Covid 19 lockdown.  The WCH surveys conducted in July 2020 commenced on Monday 13 July and were undertaken for 14 consecutive days including two weekends, between 7am and 7pm (twelve hours) on all survey days.  As such, the survey period covered the last week of school term time and the first week of the school summer holiday period.  The collected usage information, which includes recreational and utility trips, is representative of the average use of the WCH facilities and is sufficient to inform the assessment.	Agreed	01/11/21
25	WCHR / PRoW: Suitable Surfacing.	Statutory Consultation  Case for the Scheme  Environmental Statement	The proposed usage of the former A47 for WCH routes needs to ensure that it is of a suitable width and surface for horses and carriages.	Section 4.11 of the Case for Scheme (TR010038/APP/7.1) and Chapter 12 of the Environmental Statement, Population and Human Health (TR010038/APP/6.1) describe how the Scheme has managed impacts on the existing walking, cycling and horse-riding network, plus integrated new and improved existing routes the where possible.	Agreed	12/01/22



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26	Ecology: Air Quality	(if relevant) Statutory Consultation	NCC supports the work being done by Highways England to assess air quality implications. The assessment should consider any potential impacts within Norwich, which is declared as being an air quality management area.	Chapter 5 Air Quality of the Environmental Statement (TR010038/APP/6.1) has considered the risks to air quality management areas (AQMAs). No AQMAs are within the affected road network, with the closest located over 3km to the northeast, within Norwich City Centre.	Agreed	23/09/21
27	Archaeological Trenching	Statutory Consultation Environmental Statement	NCC are satisfied that issues relating to the impacts the scheme will have on below-ground are considered within the PEIR. A geophysical survey has already taken place and trial trenching is planned or being considered. The promoters of the scheme and their consultants have been maintaining contact with the county council. We note that the council's previous comments regarding the potential of the scheme to impact on deposits containing significant paleoenvironmental remains and deposits containing remains of Palaeolithic date have been taken up within the PEIR and that the full ES chapter will contain a specialist geoarchaeological assessment.	Highways England Project team have engaged with the Norfolk County Archaeologist on the production of the Trial trenching Specification, during site works, and on the Archaeological Trial Trenching Survey Report.  Details of the trial trenching and geophysical survey are provided in Appendix 6.2 and 6.2 of the Environmental Statement (TR010038/APP/6.3).  Chapter 6 of the Environmental Statement, Cultural Heritage (TR010038/APP/6.1) assesses the impact of the Proposed Scheme on paleoenvironmental remains and deposits.	Agreed	23/09/21
28	Ecology: Landscape and Visual:	Statutory Consultation Case for the Scheme Environmental Statement Scheme Design Report DMRB Volume 11 Section 3 Part 5 Landscape Effects Interim Advice Note 135/10 (IAN 135/10) Landscape and Visual Effects Assessment Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute & IEMA, 2013) An Approach to Landscape Character Assessment (Natural England, 2014)	The baseline data which is provided in respect of landscape is broadly appropriate. The study area selected is considered suitable for both the content of the application and the context in which it sits. The undulating landscape and intervening vegetation will help to contain views. The data collected in relation to National Character Areas and Local Character Areas is appropriate and we note the recognition that the proposed scheme crosses district boundaries so is included in several  Landscape Character Assessments. It will be important to acknowledge the changes in landscape context to directly inform the landscape proposals along the route. The potential for views of the scheme is extensive and that carious residential properties and publicly accessible routes will be impacted on a visual scale. The assessment should fully consider these views and the impact they will have on visual amenity; and findings should inform decisions regarding design from the outset. Suitable guidance and best practice has been referred to in terms of methodology including:  • DMRB Volume 11 Section 3 Part 5 Landscape Effects  • Interim Advice Note 135/10 (IAN 135/10) Landscape and Visual Effects  • Assessment  • Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute & IEMA, 2013)  • An Approach to Landscape Character Assessment (Natural England, 2014)  The county council understands the ZTV (Zones of Theoretical Visibility) is still to be undertaken, however the methodology provided for undertaking this appear appropriate. It will be important for this to be verified on site.	Chapter 8 of the Environmental Statement, Landscape and Visual Effects (TR010038/APP/6.1) presents an assessment on views, including the methodology and determination of the ZTV, and proposes appropriate mitigation. Impacts on landscape and visual amenity have informed the appraisal of alternative options and the Scheme design; see the Case for the Scheme (TR010038/APP/7.1) and Scheme Design Report (TR010038/APP/7.3).	Agreed	23/09/21
29	Construction: Mitigation Measures.	Case for the Scheme Environmental Statement Scheme Design	The potential construction and operation effect suggested appear to come from robust investigation and reflect concerns we would share for effects on both the landscape and visual amenity and we agree that the scheme is likely to require a 'Detailed' level of assessment as well as a comprehensive environmental masterplan and detailed planting design to ensure suitable mitigation.	Chapter 7 of the Environmental Statement, Landscape and Visual Effects (TR010038/APP/6.1) presents an assessment on views, including the methodology and determination of the ZTV, and proposes appropriate mitigation. Impacts on landscape and visual amenity have informed the appraisal of alternative options and the Scheme design; see the Case for the	Agreed	23/09/21



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		Report		Scheme (TR010038/APP/7.1) and Scheme Design Report (TR010038/APP/7.3).		
30	Ecology: Additional surveys	Statutory Consultation	Norfolk County Council considers that the environmental baseline data that has been presented in the PEIR is broadly appropriate.  The applicant has undertaken a number of appropriate surveys for protected species and has identified the relevant statutory and non-statutory designated sites.  The applicant had identified the need for further surveys for fungi, barn owl, bats, otter and water vole surveys in 2020.	Chapter 8 of the Environmental Statement, Biodiversity, (TR010038/APP/6.1) presents the full suite of 2016 to 2020 surveys used to inform the assessment of impacts on habitats and species.	Agreed	01/11/21
31	Ecology: Bats – additional surveys	Statutory Consultation  Environmental Statement	No justification of the chosen study areas (Zone of Influence) for each species has been provided. This is particularly relevant for bats. The study area boundary for the proposed scheme for bat activity is described as 100m. It should be noted that the Core Sustenance Zones for Barbastelle bats is six kilometres away and there is moderate confidence in zone size. There is a known colony of bats at Morton-on-the-Hill which is less than six kilometres from the site. Surveys undertaken in 2019 on behalf of the county council in relation to another potential highways scheme have identified additional roosts for Barbastelle in closer proximity to the proposed scheme.  The Scoping Report also identifies that the open arable landscape offers habitat for species such as noctules <i>Nyctalus noctula</i> and possibly common pipistrelles <i>Pipistrellus pipistrellus</i> to forage. Bat activity surveys have identified extensive noctule activity indicating that there may be a roost nearby. The woodland areas have potential to support species such as brown long-eared bats and Barbastelle bats <i>Barbastella barbastellus</i> . We recommend the use of infra-red/thermal imaging equipment when undertaking emergence surveys of the trees to obtain more accurate population counts, and the use of IR/TI is also important for identifying the height that bats cross the landscape and collision risk modelling.  No collision surveys have been undertaken to-date. These surveys could be undertaken to provide a baseline against which changes post-construction can be measured. We would recommend the use of detector dogs, as these have been shown to be significantly more effective at searching for animals than human surveyors.  Post note:  NCC brought a report to the same committee (Friday 27 August 2021) and agreed representations, which were afterward submitted to the Planning Inspectorate. These agreed representations updated and corrected a number of factual errors and omissions in relation to the commentary relating to bats reported to the Planning and	The Zone of Influence for each habitat has been defined in line with the relevant guidance and methodologies. The results of the bat surveys is presented within the Appendix 8.12 to the ES (TR010038/APP/6.3).  Bat records were obtained from Norfolk County Council and other relevant parties, such as Norfolk Biodiversity Information Service (NBIS). Engagement has also taken place the Norwich Western Link (NWL) Ecology Liaison Group. Impacts on ecology are assessed in Chapter 8 of the Environmental Statement, Biodiversity (TR010038/APP/6.1) together with mitigation measures proposed as part of the Scheme to avoid and/or reduce significant effects.  The mitigation measures outlined in Chapter 8 of the Environmental Statement, Biodiversity (TR010038/APP/6.1) have been tried and tested and therefore best practice is being followed to mitigate the effects on the environment.  Post-note:  The Applicant's response to the colony of barbastelle bat issue covered by Common Response 'I' 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); see italicized text below.  At Deadline 6, Highways England submitted document '9.25 Additional Environmental Information' (REP6-019) and Chapter 3:  Provides clarification on how ES Chapter 8 Biodiversity (APP-047) has considered the impact of the Scheme on barbestelle bats (Barbastellus barbastella) using survey data obtained for the Scheme and by others relating to the Core Sustenance Zone for barbastelle bats.  Reviews the potential cumulative effects of the A47 Scheme with the Roarr! Dinosaur Adventure Park Extension in response to NCC's Written Representation request.  Concludes that though the likelihood of cumulative effects is low, the significance of any residual cumulative effect would be no greater than the residual effect of the large adverse residual effect of the Scheme alone.  Highways England also submitted a revised ES Chap	Under discussion	



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			<ul> <li>Zones) of the proposed A47 Thickthorn Roundabout improvements" has been deleted, on the basis that both of these two woodland sites are located beyond the 6km CSZ of the proposed A47 Thickthorn Roundabout</li> <li>To make it clear that it is Dr Charlotte Packman (of Wild Wings Ecology), as distinct from the county council, who "believes that there is a nationally significant breeding barbastelle colony of over 150 bats in this</li> </ul>	This Applicant's response to the status of this colony, consultation with third parties and cumulative effects with Norwich Western Link road scheme is provided in Common Response I from the Applicant's Response to the Releva Representations (REP1-013), copied below for ease of reference.  Additional to that response, the main impact risks associated with Core Sustenance Zones would be effects related to bats crossing the Scheme to access feeding zones beyond the Scheme from their colony. ES Appendix 8.1.		
			<ul> <li>To explain that, to date, no survey data has been shared with Norfolk County Council or otherwise published by Dr Packman to provide supporting evidence which would substantiate Dr Packman's belief that there is a nationally significant breeding barbastelle bat colony in the area</li> <li>To confirm that, currently, the area is not formally designated as an SSSI or SAC on the basis of the presence of barbastelle bats, and nor has it been selected for assessment by the Joint Nature Conservation Committee and, as such, it does not have the status of a notified SSSI or a possible SAC (pSAC).</li> <li>8, and 9 have the most bat traffic. With regards the 6km Core Sustenar for Barbestelle bats, it is important to note that crossing points 1 and 9 or more from the centre of the Roarr! Dinosaur Adventure, where the Barbestelle bat colony is located at Morton on the Hill. Crossing points are located approximately 5.5 km from the centre of the Roarr! Dinosaur Adventure. With crossing points 7 and 8 located immediately adjacent to north side of the urban village of Honingham, there is no prime feeding within 6km beyond crossing points 7 and 8. However, as outlined in the responses to Q3.0.10 and Q3.0.12 mitigation is proposed to maintain the for bats to cross the Scheme in these areas.</li> <li>Common Response I from the Applicant's Response to the Relevance Representations (REP1-013)</li> </ul>	Barbestelle bat colony is located at Morton on the Hill. Crossing points 7 and 8 are located approximately 5.5 km from the centre of the Roarr! Dinosaur Adventure. With crossing points 7 and 8 located immediately adjacent to the north side of the urban village of Honingham, there is no prime feeding habitat within 6km beyond crossing points 7 and 8. However, as outlined in the above responses to Q3.0.10 and Q3.0.12 mitigation is proposed to maintain the ability		
				Common Response I from the Applicant's Response to the Relevant Representations (REP1-013)		
		in ES Chapter 8 Biodiversity (APP-047) and the Report to Inform Regulations Assessment (APP-139). Section 8.4 of ES Chapter 8 the Applicant has consulted the NWL scheme promoters on a mo regarding barbastelle bats and the wider mitigation proposals for Scheme. In addition, bat mitigation implemented as part of the co northern distributor road and the associated monitoring data were Data was exchanged on the locations of barbastelle bats, survey and mitigation <sup>1</sup> . These meetings are still ongoing.  The Applicant is also part of the NWL Ecology Liaison Group, wh WSP (NWL ecological consultants); Norwich Bat Group; NCC; Th Trust; Wensum Valley Bird Watching Society, Norfolk and Norwi Society, Norfolk Badger Trust, Natural England, Environment Age of Tud Valley, Costessey Conservation Volunteers, Norfolk Amph		Effects on Barbestelle bats Barbastella barbastellus have also been considered in ES Chapter 8 Biodiversity (APP-047) and the Report to Inform Habitats Regulations Assessment (APP-139). Section 8.4 of ES Chapter 8 outlines how the Applicant has consulted the NWL scheme promoters on a monthly basis regarding barbastelle bats and the wider mitigation proposals for bats by the Scheme. In addition, bat mitigation implemented as part of the completed northern distributor road and the associated monitoring data were discussed. Data was exchanged on the locations of barbastelle bats, survey techniques and mitigation <sup>1</sup> . These meetings are still ongoing.		
			The Applicant is also part of the NWL Ecology Liaison Group, which includes WSP (NWL ecological consultants); Norwich Bat Group; NCC; The Woodland Trust; Wensum Valley Bird Watching Society, Norfolk and Norwich Naturalist Society, Norfolk Badger Trust, Natural England, Environment Agency, Friends of Tud Valley, Costessey Conservation Volunteers, Norfolk Amphibian and Reptile Group, Norfolk River Trust, Buglife and Butterfly Conservation.			
				Section 8.4 of ES Chapter 8 also confirms the Applicant consulted Anna Fullford (formerly Berthinussen), at Conservation First. Ms Fullford has published papers in 2012 <sup>2</sup> and 2015 <sup>3</sup> on bats use of gantries and underpasses to cross roads safely.		
				With regards consideration of Wild Wings Ecology's research findings, the Applicant is aware that Norfolk County Council has requested Wild Wings Ecology's research findings but has not yet received that data. This was confirmed at a meeting of Norfolk County Council's planning and highways delegation committee on Friday 28 August 2021, where cabinet member Graham Plant said he was concerned as to why data had not been released by Dr Packman following her study <sup>4</sup> . In order to further assess the position, the Applicant asks that the Examining Authority requests that a copy of the Wild		

Data was also exchanged for GCN, reptiles, birds, fungi and invertebrates.
 Berthinussen, A., & Altringham, J. (2012). Do bat gantries and underpasses help bats cross roads safely? PLoS ONE, 7.
 Berthinussen, A., & Altringham, J. (2015). WC1060 Development of a Cost-Effective Method for Monitoring the Effectiveness of Mitigation for Bats Crossing Linear Transport Infrastructure. Leeds.

<sup>&</sup>lt;sup>4</sup> See local news article:



Ref.	Issues	Document	Norfolk County Council Position	Highways England Position	Status	Date
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		(if relevant)				
				Wing's Ecology research findings is provided to the Examining Authority and relevant Interested Parties (Norfolk County Council. Natural England and the Applicant) in order that that data can be properly understood in advance of any Issue Specific Hearing to address the topic.		
				As outlined in Section 8.4 of ES Chapter 8, the assessment of impacts on ecology and nature conservation follows the most recent national design standards for highways, the Design Manual for Roads and Bridges (DMRB).		
				<ul> <li>Ecological survey and design measures – DMRB, LA 118 Biodiversity Design.</li> </ul>		
				<ul> <li>Assessing and reporting the effects of highway projects on biodiversity – DMRB, LA 108 Biodiversity (Revision 1).</li> </ul>		
				<ul> <li>Assessment and reporting of the implications on European sites – DMRB, LA 115 Habitats Regulations assessment) (Revision 1).</li> </ul>		
				The assessment has also been undertaken in reference to the Chartered CIEEM's Ecological Impact Assessment (EcIA) guidance (2018).		
				As reported in the ES Chapter 8 and the Report to Inform Habitats Regulations Assessment, the only site nationally and internationally designated for bats requiring assessment is Paston Great Barn Special Area of Conversation, located 29.3km north east. Although it is claimed there is a potentially nationally significant bat colony to the north of the Scheme, the evidence that such a colony exists is based on a single study which has not been released so cannot be assessed by the Applicant. If Wild Wing's Ecology provides the Applicant with the study, the Applicant will provide further comments in writing in due course.		
				Meanwhile, as there is currently no colony with statutory designated status, any bats from the Morton-on-the-Hill have been considered on the same basis as all other non-designated bat colonies. Therefore, the cumulative effects assessment only considered non-statutory bat roosts within 50m of the DCO boundary and where that search area overlapped with the NWL. Morton-on-the-Hill, where Norfolk County Council state the colony is located, is several kilometres north of the nearest point on the Scheme DCO boundary.		
				It is noted that Norfolk County Council's reference to a nationally significant breeding barbastelle colony of bats is in a document presented for discussion with an agenda for the Planning and Highways Delegations Committee (see    Description		
				So far as the Applicant is aware, the assertion that there is a nationally significant breeding barbastelle colony in this area is based on the Wild Wings Ecology research (see news article:		
				Cumulative impacts are considered in ES Chapter 15 Cumulative Effects Assessment (APP-054) in accordance with the requirements of the Infrastructure Planning EIA Regulations 2017 and Planning Inspectorate Advice Note Seventeen. Other developments were included as part of the cumulative assessment methodology and this is detailed in section 15.3 of ES Chapter 15. However, as noted in response to representations by Norfolk County Council, with the release of more details about the NWL scheme in the NWL Scoping		



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
				Report the Applicant is proposing to update ES Chapter 15 to reflect the NWL scheme as a Tier 2 development under Advice Note Seventeen guidance. This proposed amendment will include an updated review of inter-project cumulative biodiversity effects, including on bats.		
32	Water Quality: Hydrology Assessment	Statutory Consultation Report to Inform the Habitats Regulations Assessment	The Scoping Report highlights that 'changes in water quality or hydrology (of the River Tud) have the potential to impact other qualifying features of the (River Wensum) SAC, including brook lamprey and bullhead. Specific surveys are not proposed for these species, but the impact will be assessed within the HRA using the results of the hydrology assessment and implementation of appropriate mitigation. No sites suitable for brook lamprey spawning have been identified.' It remains unclear how the assessment of suitable spawning sites was carried out.	A Report to Inform the Habitats Regulations Assessment (HRA) (TR010038/APP/6.9) and assesses the impact on the River Wensum SAC.  Natural England agreed with the conclusion of no likely significant effects on the River Wensum SAC.	Agreed	10/11/21
33	Water Quality: Aquatic surveys	Statutory Consultation Environmental Statement	River Lamprey was identified within the River Tud during other aquatic surveys which is a Species of Principal Importance.  There have been no fish surveys carried out to date and only incidental records during other aquatic surveys recorded.  Given the proposed significant in-channel works and river diversion necessary on the River Tud and potential to impact on migratory fish species including European eels, we recommend that the applicant carries out fish surveys.	Impacts on ecology are assessed in Chapter 8 of the Environmental Statement, Biodiversity (TR010038/APP/6.1) together with mitigation measures proposed as part of the Scheme to avoid and/or reduce significant effects.  The mitigation measures outlined in Chapter 8 of the Environmental Statement, Biodiversity (TR010038/APP/6.1) have been tried and tested and therefore best practice is being followed to mitigate the effects on the environment.  The Project Team have been working closely with the Environment Agency to remove the need for any diversion of the River Tud or in channel works during construction of the River Tud Structure.  Post-note:  Highways England are currently liaising with the Environment Agency and working together with them to agree a way forward to avoid and reduce significant effects, and comply with the Water Framework Directive. Highways England have commissioned accredited surveyors at Norfolk Rivers Ecology Ltd to carry out a river condition assessment survey and provide recommendations to compensate for any identified potential effect on the river, in particular the reduction in condition that will likely arise from the point of the new bridge crossing the River Tud. This assessment has identified stretches of river that could be subject to management to improve its condition and a copy of the report will be shared with NCC. To ensure Highways England provide adequate compensation for all identified effects this will be quantified using the Biodiversity Metric 3.0. Further agreement on what measures to implement will need to be reached and Highways England will continue to liaise with landowners and the Environment Agency to agree the detailed design and practical implementation of ecological enhancement measures.	Under discussion	
34	Ecology: Biodiversity net gain:	Statutory Consultation Environmental Statement Environmental Masterplan	Biodiversity data collected should be suitable for use in biodiversity metrics for assessment of 'net gain' of biodiversity.  Although we recognise that NSIP projects do not have to demonstrate net gain we would suggest that potential 'net gain' for biodiversity could be demonstrated using the Defra metric.	Impacts on ecology are assessed in Chapter 8 of the Environmental Statement, Biodiversity (TR010038/APP/6.1) together with mitigation measures proposed as part of the Scheme to avoid and/or reduce significant effects.  Where possible, woodland areas have been retained as part of the Scheme. Where this is not possible, compensatory planting has been proposed. A landscape masterplan is presented within the DCO application to identify replacement landscape planting and ecological habitat creation.  The Environmental Masterplan (TR010038/APP/6.8) aims to achieve no net loss of biodiversity value as part of the Scheme and retain habitat connectivity. The relevant planning authority will be consulted on the final landscaping design under the DCO requirement 5.	Agreed, subject to final landscape design under draft DCO Requirement 5	02/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
35	Ecology: Data Sharing	Statutory Consultation	The PEIR document refers to 'Norfolk County Council data regarding surveys that have been undertaken in 2019 for Norwich Western Link Road and previous records from surveys to support the now completed Norwich Northern Distributor Road. On assessment of this data, further surveys may be required in 2020.'  A process for sharing information is being discussed between the ecologists working for the developers of the various schemes.	Bat records were obtained from Norfolk County Council and engagement with other relevant parties, such as Norfolk Biodiversity Information Service (NBIS). Highways England are also engaging with the Norwich Western Link (NWL) Ecology Liaison Group.	Agreed	02/11/21
36	Ecology: Mineral assets and waste:	Statutory Consultation HE551489-GTY- HGN-000-DRCH- 30030 PEIR Environmental Statement	The proposed route alignment shown in the Scheme Boundary Plan (drawing no. HE551489-GTY-HGN-000-DRCH-30030) contains small areas that have been identified as safeguarded mineral resources (sand and gravel) in the Norfolk Minerals and Waste Local Plan.  The PEIR states in paragraph 9.3.3 that the Environment Statement accompanying the submission will assess the effects of the scheme on the sterilisation (substantially constrain or prevent existing and potential future use of) mineral sites or peat resources. Paragraph 9.4.8 of the PEIR identifies that small areas of safeguarded mineral resources within the scheme site boundary. It also states that the ES will identify mineral safeguarding sites and assess the potential for sterilisation. The Mineral Planning Authority considers that this is an appropriate strategy, and that the ES should as part of the future assessment consider the potential for reuse of mineral along the route to mitigate any potential sterilisation.  Table 9.1 of the PEIR lists some waste sites which have an Environment Agency Permit as landfills. While these sites may still have permits, information held by Norfolk County Council, as the Waste Planning Authority, indicates that only Spixworth Quarry is actively importing waste.  A list of the active safeguarded mineral and waste sites as at July 2019 can be found on the council's website at:  https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-andstrategies/minerals-and-waste-planning/list-of-sites-safeguarded-under-core-strategy-policy-cs16.pdf?la=en	Chapter 10 of the Environmental Statement, Material assets and waste (TR010038/APP/6.1) has assessed the impact on safeguarded mineral resources as identified in the Norfolk Minerals and Waste Development Framework. The chapter also assesses landfill capacity and disposal to landfill requirements.  Appendix 10.3 to the ES, Mineral Impact Assessment, (TR010038/APP/6.3) assesses the effects of the Proposed Scheme onto any potential sterilization of mineral sites and peat resources. Mineral safeguarding sites have been identified and assessed within this Appendix.  Chapter 10 also assesses landfill capacity and disposal to landfill requirements.	Agreed	23/09/21
37	Construction: Noise and Vibration:	Statutory Consultation Environmental Statement	Highways England should seek to minimise noise and vibration impacts during both construction and subsequent operation of the road.  At this time the authority has no comments to make but is supportive of the methodology being adopted.	Baseline Noise surveys were undertaken during the period of 8 <sup>th</sup> – 15th September 2020 with locations consulted upon with NCC and local district councils in advance. The noise assessment is presented in Chapter 11 of the Environmental Statement ( <b>TR010038/APP/6.1</b> )	Agreed	23/09/21
38	Flood Risk & Drainage: Road Drainage and the Water Environment	Statutory Consultation Environmental Statement National Policy Statement for National Networks 2014 PEIR Flood Risk Assessment	The county council, in its role as Lead Local Flood Authority (LLFA), provided detailed information within the EIA scoping report in September 2019 and these comments should be read in combination with them.  The LLFA suggest that the following information should be included within the final versions of the Flood Risk Assessment (FRA), Drainage Strategy and Environmental Assessment for the DCO application to enable it to meet with local and national guidance.  Additional information should be provided on how the scheme will assess other sources of flooding (fluvial associated with the ordinary watercourses, surface water flow paths and groundwater flooding).	Chapter 13 of the Environmental Statement, Road Drainage and the Water Environment (TR010038/APP/6.1) is informed by a flood risk assessment and drainage strategy report presented in ES Appendix 13.1 and ES Appendix 13.2 respectively (TR010038/APP/6.3) and has considered use of sustainable urban drainage systems and management of surface water and groundwater drainage flooding risks taking into account relevant guidance on future climate change allowance and need to control discharge run-off rates.  The flood risk assessment and drainage strategy has considered all sources of flooding posed by and posed to the Scheme and has given due consideration to the points sets out by the LLFA during statutory consultation. In addition, the Applicant has provided additional information with regards to flood risk at Deadline 3 (REP3-026).	Agreed	10/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
			<ul> <li>This is in line with National Policy Statement for National Networks 2014, considering all sources of flooding (section 5.92, 5.93, 5.97, 5.102 to 5.104). This additional baseline information could be included within the Flood Risk Assessment (FRA) and will include:</li> <li>Ordinary watercourses including the proposed crossing point south east of Hockering and flood risk associated with fluvial flooding from this source</li> <li>Groundwater flooding potential following ground investigations, showing where groundwater may be close to surface how this may be managed within the drainage scheme or diverted through/around the development area without adversely affecting the risk of flooding.</li> <li>Surface water flow paths which may cross the area and how these will be incorporated into the drainage scheme or diverted through / around the development without adversely affecting the risk of flooding. This is including flow paths crossing the alignment of the road and associate junctions (South east of Hockering, church / sandy lane and north &amp; east of Honingham – as section 12.4.5 of the PEIR).</li> <li>Demonstration that any SuDS attenuation features will be protected from all sources of flooding to ensure they will be functioning during the 1:100 year plus 40% climate change.</li> <li>Mitigation for any source of flooding is demonstrate e.g. compensatory storage for structures, including SuDS (Sustainable Drainage System), dry culverts or interception drainage.</li> <li>Additional information and evidence is required on how the drainage scheme for the new road will be designed to meet national standards including S2 (peak flow control), S4 (volume Control), S7, S8 and S9 (flood risk within the development including no flooding outside a drainage scheme at 1:30 year event).</li> <li>This would be in line with National Policy Statement for National networks 2014, technical standards for SuDS (section 5.100, 5.110 to 5.115).</li> <li>Evidence should be provided to show how current climate change allowances</li></ul>	The Scheme has been designed in accordance with the National Policy Statement for National Networks, Design Manual for Roads and Bridges (DMRB) standards and Defra's Sustainable drainage Systems: non-statutory technical standards for sustainable drainage systems. A full list of design standards, guidance and design criteria can be found in section 5 of the ES Appendix 13.2 Drainage Strategy Report.  The flood risk assessment and drainage strategy has been developed in liaison with Norfolk County Council as the Lead Local Flood Authority.		
39	Flood Risk & Drainage: Watercourse infiltration	Statutory Consultation  Environmental Statement	The LLFA expect that where possible infiltration is considered over connection to a watercourse in line with the SuDS hierarchy. They expect that any infiltration is proved via appropriate testing along the length and at proposed depth of infiltration feature. In Norfolk, proposed infiltration greater than 2m is classed as 'deep' and is at the end of the SuDS hierarchy similar to connection to a sewer. The LLFA state that water quality assessments for DuDA will consider the sensitive receptors of receiving waterbodies and additional treatment provided where appropriate. They state that the use of DMRB water quality assessment is reasonable.	Chapter 13 of the Environmental Statement, Road Drainage and the Water Environment (TR010038/APP/6.1) is informed by a drainage strategy presented in ES Appendix 13.2 (TR010038/APP/6.3) that has considered use of sustainable urban drainage systems including the consideration of infiltration approaches within the Scheme drainage design.  Section 5.11, 5.12 and section 6.5 of the Drainage Strategy Report (TR010038/APP/6.3) considers the use of infiltration methods within the drainage design. The use of filter drains is proposed, however, the extent of their usage will be confirmed at detailed design and is subject to the findings of the supplementary GI investigations and review by the Environment Agency. The Environment Agency has also stipulated that infiltration methods should not be used where the groundwater levels are less than 1.2 metres below the surface.  Section 5.10 and section 6.8 of the Drainage Strategy Report (TR010038/APP/6.3) outlines the pollution control processes included within the	Agreed	10/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
	Flood Risk & Drainage: SuDS		SuDS using source control should be prioritised e.g. over the edge drainage to filter strips and swales to slow water and treat it close to where it falls.  The LLFA advise against using pipes to large infiltration / attenuation ponds as this provides little resilience for this type of infrastructure. We have experience of highly variable ground conditions in Norfolk, even after extensive ground investigation.  Smaller structures do provide greater resilience if ground conditions prove to be not as favourable as anticipated, allowing for easier alternative arrangements to be designed.  Where existing drainage schemes are being retained, then an assessment to show why improvements to upgrade the drainage to current standards cannot be undertaken.  The LLFA would expect on a large scheme such as this where significant landscaping is being undertaken retrofit of SuDS to improve runoff quantity and quality is scoped and provided.  Consideration should be made that the road will be a linear structure that may impede natural greenfield runoff and mitigation suggested to maintain drainage patterns. This may include agricultural land drainage systems.	drainage design of the Scheme. Surface water quality (DMRB HEWRAT) assessment of the proposed drainage is provided in ES Appendix 13.3 Water Quality Assessment (TR010038/APP/6.3) and a groundwater quality assessment (DMRB HEWRAT) is provided in ES Appendix 13.4 Groundwater Assessment.  The drainage strategy has been developed in liaison with Norfolk County Council as the Lead Local Flood Authority.  Chapter 13 of the Environmental Statement, Road Drainage and the Water Environment (TR010038/APP/6.1) is informed by a drainage strategy presented in ES Appendix 13.2 (TR010038/APP/6.3) that has considered use of sustainable urban drainage systems, existing ground conditions and the tie into the existing highway drainage.  Section 5.11, 5.12 and section 6.5 of the Drainage Strategy Report (TR010038/APP/6.3) considers the use of infiltration methods within the drainage design. The use of infiltration basins is not currently proposed. The use of filter drains (source control) is proposed, however, the extent of their usage will be confirmed at detailed design and is subject to the findings of the supplementary GI investigations and review by the Environment Agency. The Environment Agency has stipulated that infiltration methods should not be used where the groundwater levels are less than 1.2 metres below the surface.  There are five networks in the proposed drainage design that are proposed to tie into existing drainage systems. These are networks M1, S1, S2, S3 and S4 and are described in Sections 6.3.1 and 6.3.11 to 6.3.14 of ES Appendix 13.2 Drainage Strategy Report. In such locations it is not feasible to incorporate attenuating SuDS over such a short distance or as a result of the existing physical constraints. In these locations, the proposals are to utilise flow controls with oversized pipes in the existing verge / ditch if the flows are found to be excessive. This is covered within Section 6.6.3 and Table 6-2. Proposed treatment measures for highway runoff on these networks is documented in section 6.8 of the	Agreed	
	Flood Diek & Drainers			natural catchment drainage crossing the Proposed Scheme in the context of flood risk and interceptor drains or 'dry culverts' have been incorporated into the proposed design to maintain surface water overland flow pathways.  The flood risk assessment and drainage strategy has been developed in liaison with Norfolk County Council as the Lead Local Flood Authority.		
41	Flood Risk & Drainage: Drainage	Statutory Consultation	The LLFA request that an appropriate management and maintenance plan be provided for the scheme including an assessment for the temporary needs for the maintenance of ordinary watercourses, culvert etc which may have access cut off for the riparian owners during the construction phase. It would also include a phasing plan of how the drainage scheme will be constructed and vegetated well in advance of the required operational use.	The drainage strategy has been developed in liaison with Norfolk County Council as the Lead Local Flood Authority.  The Project Team will continue to engage with the LLFA on the Scheme design through the development period and will provide the required documentation during Detailed Design in advance of construction commencing.	Agreed	03/11/21
42	Flood Risk & Drainage: SuDS	Statutory Consultation	Unvegetated SuDS can cause pollution with the mobilisation of suspended solids into the environment.  The LLFA understand that all consenting on ordinary watercourse may fall within the Norfolk River Internal Drainage Board.	The drainage strategy has been developed in liaison with Norfolk County Council as the Lead Local Flood Authority.  The Project Team will continue to engage with the LLFA on the Scheme design through the development period and will provide the required documentation during Detailed Design in advance of construction commencing.	Agreed	03/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
			If any structures are proposed outside of their area, this will be consented by NCC LLFA.  The LLFA would welcome early discussions on this. The LLFA would also welcome a meeting to discuss requirements and how overlap with the Environment Agency and/or Internal Drainage Board (Norfolk Rivers) can be managed regarding flood risk from fluvial sources of flooding.  The LLFA are also open, to having a joint meeting with any other flood risk management authority.  Further guidance on information required by the LLFA from applicants can be found at: <a href="https://www.norfolk.gov.uk/rubbish-recycling-and-">https://www.norfolk.gov.uk/rubbish-recycling-and-</a>	Combined meetings have been held with the EA and LLFA throughout scheme development, where all parties have worked collaboratively to achieve compliant solutions.		
			planning/flood-and-water-management/information-for-developers			
43	Climate	Statutory Consultation PEIR	The statement in the climate section on page 15 on the PEIR Non-Technical Summary does not refer to the new version of the government's climate target (net zero emissions target by 2050) but refers to the old 80% target. Section 1.16 of the PEIR Non-Technical Summary could be worded more clearly.  For example, Section 1.16.2 states that the "the assessment of effects on climate will consider the extent to which carbon emissions resulting from the Proposed Scheme may impact the global climate and contribute towards climate change" without elaborating on this.  Section 1.16.4 states that "the Proposed Scheme is anticipated to generate an increase in carbon emissions during both construction and operation".  Reference should be made to how government's net zero climate change target has been taken into account in the assessments.	Section 13. 1 of the PEIR (Methodology for effects on climate) acknowledged The Climate Change Act (2008) sets legally binding targets for reducing the UK's carbon emissions by at least 100% by 2050 (net zero), relative to a 1990 baseline.  The Environmental Statement ( <b>TR010038/APP/6.1</b> ) includes Chapter 8 Biodiversity and Chapter 14 Climate that assess the impacts of the Scheme on and by the climate and, where needed, propose mitigation measures to help the Scheme support the government's net zero climate change and biodiversity net gain targets.	Agreed	26/10/21
44	Governance		Norfolk County Council has been working closely with Highways England and its consultants on this project and has regular progress meetings.	The Project Team will continue to work collaboratively with the Lead Local Authority	Agreed	23/09/21
45	Scheme Support: NWL delivery	Relevant Representation response RR-037.1 (REP1-013)	While the County Council has long supported the principle of full dualling of the A47 – and this proposal is consistent with that objective – there are a number of detailed issues in respect of, amongst other things, local highway and access matters, flood risk and environmental management, and potential impact on delivery of council services that will need to be resolved ahead of any final decision on the DCO. The most significant items of concern relate to resolving issues related to:	Highways England acknowledges the Council's comments, which reflect the benefits and the planning policy review presented in the Case for the Scheme (APP-140).	Agreed	01/11/21
			How to deal with traffic issues rising on the local road network should the Norwich Western Link (NWL) not come forward, or not come forward within a reasonable time period after the dualling scheme			
			Connections to the Food Enterprise Park			
			The County Council taking on responsibilities for parts of the existing A47 trunk road that will be de-trunked following the scheme.			
			It is acknowledged that this statement is contextual and these issues are covered in more detail in the following representations.			
46	Scheme Support: DCO conditions and requirements	Relevant Representation response RR-037.2 (REP1-013)	In summary the County Council supports the principle of dualling the A47 between North Tuddenham to Easton subject to the implementation of appropriate highway, historic environment, and surface water conditions / requirements being resolved through the DCO process. NB the County Council will be submitting a full detailed statement to the Planning		Agreed	01/11/21



Ref.	Issues	Document	Norfolk County Council Position	Highways England Position	Status	Date
No.		References (if relevant)				Agreed
			Inspectorate highlighting all issues it wishes to be resolved through the above process.			
			It is acknowledged that this statement is contextual and these issues are covered in more detail in the following representations.			
47	Scheme Support: Principle of A47 Dualling	Relevant Representation response RR-037.3	Norfolk County Council supports the principle of dualling the A47 between North Tuddenham and Easton subject to:	Highways England acknowledges the Council's comments.	Agreed	01/11/21
		(REP1-013)	(a) The implementation of appropriate highway, historic environment, and surface water conditions / requirements being resolved through the DCO process			
			(b) The detailed comments set out in this report being addressed through the DCO process.			
			1 Substantive Comments			
			Overview Comments			
			1.1 The principle of dualling the A47 is fully supported. This has been a longstanding objective of the county council. The county council leads the A47 Alliance, which has been campaigning for full dualling of the A47 from Lowestoft to the A1 at Peterborough with appropriate grade-separation. The current proposals meet this aspiration, providing a dual carriageway standard A47 together with grade-separated junctions.			
			It is acknowledged that this statement is contextual and these issues are covered in more detail in the following representations.			
48	Road Design: Asset Ownership	Relevant Representation response RR-037.4 (REP1-013)	De-trunking - No agreement has been made to accept any current Highways England assets and we will not do so until an agreement process including exchange of data and provision of funding regarding assets which may require attention in the short to medium term has been completed.	The Applicant will work with Norfolk County Council to settle and conclude a detrunking agreement for the highway assets that will no longer form part of the strategic road network, as well as new highway assets that would become the responsibility of the local highway authority.	Under discussion	
			The agreement should be based on the condition and number of the assets to generate either a sum of funding to be transferred to Norfolk County Council, or the asset brought up to an as new or good condition. The county council would expect to receive a commuted sum, agreed with Highways England, for future maintenance of transferred assets.			
49	Road design: Wood Lane Junction	Relevant Representation response RR-037.6	The link road between the two roundabouts at the Wood Lane junction is proposed as a single carriageway through an underpass beneath the dualled A47. Norfolk County Council has raised concerns about the	The Applicant has engaged with the Local Highway Authority (Norfolk County Council) and their internal project team promoting the NWL scheme regularly throughout the design development process.	Agreed	24/09/21
		GENERAL ARRANGEMENT	capacity of this, its possible future long-term capacity and also about its resilience should there be an incident on the underpass.	The Applicant has shared traffic information and models to ensure an efficient approach and to understand the differences between the two traffic models, as		
		PLANS	This part of the network is proposed to form part of the local, non-trunk	explained within Section 9.2 of the Scheme Design Report, Rev.1 (AS-009).		
		REGULATION 5(2)(o) SHEET 9	road network and future maintenance and management would fall to the county council. The county council needs to be assured that its design can	The Applicant has undertaken traffic modelling of the proposed junctions and		
		OF 23 HE551489- GTY-LSI-000-DR- CH-31009)	accommodate future traffic flows (as it is through an underpass it would be difficult / expensive to widen in the future) and that the network can be properly managed in the event of any incidents occurring in the underpass.	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		
		Scheme Design Report, Rev.1 (AS- 009)	(Document reference: GENERAL ARRANGEMENT PLANS REGULATION 5(2)(o) SHEET 9 OF 23 HE551489-GTY-LSI-000-DR-CH-31009)	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.		
		Case for the				



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
		Scheme (APP-140) Structure S03 in the Engineering Drawings and Sections document (APP-010)	Post note  Norfolk County Council's written comments set out concern about the resilience of Wood Lane Junction, although we acknowledged that we were awaiting the full modelling analysis to back up the justification for the applicant proposing that this be single carriageway only. This has been discussed further with the applicant. The applicant has confirmed that the operational traffic modelling assessments show that the single carriageway link road between the two roundabouts is appropriate for the anticipated traffic flows. An independent assessment has also been undertaken by the county council's NWL Delivery Team. The council can confirm that it accepts the applicant's proposal at this junction.	The NWL project team undertook an independent assessment and concluded the same findings. This was reported back to the Applicant by Norfolk County Council's Infrastructure Delivery Manager.  The Applicant has undertaken a Stage 1 Road Safety Audit and the road safety audit team did not raise any actions regarding the single lane link provision or resilience.  The Applicant has consulted with Highways England Operations Department and Norfolk County Council's Safety team, and no concerns were raised regarding the provision or resilience of the proposed link road.  The Applicant supplied in the DCO application a drawing of the proposed Wood Lane underbridge; see Structure S03 in the Engineering Drawings and Sections document (APP-010). The drawing illustrated that the proposed structure cross section carries a 7.3m wide carriageway, with 1m hard strips and 3m verges. This provides a clear span of 15.3m and would permit a future upgrade if required.  The Applicant will continue to discuss this with Norfolk County Council and will record the outcome in the Statement of Common Ground.		
50	Street Lighting: Wood Lane	Relevant Representation response RR-037.7 (REP1-013) Draft Development Consent Order, Rev.0, page 47 paragraph (d)	The lighting strategy for the Wood Lane junction has not been sufficiently defined to assess the interface with the NWL. This issue need to be resolved between Highways England and the county council.  (Document reference: TR010038-000123-3.1 Draft Development Consent Order, page 47 paragraph (d) includes street lighting as further development works.)  POST NOTE: Should be designed with support from an Ecologist.  POST NOTE: The Local Highway Authority is to be consulted on the provision of lighting during the detailed design of the scheme.	The Applicant has engaged with the Local Highway Authority (Norfolk County Council) and their internal project team promoting the NWL scheme regularly throughout the design development process.  The Applicant provided the Scheme's preliminary lighting design and cable duct information in both drawing and model formats to the NWL project team on the 10 November 2020.  The Applicant also formed a user group with Norfolk County Council to commence early discussions on the de-trunking of existing assets and the handover of new assets. This has led to early discussions on how, through efficient design, capacity could be provided within the Applicant's Scheme allowing a simple connection point for the NWL scheme lighting on approach to the northern wood lane roundabout.  The Applicant will continue to work collaboratively with the NWL contractor and project team.  POST NOTE:  The lighting team will liaise with a qualified Ecologist during the detailed development of the detailed design.  The lighting designer will consider the following guidance when developing their detailed design: "The Bat Conservation Trust and Institution of Lighting Professionals issued Guidance Note 08/18 Bats and Artificial Lighting in the UK in 2018." This guidance document is aimed at lighting professionals, lighting designers, planning officers, developers, bat workers/ecologists and anyone specifying lighting.  The relevant local planning authority would be consulted on the final lighting design under Requirement 3 'Detailed Design' of the draft DCO.	Agreed	28/01/22
51	Road Design: Wood Lane speed limit	Relevant Representation response RR- 037.11 (REP1-013) TRAFFIC	There is an existing 50mph speed limit traffic regulation order along Wood Lane. The proposed link road to the existing Wood Lane should also be restricted to 50mph.  (Document reference: TRAFFIC REGULATIONS PLANS REGULATION 5(2)(o) SHEET 10 OF 23 HE551489-GTYLSI-000-DR-CH-35010)	The Applicant has agreed to update the Traffic Regulation Plans and dDCO schedule to reflect this requested change, which will not affect any of the EIA assessments. The updated plans and dDCO will be provided by either Deadline 2 or 3 to ensure the updated documents are available ahead of the November Hearings.	Agreed	23/09/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)  REGULATIONS PLANS  REGULATION 5(2)(o) SHEET 10 OF 23 HE551489- GTYLSI-000-DR- CH-35010)				
52	Traffic Modelling: Longwater Interchange	Relevant Representation response RR- 037.13 (REP1-013) Document 9.3 A47/A1074 Longwater Junction Impact Analysis	The county council also has concerns about the scheme's potential impacts on the adjacent Longwater Interchange. Highways England need to present clear evidence that this junction would not be affected by the proposal and – if it is – to propose appropriate mitigation.	The Applicant has engaged with the Local Highway Authority (Norfolk County Council) and their appointed Traffic lead regularly throughout the design development process and provided summary traffic information as requested to demonstrate there was no material impact on the Longwater Interchange.  A Technical Note, presented at Deadline 1 as document 9.3 A47/A1074 Longwater Junction Impact Analysis, has been prepared recording the previous operational modelling discussions and issued to Norfolk County Council for review and comment.  POST NOTE: Highways England will continue to work with Norfolk County Council to maintain Longwater Junction's operational performance.	Agreed	23/09/21
53	Road design: Food Enterprise Park	Relevant Representation response RR- 037.14 (REP1-013) Scheme Design Report, Rev.1 (AS- 009) Consultation Report Annex J - Section 47 Consultation Materials (APP- 034) Consultation Report (APP-024)	The council considers that the proposed arrangements at Blind Lane do not include a suitable access for the Food Enterprise Park (FEP) and do not suggest an alternative for how access might be provided. The FEP is a significant development comprising: Agri-tech businesses which make use of the local agri-science base; food technology; processing and manufacturing; and storage and distribution. A Local Development Order has been granted for the proposal.  The council considers that Highways England should retain the connection of Blind Lane to the A47, via the new roundabout junction south of the A47 forming part of the Taverham Road junction. Blind Lane could be closed at a point to the south if concerns about additional through traffic resulting from the A47 dualling scheme materialise following opening. Such an arrangement could allow the FEP to form an access direct to the A47 at this point. If an access to the FEP is not provided at this point, there is likely to be an unacceptable increase in heavy goods movements through the village of Easton as the result of the FEP not having an appropriate alternative access once the Easton roundabout is closed.  POST NOTE: Norfolk County Council supports a connection to the FEP at the Blind Lane / A47 junction. The lack of an access at this point will be likely to lead to an unacceptable increase in heavy goods movements through the village of Easton.  The council notes that closure of Blind Lane is required in the LDO at an appropriate trigger point, to be agreed in writing with the local planning authority. The council notes the comments received by the applicant regarding potential use of Blind Lane for through traffic should this road remain open following construction of the A47 North Tuddenham to Easton scheme. The council would therefore support closure of Blind Lane at some point on its length to through traffic.  The council acknowledges that the proposed design of the North Tuddenham to Easton scheme allows a connection to be made to access the FEP at the Bl	The Applicant has explained its reason for not providing a connection to Blind Lane within Section 9.3 of the Scheme Design Report, Rev.1 (AS-009).  The Applicant acknowledges that during statutory consultation, in 2020, the initial design concept proposed the Norwich Road junction with a side road connection to Blind Lane; see drawing on page 10 of Consultation Report Annex J - Section 47 Consultation Materials (APP-034).  However, statutory consultation feedback raised concerns about the provision of a link to Blind Lane in light of Local Development Order (LDO) requiring the closure of Blind Lane and the provision of a link for the benefit of the private developers of the Greater Norwich Food Enterprise Zone (FEZ).  Therefore, the Applicant reviewed the legal position and determined there is no existing or contingent requirement that the LDO requires the Greater Norwich FEZ site to be accessed directly from the A47 given the approved alternative route along Church Lane, Easton. The analysis is set out in Section 9.3 of the Scheme Design Report, Rev.1, (AS-009) and the removal of Blind Lane post statutory consultation is reported in Table 4.12 (item no. 12) of the Consultation Report (APP-024).  However, the Applicant acknowledges that the developer of the FEZ site may wish to obtain consent to create their own connection to the Scheme in the future. Therefore, Scheme's traffic modelling has taken this into account at the Norwich Road junction to provide capacity for the FEZ vehicle movements. The design of the Honingham roundabout to Norwich Road junction side road would allow for a third party to create a new highway connection. This commitment is presented in Section 9.3 of the Scheme Design Report, Rev.1 (AS-009).  The FEZ developer was invited to contribute funds to the Scheme to provide a direct connection to the FEZ, but as no offer was received before design was fixed for the assessments the Blind Lane connection remained removed from the Scheme design. The Applicant notes that the promoters of the FE	Agreed	11/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)	The council accepts that responsibility for connection to the FEP including securing the necessary statutory approvals and funding rests with the promoters of the FEP.  The council wishes to continue to work with National Highways, promoters of the FEP and other interested parties including the local planning authority to enable an access to the FEP to be provided at the Blind Lane / A47 junction. This includes to enable the construction of the access as part of the A47 North Tuddenham to Easton scheme, to secure cost efficiencies and minimise disruption, provided that agreement can be reached between the parties in respect of all relevant matters, and all necessary permissions secured.	POST NOTE: The LDO made by Broadland District Council (BDC) on 31 October 2017 required a vehicular access route to the FEP to be approved prior to commencement of development pursuant to condition 2.20 of the LDO as well as the closure of Blind Lane. The route via Church Lane was approved by BDC on 21 December 2018 and has therefore been the intended route since that date. As such, there is no requirement for the Scheme to provide an access over and above what has been approved to-date by BDC.  The Applicant will continue to work with the promoters of the FEP and other interested parties, including the local planning and highways authorities, to explore opportunities to work with the FEP's contractor to construct the access alongside the construction A47 North Tuddenham to Easton scheme, to secure cost efficiencies and minimise disruption, provided that agreement can be reached between the parties in respect of all relevant matters, and all necessary permissions are secured.		
54	Socio-Economic opportunities: job creation	Relevant Representation response RR- 037.15 (REP1-013) Case for the Scheme (APP-140)	The county council would certainly want to see opportunities for inclusive growth and social mobility included in the socio-economic opportunities for Norfolk. We would be willing to work with Highways England or the appropriate agency to support this.  The county council will continue to work proactively with Highways England to encourage apprenticeships, work experience and internships being included at an appropriate stage in the project.  Productivity and other wider economic benefits will arise from the completed schemes. These include journey time savings and reliability improvements, benefitting businesses. These are to be welcomed.	An objective of the Scheme is to increase capacity and reduce journey times along this section of the A47 to support economic and housing growth in region. Section 4.14 'Walking, Cycling and Horse-riding (WCH) Assessment' of the 7.1 Case for the Scheme (APP-140) also demonstrates how the Scheme would provide new WCH facilities, improve accessibility for users in the local area and provide the opportunity to choose active travel modes (e.g. walking and cycling).  The Applicant agrees with Norfolk County Council regarding productivity and wider economic benefits arising from the Scheme, which are reported in Chapter 5 of the Case for the Scheme (APP-140). The Applicant is grateful to Norfolk County Council for welcoming these positive benefits.  The Applicant and Galliford Try, as the Principal Contractor, will explore opportunities to encourage direct and indirect local employment, proportionate to the scale and timescale of the project.	Agreed	23/09/21
55	Construction: Air Quality	Relevant Representation response RR- 037.16 (REP1-013) ES Chapter 5 Air Quality (APP-044) dDCO (APP-017)	The county council supports improvements to air quality and would want to see continued monitoring including in operation of the scheme following construction. The county council would expect the construction phases to be coordinated with the appropriate district councils and local highways teams to minimise, for example, dust, construction vehicle emissions (eg from engine idling) and any short-term impacts of increased stationary traffic close to any local populations.	Section 5.11 of ES Chapter 5 Air Quality (APP-044) concludes that as no significant effects on human health receptors have been identified due to the Scheme, additional air quality monitoring is not required.  A Highways England six-month monitoring study was conducted to inform the environmental assessment by supplementing current available monitoring data and identify pollutant conditions. There were no exceedances of the annual mean NO2 Air Quality Objective observed from the monitoring study.  Measures to minimise impacts on air quality during construction (e.g. dust, vehicle emissions) would be delivered through dDCO (APP-017) Requirement 4 'Environmental Management Plan', which requires the second iteration to be approved by the Secretary of State following consultation with the relevant planning authority. This plan includes action AQ1 in Table 3.1 and Annex B.3 'Construction Noise and Dust Management Plan' to manage the risks to air quality o limit and control emissions to air during construction on sensitive receptors.  The Environmental Management Plan will be supported by controls on construction traffic movements through the traffic management plan, secured through Requirement 10 'Traffic Management' of the dDCO (APP-017).	Agreed	23/09/21



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56	Archaeological Trenching: DCO Inclusions	Relevant Representation response RR- 037.17 (REP1-013)  Requirement 9 of the dDCO  'Record of Environmental Actions and Commitments' of the Environmental Management Plan (APP-143).	A significant amount of archaeological investigations has already been undertaken in association with the above mentioned scheme. Geophysical survey and archaeological trial trenching have been carried out within most of the 'redline' area of the Proposed Scheme.  Following review of reports on the geophysical survey and trial trenching we agreed an outline scope for post-consent archaeological mitigation with Highways England's archaeological consultant at the end of November last year. We recommend that that the following requirements are included with the draft DCO:  1) No part of the authorised development is to commence until, for that part, a written scheme of investigation of areas of archaeological interest, reflecting the relevant mitigation measures, has been submitted to and approved in writing by the Secretary of State, following consultation by the undertaker with the relevant planning authority; Norfolk County Council (Historic Environment strategy and advice team); and Historic England on matters related to its function.  2) The authorised development must be carried out in accordance with the scheme referred to in sub-paragraph (1);  3) The authorised development shall not be put into first use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the scheme referred to in subparagraph (1) and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.	Requirement 9 of the dDCO has been updated as follows:  9.—(1) No part of the authorised development, is to commence until, for that part, a written scheme of investigation of areas of archaeological interest, reflecting the relevant mitigation measures set out in the REAC, has been submitted to and approved in writing by the Secretary of State, following consultation by the undertaker with the relevant planning authority, Norfolk County Council (historic strategy and advice team) and Historic England on matters related to its function.  (2) The authorised development must be carried out in accordance with the scheme referred to in sub-paragraph (1).  The requirements to carry out the site investigation and post investigation assessment in line with the programme and the provision for analysis, publication and dissemination of results and archive deposition are set out in Table 3.1 'Record of Environmental Actions and Commitments' of the Environmental Management Plan (APP-143). The wording in sub-paragraph (3) repeats the commitments in sub-paragraphs (1) and (2), so it is not necessary to include the text proposed in sub-paragraph (3) in Requirement 9.	Agreed	26/10/21
57	Landscape and Visual: Arboricultural Impact Assessment	Relevant Representation response RR- 037.18 (REP1-013) ES Appendix 7.6 – Arboricultural Impact Assessment BS5837:2012 ES Appendix 7.6 Arboricultural Impact Assessment (APP-094) dDCO (APP-017) Requirement 4 'Environmental Management Plan'	NB: This section is in reference to document 6.3 Environmental Statement Appendices: Appendix 7.6 – Arboricultural Impact Assessment:  The Arboricultural Impact Assessment (AIA), in accordance with BS5837:2012 'Trees in relation to design, demolition and construction, recommendations' submitted by RSK ADAS Ltd, dated January 2021 is fit for purpose (based on the information provided at the time of survey) with regards to assessing existing tree quality and calculating impacts. The report also gives clear advice with regards to relevant legislation, construction techniques, utility installation and other on-site methodology to mitigate impacts to trees. However, there are a significant number of category A and B trees designated for removal that should be considered for retention if the road layout changes. By examining the stem diameter measurements in the AIA Tree Survey Schedule and general observation notes, it is likely that a number of these trees are either ancient, veteran or have veteran features.  Ancient and veteran trees can be individual trees or groups of trees within wood pastures, historic parkland, hedgerows, orchards, parks or other areas. They are often found outside ancient woodlands. They are irreplaceable habitats with some or all of the following characteristics (as stated in the .gov.uk guidance note: Ancient woodland, ancient trees and veteran trees: protecting them from development - GOV.UK (www.gov.uk)):  An ancient tree is exceptionally valuable. Attributes can include its:  • Great age	The Applicant welcomes the positive feedback about the report. With regards trees that may be ancient, veteran or have veteran features, the tree survey, reported in ES Appendix 7.6 Arboricultural Impact Assessment (APP-094), was carried out by a team of two arboricultural consultants working together. Both arboricultural consultants are qualified (Level 4 and Level 6) and experienced in carrying out BS5837:2012 surveys, particularly for large infrastructure projects. Each tree was surveyed by both arboricultural consultants, and the assessment of each consultant was that whilst some of the trees proposed to be removed had large stem diameters, they were not deemed to be veteran.  No ancient woodland or ancient trees were identified, and only one tree was identified as having veteran features (T13); however, T13 will be retained.  Upon further review in response to this relevant representation, it has been agreed with the Principal Contractor to add an action to the 2nd iteration of the Environmental Management Plan specifically mentioning this veteran tree and the need to apply measures to avoid affecting this tree to ensure this assessment conclusion is achieved.  This commitment will then be secured through the dDCO (APP-017) Requirement 4 'Environmental Management Plan', which requires approval of the second iteration Environmental Management Plan by the Secretary of State following consultation with the relevant planning authority.	Agreed, subject to 2 <sup>nd</sup> EMP under draft DCO Requirement 4	20/10/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
58	Landscape and Visual: Wholly Exceptional Development.	Relevant Representation response RR- 037.19 (REP1-013) The National Planning Policy Framework (NPPF) Appendix 7.6 – Arboricultural Impact Assessment	Condition Biodiversity value as a result of significant wood decay and the habitat created from the ageing process Cultural and heritage value.  Very few trees of any species become ancient.  All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. The National Planning Policy Framework (NPPF), updated in 2018, includes a provision that "development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons" (paragraph 175c). It is assumed that this development has been classed as 'wholly exceptional', in which case it should:  Avoid impacts Reduce (mitigate) impacts And compensate as a last resort.		Agreed, subject to 2 <sup>nd</sup> EMP under draft DCO Requirement 4	20/10/21
59	Landscape and Visual: Environmental Masterplan	Relevant Representation response RR- 037.20 (REP1-013) Defra Metric 2.0 Environmental Masterplan, Rev.1 (AS-007). Appendix B.5 of the Environmental Management Plan (APP-143) dDCORequirement 5 'Landscaping' of the dDCO (APP- 017) dDCO Requirement 4 'Environmental Management Plan' (APP-017)	In reference to document 6.8 Environmental Masterplan:  The Environmental Masterplan details replanting proposals in detail. It is not clear, at this stage, how mitigation planting has been calculated to ensure 'net-gain' will be achieved, although this is currently not required for NSIPs. This requires further clarification.  Trees and woodlands are part of the wider landscape mitigation that will be required and it should be the quality and resilience of the resulting landscape, taking all habitats into account, rather than the number of replacement trees that will dictate whether the mitigation is acceptable. We would expect a minimum 30- year compensation strategy to be submitted, based on a calculation of habitat loss and demonstrating net gain. This strategy would usually include the area surrounding the application boundaries and should consider the following examples:  Planting of new woodlands, hedgerows with trees, individual and tree groups  Management plans and schedules to maintain newly planted trees and woodlands  Connecting woodland and ancient and veteran trees separated by development with green bridges  Planting individual trees that could become veteran and ancient trees in future  Management agreements with adjacent landowners to provide or assist with woodland management to improve tree resilience and biodiversity  Providing management schedules for existing veteran and ancient trees / woodlands nearby  Extending existing woodland and ancient woodland through natural regeneration / rewilding	Highways England projects are assessed every three months during the design process using the Defra Metric 2.0 in order to track their Biodiversity Net Gain (BNG) performance, with the final assessment of BNG for a project during the construction stage. Highways England are responsible for monitoring the BNG metric performance across all their road network. BNG will be achieved through considered planting to create new or extend landscaping and biodiversity elements, including species rich grassland, hedgerows, trees, woodland and biodiversity wetlands as shown in the Environmental Masterplan, Rev.1 (AS-007).  Appendix B.5 of the Environmental Management Plan (APP-143) will contain a Landscape and Ecology Management Plan (LEMP) to be produced by the appointed Landscape Architect and Ecologist prior to construction. The LEMP will describe the proposed management and monitoring, including durations, of the landscape and ecological mitigation and compensation features of the Project. The commitment to deliver the LEMP will be secured through dDCO Requirement 4 'Environmental Management Plan'.  The Scheme is currently forecast to achieve a BNG and the Applicant will seek further improvements in the final landscape design to be delivered under Requirement 5 'Landscaping' of the dDCO (APP-017).	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
			Selective veteranisation of specific trees.			
60	Landscape and Visual: Tree Compensation Plans	Relevant Representation response RR- 037.21 (REP1-013) Table 3.1 in the Environmental Management Plan (APP-143) BS5837:2012 (Trees in relation to design, demolition, and construction – Recommendations) Environmental Masterplan, Rev.1, (AS-007) ES Appendix 7.7 Arboricultural Impact Assessment (APP-094)	In addition, should the proposals be approved, it should be conditioned and submitted for approval prior to works commencing, that the AIA will be updated to include a:  • Tree Constraints Plan  • Tree Protection Plan  • Arboricultural Method Statement  • Timetable for Implementation of Tree Protection Works	Action LV3 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143), requires the Principal Contractor to engage an arboricultural consultant to complete an arboricultural method statement. The method statement shall include, but not limited to the following:  • Tree protection measures in compliance with BS5837:2012 (Trees in relation to design, demolition, and construction – Recommendations) during the construction phase.  • Maintenance and monitoring requirements of the tree protection measures.  • Schedule of trees to be removed and based on the Environmental Masterplan, Rev.1, (AS-007) and ES Appendix 7.7 Arboricultural Impact Assessment (APP094).  • Tree root protection zones.  • Contingency plan (chemical spillage, collision, emergency access to the root protection zone).  Delivery of this commitment is secured through the dDCO, Requirement 4 'Environmental Management Plan' (APP-017).	Agreed	20/10/21
61	Landscape and Visual: Landscape & Visual effects chapter 7.2 and 7.3.	Relevant Representation response RR- 037.22 (REP1-013) Norfolk County Council Environment Policy Environmental Masterplan, Rev.1 (AS-007) ES Chapter 7 Landscape and Visual Effects (APP-046)	<ul> <li>Pages 22-26, 3.40: In reference to Chapter 7 of the Environmental Assessment – Landscape and Visual Effects:</li> <li>Norfolk County Council considers that:</li> <li>Paragraph 7.2: Suitable expertise is provided for such an assessment.</li> <li>Paragraph 7.3.2: Where losses are unavoidable, we would of course support suitable mitigation for these losses. Whilst not required, it would be beneficial to see enhancements that offers Net Biodiversity Gain in line with the upcoming environment bill and Norfolk County Council Environment Policy. It will also be important for the mitigation to be tailored to the areas in which it is being placed, what may be suitable at one end of the road, may not be so suitable at the other end. We support the use of Local Landscape Characters to help identify these changes in the landscape.</li> </ul>	The Applicant notes Norfolk County Council's acknowledgement of the expertise provided for the assessment and the use of Local Landscape Character Areas as part of the assessment.  Regarding mitigation, the Applicant has taken into account the variety in the landscape throughout the DCO boundary which is illustrated in the mitigation scheme as presented in the Environmental Masterplan, Rev.1 (AS-007). This was informed by baseline studies, as documented within ES Chapter 7 Landscape and Visual Effects (APP-046).  Regarding biodiversity net gain (BNG), the Scheme is currently forecast to achieve a BNG, but will seek to improve this in the final landscape design to be delivered under Requirement 5 'Landscaping' of the dDCO (APP-017). The Applicant is responsible for monitoring the BNG metric performance across all their road network. Highways England projects are assessed every three months during the design process using the Defra Metric 2.0 in order to track their BNG performance, with the final assessment of BNG for a project during the construction stage.	Agreed	20/10/21
62	Landscape and Visual: Landscape & Visual effects chapter 7.4	Relevant Representation response RR- 037.23 (REP1-013)  DMRB LA 107 Landscape and Visual Effects ES Chapter 7 Landscape and Visual Effects chapter (APP-046)	<ul> <li>Paragraph 7.4.1: Suitable guidance is being used and adhered to, and we welcome other relevant references being taken account of.</li> <li>Paragraph 7.4.5: Comments on Visual Receptors are discussed below.</li> <li>Paragraph 7.4.6: Covers a well-considered and range of assessment criteria, it is encouraging to see such things as night/day impacts and perception of the landscape.</li> <li>Paragraph 7.4.8: We support the consideration of deeper planting in key location to offer increased screening during winter months when vegetation is not in leaf.</li> </ul>	The Applicant notes Norfolk County Council are satisfied with the following components of the methodology of ES Chapter 7 Landscape and Visual Effects chapter (APP-046): guidance considered; criteria for the assessment; scope of the assessment; and approach to agreeing viewpoints with the host planning authorities.  Regarding the construction period, as stated in Paragraph 7.4.10 of ES Chapter 7 Landscape and Visual Effects (APP-046), we can clarify that the paragraph correctly sets out certain parameters regarding the construction period. However, in response to Norfolk County Council's query we can clarify that:  • The estimated construction period is 23 months which would commence in January 2022.	Agreed	20/10/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				7.9.000
			<ul> <li>Paragraph 7.4.10: There appears to be 21 months between Start of construction works and Open for traffic, whilst the estimated duration of construction is listed as 23 months. This may just need clarification if part of the road is to be opened whilst other parts are still under construction.</li> <li>Paragraph 7.4.11: Comments on Cumulative Effects Assessment are discussed below.</li> <li>Paragraph 7.4.12: Verified Photomontage Methodology is discussed below.</li> <li>Paragraph 7.4.14: We understand and accept the need to amend the scope of the assessment following a review of changes in DMRB LA 107 Landscape and Visual Effects.</li> <li>Paragraph 7.4.15: Tables 7-1 and 7-2 lay out the proposed scope in terms of both landscape and visual effects. We broadly agree with the elements which have been scoped in and out of the assessment.</li> <li>Paragraph 7.4.16: We also acknowledge the change in guidance on Visual Representation of Development Proposals and are pleased to see that whilst it does not change the approach, that the amended guidance has been considered.</li> <li>Paragraph 7.4.18: We are satisfied that the viewpoint locations have been agreed with both Breckland District Council and South Norfolk District Council.</li> </ul>	The road will open to traffic in October 2024, however construction activity (e.g. compound removal and site restoration) will continue past this point.		
63	Landscape and Visual: Landscape & Visual effects chapter 7.6	Relevant Representation response RR- 037.24 (REP1-013) ES Chapter 7 Landscape and Visual Effects (APP-046)	Paragraph 7.6.2: We are happy with the 1km from DCO boundary study area of the LVIA and the justified reasoning and support the consideration of receptors beyond 1km where deemed necessary.	The Applicant notes Norfolk County Council are happy with the 1km study area considered within ES Chapter 7 Landscape and Visual Effects (APP-046) and that receptors outside this distance have been considered where judged to be necessary.	Agreed	29/10/21
64	Ecology: Landscape & Visual effects chapter 7.7	Relevant Representation response RR- 037.25 (REP1-013) ES Chapter 7 Landscape and Visual Effects (APP-046)	<ul> <li>Paragraph 7.7.1-7.7.10: We agree with the General Context as laid out within the Baseline conditions. Landscape features including Trees and Hedgerows in the vicinity of the site, and with the potential to be impacted are extensive, and as stated in the AIA, some of these are very high in quality. But it should be noted that even trees of low Arboricultural quality, can still play an important part in the landscape.</li> <li>Paragraph 7.7.17: Landscape Character areas are discussed below.</li> <li>Paragraph 7.7.36 – 7.7.50: We support the representative viewpoints and the reasons for selection. The receptors listed appear to be well considered and justified.</li> </ul>	The Applicant notes Norfolk County Council are satisfied with the baseline conditions, including representative viewpoints, as set out within ES Chapter 7 Landscape and Visual Effects (APP-046). We acknowledge the feedback given and in particular the Applicant agrees that trees assessed as being of lower quality in a BS:5837 arboricultural assessment can play an important role in the landscape.	Agreed	20/10/21
65	Ecology: Landscape & Visual effects chapter 7.8	Relevant Representation response RR- 037.26 (REP1-013) ES Chapter 7 Landscape and Visual Effects	Paragraph 7.8.2 – 7.8.5: We note that separation of Construction and Operational Impacts, but wonder if the removal of existing woodland, individual trees and areas of linear highway planting is a consideration during operation as well as the construction phase as even mitigation planting will not offer a direct replacement of what has been lost.	The removal of trees during the site clearance phase of construction has been considered in the operational assessment. This is particularly relevant to the Year 1 assessment of operational landscape and visual effects, prior to the establishment of mitigation as presented in the Environmental Masterplan, Rev.1 (AS-007).	Agreed	20/10/21



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		(if relevant)				
		(APP-046)				
		Environmental Masterplan, Rev.1 (AS-007)				
66	Ecology: Landscape & Visual effects chapter 7.9	Relevant Representation response RR- 037.27 (REP1-013) ES Chapter 7 Landscape and Visual Effects (APP-046)	<ul> <li>Paragraph 7.9.1: We support the measures proposed for mitigation during construction.</li> <li>Paragraph 7.9.2: The protection and retention of existing vegetation will be imperative to minimise impacts of the scheme, so we fully support the appointment of an Arboricultural consultant. My Arboricultural colleague will be able to comment on the suitability of the tree protection and standard to be adhered to.</li> <li>Paragraph 7.9.6: States the opening year to be 2025, whilst 7.4.10 states it to be October 2024. This should be clarified. All planting and mitigation measures should have taken place prior to opening. Depending on the correct year of opening, the Year 15 date will also need to be altered to reflect this.</li> </ul>	The Applicant notes Norfolk County Council are satisfied with the mitigation measures during the construction phase as set out within ES Chapter 7 Landscape and Visual Effects (APP-046). The Applicant acknowledges Norfolk County Council's offer to liaise with Norfolk County Council's Arboricultural specialist.  Regarding the opening year as 2025, as stated in Paragraph 7.9.6 of ES Chapter 7 Landscape and Visual Effects (APP-046), the Applicant can confirm that this is correctly stated as it comprises the first full calendar year following completion of construction at the end of 2024. The Applicant judges 2025 to be a reasonable basis for the consideration of landscape and visual effects following the opening of the road and 2040 to form a reasonable year to consider landscape and visual effects 15 years following opening. ES Chapter 7 therefore does not require alteration.	Agreed	20/10/21
67	Ecology: Landscape & Visual effects chapter 7.10	Relevant Representation response RR- 037.28 (REP1-013) ES Chapter 7 Landscape and Visual Effects (APP-046) Environmental Masterplan, Rev.1 (AS-007) Environmental Management Plan (APP-143) Draft DCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (APP-017)	<ul> <li>Paragraph 7.10.4 – 7.10.6: There is extensive losses of landscape features and notable tree losses as a result of this scheme. It will be hard to offer replacements at such scale, but mitigation must be well thought out and the locations carefully considered so as to both minimise the visual impacts of the scheme and minimise the landscape scale impacts on a wider scale.</li> <li>Paragraph 7.10.9 – 7.10.11: We agree that the overall removal of existing vegetation, earthworks and presence of construction plant, materials, machinery, construction compounds and construction lighting will have an adverse and significant impact on the local landscape character during construction and will, however temporary, change the perception of the area from a tranquil rural landscape to one of much more activity, movement and perceived development.</li> <li>Paragraph 7.10.12 – 7.10.15: We broadly agree with the conclusion that the construction period would give way to minor adverse (day) and slight adverse (night) visual impacts. We note the potential for lighting during the winter months, but from the dates are led to assume this will only be one season October 2023-March 2024 which will minimise impacts.</li> <li>Paragraph 7.10.16: We broadly agree with the effects on representative viewpoints as laid out in Table 7-8 during the construction phase.</li> <li>Paragraph 7.10.39 – 7.10.40: We broadly agree that the initial impact of operation on the landscape character of the area would be significant and of moderate adverse magnitude, decreasing to not significant and slightly adverse magnitude at Year 15.</li> <li>Paragraph 7.10.41: The sense of tranquillity lost due to the scheme is notable and would impact the experience of those both living near to the scheme or using recreational routes within the vicinity.</li> <li>Paragraph 7.10.49: We note and agree with the conclusions drawn that the visual impacts of night-time effects, but the assessments given for</li> </ul>	The landscape and visual effects mitigation scheme, as presented in the Environmental Masterplan, Rev.1 (AS-007), has sought to mitigate for the losses of landscape features, including trees, and minimise visual effects due to the Scheme. In addition, actions LV1 and LV4 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143), require the retaining or replacing and reinforcing existing vegetation where this contributes to the distinctive qualities of the landscape.  Delivery of these commitments, including consulting the relevant planning and highway authorities on the final landscaping design and 2nd iteration of the Environmental Management Plan, will be secured through dDCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (APP-017).  The Applicant notes Norfolk County Council broadly agrees with the landscape and visual effects during the construction and operational phases, including night-time lighting effects, as set out within ES Chapter 7 Landscape and Visual Effects (APP-046). As to the comment regarding the lack of a conclusion regarding day-time effects, the Applicant confirms that the main assessment of effects within ES Chapter 7 considers day-time effects of the Scheme, including the visibility of lighting columns when unlit.  The Applicant acknowledges Norfolk County Council's concerns about the residual significant visual effect identified at the following viewpoints and receptors:  • Viewpoint 4 (Sandy Lane Properties beside A47)  • Viewpoint E (Church Lane)  • R11: Hill View Properties  • R14: Newgate house  • R18: Sycamore Farm Properties  • R21/R22: Properties beside Sandy Lane (represented by Viewpoint 4) Significant consideration has been given to mitigating the effects of the Scheme such as through the design of soft landscaping in proximity to the	Agreed	20/10/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
NO.		(if relevant)				Agreed
			<ul> <li>Paragraph 7.10.53: The residual significant moderate adverse effects in Year 15 at Viewpoint 4 (Sandy Lane Properties beside A47) and Viewpoint E (Church Lane) are of concern.</li> <li>Paragraph 7.10.57: The same applies to the residential receptors identified as having significant visual effect in Year 1, and more so those where the effect remains at year 15. Namely R11: Hill View Properties which is identified as large adverse, and R14: Newgate house, R18: Sycamore Farm Properties, R21/R22: Beside Sandy Lane which are all identified as moderate adverse. Whilst these are not widespread and extensive concerns, they are still impacts that will affect those living in those properties.</li> <li>Paragraph 7.10.62 – 7.10.64: Whilst the Year 1 impacts on Footpath receptors are disappointing as these routes will likely be primarily used for their recreational benefit and views, we understand that some impacts are unavoidable. It is however encouraging to see that by Year 15 the new planting will have reduced this impact.</li> </ul>	properties as part of the final mitigation scheme as presented in the Environmental Masterplan, Rev.1 (AS007). However, at these viewpoints and receptors the assessment indicates that there would remain a residual significant visual effect.		
68	Landscape & Visual effects: Cumulative Effects Assessment	Relevant Representation response RR- 037.29 (REP1-013) Chapter 15 – Cumulative Effects Assessment (APP- 054) ES Appendix 7.1 Planning Policy Context (APP-089) EIA Scoping Report EIA Scoping Opinion for the NWL	<ul> <li>In reference to Chapter 15 – Cumulative Effects Assessment: (Please note only elements relevant to Landscape and visual effects have been reviewed).</li> <li>The document has been reviewed for its inclusion of Landscape and Visual consideration, but comments cannot be made on the suitability of the methodology or the suitable qualifications of those who have undertaken the assessment.</li> <li>Paragraph 15.3.6: We support the overall ZOI of 4km and note the increase boundary for the ZOI to 2km in relation to Landscape and Visual Impacts.</li> <li>Paragraph 15.5.32: States that "An assessment of inter-project cumulative effects has not been undertaken for other environmental topics as no scoping report has been submitted for the proposed Norwich Western Link (NWL) development. This is considered a Tier 3 development under Advice Note Seventeen guidance and it is assumed that the NWL will assess the Proposed Scheme in their coming EIA", however this is incorrect. A Scoping report can be found on Norfolk County Council Planning Portal under the reference SCO/2020/0001. The Cumulative Effects Assessment should be updated to take account of this, and therefore include an assessment of other topics including Landscape and Visual Impacts.</li> <li>Paragraph 15.7.3: The cumulative landscape and visual impacts will need to be reassessed in line with the advice given above regarding the NWL. In reference to Planning Policy Context (Appendix 7.1): The document provides a thorough and suitable summary of Planning Policy Context.</li> </ul>	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).  The Applicant notes Norfolk County Council are satisfied with the planning policy context as set out within ES Appendix 7.1 Planning Policy Context (APP-089).  ES Chapter 15 considers effects from a single project (the Scheme) and different projects in combination with the Scheme as detailed in Section 15.3 of ES Chapter 15. The assessment of inter-project cumulative effects has been undertaken for noise and vibration and air quality, considering the impact from both the Scheme and the proposed NWL scheme. The assessment considered the cumulative operational effects for noise and vibration and air quality in combination with the NWL road as a worst case scenario. This is because the predicted traffic models for these topics included future other developments including the NWL scheme.  The Applicant acknowledges the feedback provided regarding the submission of an EIA Scoping Report and subsequent EIA Scoping Opinion for the NWL road which is available on Norfolk County Council's Planning Portal.  In light of the clarification on the NWL Scoping Report in the representation, the Applicant agrees that ES Chapter 15 should be updated to reflect the NWL scheme as a Tier 2 development under Advice Note Seventeen guidance. This proposed amendment will also require the provision of a new section to be added assessing the inter-project cumulative effects with the NWL scheme for other topics including landscape and visual as the NWL road falls within the ZOI identified for landscape and visual effects.  The Applicant will seek to provide an amended ES Chapter 15 at Deadline 3 or 4.	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21



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Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
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69	Landscape and Visual: Landscape Planning and mitigation	Relevant Representation response RR- 037.30 (REP1-013) ES Appendix 7.2 ZTV and Verified Photomontage Methodology (APP- 090) ES Appendix 7.3 Landscape Character Areas (APP-091)	<ul> <li>In reference to ZTV and Verified Photomontage Methodology (Appendix 7.2):</li> <li>Suitable methodology has been used and relevant and industry standard best practise and recommendations referred to.</li> <li>In reference to Landscape Character Areas (Appendix 7.3):</li> <li>Suitable Landscape Character Studies have been used to conduct this assessment.</li> <li>It is noted there are a number of areas where the constructional and operational activities will give rise to adverse and significant impacts on the landscape characters of the area the scheme passes through. This is of particular concern where the impacts are concluded to be "large adverse" magnitude of change and "major adverse" significance of effect – such as the construction phase within LCA D2. (paragraph 1.4.12). However, it is noted that construction impacts should be short lived and no more than 23 months in time. This same LCA also has such impacts in Year one of operation, decreasing to minor adverse magnitude of change and slight adverse significance by Year fifteen.</li> <li>The conclusions drawn from this assessment should be used to inform the Landscape Plan in order to minimise impacts where possible through avoidance and minimisation of impact, and where there is no scope to do this mitigation and compensation should be integrated into the scheme.</li> </ul>	The Applicant notes Norfolk County Council are satisfied with ES Appendix 7.2 ZTV and Verified Photomontage Methodology (APP-090) and ES Appendix 7.3 Landscape Character Areas (APP-091).  The Applicant confirms that the landscape and visual effects mitigation scheme, as presented in the Environmental Masterplan, Rev.1 (AS-007), has sought to integrate the Scheme into the existing landscape and visual baseline context and to mitigate landscape and visual effects which have been identified.	Agreed	20/10/21
70	Landscape and Visual:: Visual Receptors	Relevant Representation response RR- 037.31 (REP1-013) ES Appendix 7.4 Visual Receptors (APP-092) ES Appendix 7.5 Representative Viewpoints (APP-093)	In reference to Visual Receptors (Appendix 7.4): We are happy that the Visual Receptors have been agreed in consultation with the relevant district authorities. We have not undertaken a review of these at this stage. In reference to Representative Viewpoints (Appendix 7.5): We are happy that the Viewpoints have been agreed in consultation with the relevant district authorities. We have not undertaken a review of the viewpoints at this stage. I have been unable to locate: Figure 7.4 (Visual Context) (TR010038/APP/6.2).	The Applicant notes Norfolk County Council are satisfied with the consultation carried out regarding viewpoints, as set out within ES Chapter 7 Landscape and Visual Effects (APP-046).	Agreed	20/10/21
71	Landscape and Visual:: Landscape Planting	Relevant Representation response RR- 037.32 (REP1-013) ES Appendix 7.6 Arboricultural Impact Assessment (APP-094) ES Chapter 7 Landscape and Visual Effects (APP-046)	In reference to Arboriculture Impact Assessment (Appendix 7.6):  (Please note for these comments, this has only been reviewed from a Landscape perspective and not in relation to Arboricultural expertise – see Norfolk County Council Arboricultural Comments).  The AIA appears to conform to industry standards and be fit for purpose. There are a considerable number of large trees proposed for removal. We would of course, in the first instance prefer to see these trees retained where possible, and amendments made to the scheme to allow the retention of more trees. Trees in such large numbers play an important part in the wider landscape and act as features seen from great distances. Where the retention of trees is not possible, then suitable mitigation in line with Norfolk County Council's tree policy would be our next expectation. Whilst this will not replace the loss of mature and veteran trees, it will form the foundation of the future landscape. The location of such trees, tree belts, hedges and woodland should be carefully chosen to not just screen	The Applicant acknowledges Norfolk County Council consider the Arboricultural Impact Assessment (AIA) (APP-094) to be fit for purpose. The AIA formed an important set of reference information within the landscape and visual impact assessment, in ES Chapter 7 Landscape and Visual Effects (APP-046), and in the preparation of the Environmental Masterplan, Rev.1 (AS-007). The Environmental Masterplan seeks to locate proposed trees and hedgerows carefully within DCO boundary, with consideration of the wider landscape, as defined in the baseline section (Section 7.7) of ES Chapter 7 Landscape and Visual Effects (APP-046).  In addition, actions LV1 and LV4 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP143), require the retaining or replacing of and reinforcing existing vegetation where this contributes to the distinctive qualities of the landscape. Our response to RR-037.18, above, discusses our approach to protecting trees that are either ancient, veteran or have veteran features.	Agreed, subject to final landscape design under draft DCO Requirement 5	20/10/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
			the development, but also be reflective and respectful of the wider landscape.	Delivery of these commitments, including consulting the relevant local planning and highway authorities, on the final landscaping design and second iteration		
				Environmental Management Plan, will be secured through dDCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (APP-017).		
72	Landscape and Visual: Environmental Masterplan	Relevant Representation response RR- 037.33 (REP1-013) Environmental Masterplan, Rev.1 (AS-007)	In reference to the Environmental Masterplan TR010038/APP/6.8:  (Please note this has been viewed at a strategic level, there is no easy way to navigate the document at such a scale digitally with no location plan and I have no means to print a copy of the full plans at a legible scale).  The plans provide detailed proposals for the landscaping of the scheme. Further planting specification and planting details will be required, as well as management plans for the establishment and long-term maintenance of the various landscaping, landscape features and landscaped elements. Detailed design may be required for some elements when specifications are confirmed further during the process.	The Environmental Masterplan, Rev.1, (AS-007) will be developed in greater detail during the detailed design stage, prior to construction.  Appendix B.5 of the Environmental Management Plan (APP-143) will contain a Landscape and Ecology Management Plan (LEMP) to be produced by the appointed Landscape Architect and Ecologist prior to construction. The LEMP will describe the proposed management and monitoring of the landscape and ecological mitigation and compensation features of the Scheme. The commitment to deliver the LEMP, including consulting the relevant local planning and highway authorities, will be secured through dDCO Requirements 4 'Environmental Management Plan' and 5 'Landscaping' (APP017).	Agreed, subject to final landscape design under draft DCO Requirement 5 and LEMP under draft DCO Requirement 4	20/10/21
73	Ecology: Survey data	Relevant Representation response RR- 037.34 (REP1-013) Chartered Institute of Ecology and Environmental Management's (CIEEM's) advice note on the lifespan of ecological reports and surveys (CIEEM; 2019 ES Chapter 8 Biodiversity (APP- 047)	In reference to the age of survey data:  Some of the survey data collected is considered out of date in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM's) advice note on the lifespan of ecological reports and surveys (CIEEM; 2019). Norfolk Biodiversity Information Service (NBIS) were consulted for records of designated sites and protected and notable species in 2017 and for designated sites again in 2020. We recommend that the applicant fully updates the desktop study with protected species data too.	CIEEM (2019) Guidelines for Ecological Impact Assessment (EcIA) requires ecological data to have been collected within one or two years prior to an EcIA being written. Table 8-3 in ES Chapter 8 Biodiversity (APP-047) demonstrates the most recent surveys were completed in 2019 or 2020, which is within 2 years of the EcIA being written end of 2020. Additional desktop data is not required as field surveys have been completed since 2017, which provide a more accurate record of ecology baseline within the DCO boundary.	Agreed	02/11/21
74	Ecology: Site Boundary	Relevant Representation response RR- 037.35 (REP1-013) ES Chapter 8 Biodiversity (APP- 047)	In reference to the site boundary: The site boundary has been amended since some of the surveys have been undertaken and therefore some of the reports need updating in-line with the current proposals.	Although the site boundary has been amended since some of the surveys were undertaken, the Applicant's ecologists were in the field during 2020 to acquire additional information and/or validate the original survey findings to present the ecological baseline, affected by the final DCO boundary and scheme design, presented in ES Chapter 8 Biodiversity (APP-047). The supporting botanical and protected species survey reports only provide a point in time record of the surveys completed in 2016 to 2020 to inform the main assessment in ES Chapter 8.  In addition, paragraph 8.7.80 of ES Chapter 8, states further surveys for biodiversity resources that are to be licensed (e.g. bat roosts, badger, water vole and great crested newt) will be undertaken as per the respective licence method statements in order to update results. Action BD2 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143), requires pre-construction ecological surveys prior to any site clearance by an Ecological Clerk of Works and prior to vegetation clearance. Delivery of this commitment will be secured through dDCO Requirement 4 'Environmental Management Plan'.  Therefore, updating of historic survey reports is not required.	Agreed	02/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
75	Ecology: Bat Survey Areas	Relevant Representation response RR- 037.36 (REP1-013) PEIR LA 108 Biodiversity and LD 118 Biodiversity design ES Chapter 8 Biodiversity (APP- 047)	In reference to survey area (all species) was up to 1km from the DCO boundary. As previously stated in comments in response to the Preliminary Environmental Information Report (PEIR) document bat survey work should consider incombination impacts with the Norwich Western Link and it should be acknowledged that core sustenance zones for bats varies with species (6km for barbastelles). It should be noted that the Core Sustenance Zones for Barbastelle bats is 6km away and there is moderate confidence in zone size. There is a known colony of bats at Morton-on-the-Hill which is less than 6km from the site. In reference to mitigation measures:  The applicant states in their biodiversity statement they have undertaken their assessment in accordance with LA 108 Biodiversity and LD 118 Biodiversity design. We recommend asking the applicant to demonstrate that mitigation measures proposed are effective. Section 4.5 of LD 118 Biodiversity design states "only mitigation measures that are effective and proven shall be included in project design". However, it has not been demonstrated that mitigation measures are effective where proposed, for example "hop overs" are proposed in the bat crossing point report.	Please see Common Response I [in the Applicant's Responses to the Relevant Representations (REP1-013) and copied in row NWL6 in Appendix C of this SoCG].  With regards the effectiveness of hop overs, Table 8-14 in ES Chapter 8 Biodiversity (APP-047) acknowledges that it is unknown whether mitigation at the underpasses, overpasses and River Tud Crossing to enable bats to fly safely across the new road will work until monitoring surveys are complete. However, Section 8.4 of ES Chapter 8 confirms the Applicant consulted Anna Fullford (formerly Berthinussen), at Conservation First. Ms Fullford has published papers in 2012 and 2015 on bats use of gantries and underpasses to cross roads safely. It is acknowledged that mitigation effectiveness in terms of 'hop overs' (dependent on design and approach) is currently unknown and there is a lack of published research within this field. As such, on a precautionary basis, the assessment assumed the absence of mitigation in the project design, complying with LD118 Biodiversity, and the residual impact was concluded to be major adverse due to the potential for permanent damage to populations.  Post-note: The Applicant submitted at Deadline 2, within document '9.6 Applicant's Response to the Examining Authority's First Written Questions (ExQ1)' (REP2-014), the following responses clarifying the reasons why underpasses could not be built on the existing crossing points and how this mitigation will be monitored and managed.  Q3.0.13 ES Chapter 8: Biodiversity [APP-047] Table 8.14 identifies that there would be a large adverse and thus a significant residual effect on bats. Please provide further justification to demonstrate that all potential options have been fully explored to mitigate such effects?  Q3.0.10 The Applicant ES Chapter 8: Biodiversity [APP-047], paragraph 8.11.6 refers to crossing points and identifies that if a reduction in numbers crossing is observed, further mitigation will be required. Please provide further explanation of this, including at what level would	Under discussion	
76	Ecology: Monitoring Methodology	Relevant Representation response RR- 037.37 (REP1-013) LA 108 Biodiversity Environmental Management Plan (APP-143)	In reference to monitoring:  Where monitoring is required, we recommend asking the applicant to outline the following points as detailed in section 4.1.1. of LA 108 Biodiversity:  1) monitoring methodology;  2) mechanisms for implementation;  3) criteria for determining success/failure;  4) frequency and duration of monitoring; and  5) frequency of reporting.	The request is acknowledged by the Applicant as reasonable. Monitoring is recommended for several mitigation measures proposed to minimise impacts on biodiversity. The monitoring commitments are presented in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143). Delivery of these commitments will be secured through the dDCO Requirement 4 'Environmental Management Plan' (APP-017), which requires consultation with the relevant planning authority on the second iteration of the Environmental Management Plan. The Applicant recommends that during the process of developing the second iteration Environmental Management Plan for Secretary of State approval preconstruction, the monitoring commitments are developed to reflect the final detailed design and construction strategy taking into account the points detailed in section 4.1.1. of LA 108 Biodiversity.	Agreed	02/11/21
77	Ecology: Defra Metric Calculations	Relevant Representation response RR- 037.38 (REP1-013)	In reference to Defra Metric 2.0: Section 8.4.15 of Chapter 8 of the ES states "Biodiversity gains and losses have been assessed by using the Defra metric 2.0, which has informed the proposed mitigation measures to minimise the effects of the Proposed Scheme." The calculations have not been provided and it is not clear if net	Highways England projects are assessed every three months during the design process using the Defra Metric 2.0 in order to track their Biodiversity Net Gain (BNG) performance, with the final assessment of BNG for a project at the construction stage. Highways England are responsible for monitoring the BNG metric performance across all their road network. At DCO application	Agreed	02/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)  Defra Metric 2.0  ES Chapter 8  Biodiversity (APP-047)  Environmental  Masterplan, Rev.1  (AS-007)	gain will be achieved. If there is off-site mitigation/ compensation proposed no details of off-site mitigation/ compensation has been provided.	submission the Scheme was forecast to achieve a positive BNG Metric score. This was achieved through considered planting, landscaping and biodiversity elements including species rich grassland, woodland and wetland habitats as shown in the Environmental Masterplan, Rev.1 (AS-007). Table 8-13 in ES Chapter 8 Biodiversity (APP-047) presents the net gain or loss of each habitat, with a net gain in most of the higher biodiversity habitats. All land for provision of all ecology mitigation and compensation requirements is identified within the DCO boundary.		
78	Ecology: Protected Species Reports	Relevant Representation response RR- 037.39 (REP1-013) ES Chapter 8 Biodiversity (APP- 047)	All reports need to be consistent and the recommendations in Chapter 8 of the Environmental Statement need to be in-line with the recommendations of the targeted botanical and protected species reports.	ES Chapter 8 Biodiversity (APP-047) presents the recommendations proposed following an assessment of the impacts of the Scheme design and DCO boundary presented in the DCO application. However, the supporting botanical and protected species reports were developed primarily to provide baseline survey data records from 2016 to 2020 to inform the main assessment in ES Chapter 8. Consequently, any recommendations in the supporting technical reports were based on a less developed scheme design and DCO land take needs information; for example ES Appendix 8.1 Botanical Survey Report (APP-096) was published before the Scheme was altered following statutory consultation in 2020. Therefore, though the 2019 baseline survey data remained applicable for use in an assessment of the final Scheme design and the recommendations in the technical repots were considered when developing ES Chapter 8, it is not appropriate to align the ES Chapter 8's recommendations with the recommendations in the technical survey reports in the ES appendices.	Agreed pending updated ecological constraints plan	
79	Ecology: Bat Survey Report	Relevant Representation response RR- 037.40 (REP1-013) ES Appendix 8.12 Bat Survey Report (APP-102) LD 118 Biodiversity Design	Page 40, 3.44: In reference to the Bat Survey Report (Appendix 8.12):  Section 5 of the Bat Activity Survey Report, Annex E highlights that further transect and static surveys are required to aid confirmation of potential crossing points used by bats, however due to COVID restrictions transect surveys were only undertaken in April 2020. Transect surveys were not carried out in May 2020 and surveys in June comprised of more targeted crossing point activity. Best practice (Collins; 2016) recommends a combination of transects and static surveys.  Transect surveys also have limited ability to identify spatial and temporal variations in bat activity as they are biased towards the dusk period, and where the surveyor is when they encounter a bat. We recommend that there is greater use of static bat detectors to record bat activity within the site/along linear landscape features (see Stahlscmidt & Bruhl, 2012).  Bat Survey report mitigation section 7.1.1. states "CIEEM advise that survey results more than 3 years old are unlikely to be valid (CIEEM, 2019)". It should be noted in accordance with CIEEM's guidance on the age of survey data, where survey data is over 18 months of age, a site visit is required and some or all of the ecological surveys will need updating and also the desktop study data information may also need updating.  There appears to be some uncertainty in Table 5-1 with regards to some of the type of roosts identified for example 'potential maternity' and 'potential day roost', additionally some species remain unidentified. Full impacts on bats cannot be determined until the type of roost and species involved has been identified. The report highlights that a bat licence will determine specific mitigation. Section 4.4- 4.8.LD 118 Biodiversity Design outlines the requirement that mitigation and compensation measures should be specific and proportionate to the nature, magnitude and duration of the impact. However, the proposed mitigation/ compensation measures for impacts on roosting bats has not been pro	Transect and static detector surveys will be carried out in 2022 to update results and ensure that up to date baseline conditions are fully understood to inform detailed design. COVID restrictions in 2020 made it exceptionally difficult to carry out surveys, with surveyors required to be at home self-isolating and all non-essential retail and accommodation was closed; so there was no safe suitable accommodation for staff, particularly at the beginning of the survey season. It is acknowledged that best practice guidelines recommend a combination of transects and static surveys and this will be carried out during the detailed design stage, which will align with CIEEM guidance on timing and validity of survey data prior to assessment and implementation of works. This said, transect surveys and static detector were carried out between July and October inclusive in 2019; the findings of the surveys provided enough information on the baseline of the site to determine baseline conditions for the ES written in late 2020.  Further survey effort will be carried out during the detailed design stage to support the formal licence application and additional effort will be taken to clarify the status of identified roosts. Mitigation required for any impacts on confirmed roosts will be carried out under the terms of a Natural England derogation licence.  ES Chapter 8 assessed a residual major adverse impact on bats. For the purposes of the DCO, the assessment was based on a probable worst-case scenario to ensure suitable mitigation and compensation is recommended. The major adverse impact may be reassessed as a lesser impact following further assessment and survey. In the detailed design habitat loss might change and therefore providing detailed recommendations for it at this stage is not appropriate. Detail on how many bat boxes, what type and their design will be written into the Landscape and Ecology Management Plan (LEMP) and Record of Environmental Actions and Commitments (REAC) as it will be based upon habitat loss calcu	Under discussions	



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)	artificial bat roosting habitat cannot replace the range of natural cavities and features that trees provide, they can create additional roosting opportunities for a variety of species (particularly where no potential existed previously) and boxes can be fitted on trees." It is not clear how many bat boxes, what type, design to mitigate impacts on roosting bats are proposed. Section 8.11.6. of the Chapter Biodiversity document briefly refers to "Schwegler 1FF bat boxes recommended in the licence".  It is noted that thermal imaging equipment was not used during emergence/ re-entry surveys. We previously recommended in our response to the PEIR document the use of infra-red/thermal imaging equipment when undertaking emergence surveys of the trees to obtain more accurate population counts.	Plan (APP-143). Delivery of these commitments will be secured through dDCO Requirement 4 'Environmental Management Plan' (APP-017), in consultation with the relevant planning authority.  Mitigation measures at crossing points, hedgerow planting, retention of existing vegetation, and planting to reduce light spill etc were included in the Environmental Masterplan, Rev.1 (AS-007). Lighting plans specify that cowls are used that change the lumins in the bulbs where possible to reduce any light spill into sensitive areas. Lighting will be directional and positioned sympathetically, to minimise light spill and disturbance sensitive biodiversity resources including foraging bats.  The use of thermal imaging and infrared cameras for emergence/re-entry is not a requirement of BCT best practice guidelines. All surveys carried out followed general accordance with best practice BCT guidelines on survey effort.  POST NOTE:  As part of a European Protected Specials ghost licence application for bats, Highways England are liaising with Natural England to ensure the additional 2022 surveys provide updated data to support the licence application.  Highways England will consider the following guidance when developing their detailed design: "The Bat Conservation Trust and Institution of Lighting Professionals issued Guidance Note 08/18 Bats and Artificial Lighting in the UK in 2018." This guidance document is aimed at lighting professionals, lighting designers, planning officers, developers, bat workers/ecologists and anyone specifying lighting. The relevant local planning authority would be consulted on the final lighting design under Requirement 3 'Detailed Design' of the draft DCO.		
80	Ecology: Collision surveys	Relevant Representation response RR- 037.41 (REP1-013) ES Appendix 8.13 Bat Crossing Point Report (APP-108)	No collision surveys have been undertaken to-date. These surveys could be undertaken to provide a baseline against which changes post - construction can be measured. We would recommend the use of detector dogs, as these have been shown to be significantly more effective at searching for animals than human surveyors.	Collision surveys are not suitable for highways as surveyors can't safely access the highway to search for carcasses, unlike wind farm studies, etc. in fields. In addition, any such data that may be collected could not be used as a robust data set as it would be ad hoc and biased towards larger animals.  The ES contains analysis of a crossing point survey for bats that assesses where bats currently cross to identify locations for mitigation measures to minimise risk of future collisions, such as planting fully grown trees to help encourage bats to cross the highway at height above the traffic.  ES Appendix 8.13 Bat Crossing Point Report (APP-108), section 3.1.6, states: "During the surveys undertaken in 2020 one surveyor was positioned at either side of the A47 at the crossing point. They were equipped with a full spectrum bat detector (Anabat Walkabout) to aid detection of bats and made notes of the times and locations of bat calls and any bat activity that had been seen or heard (commuting, foraging or social calls). Particular attention was paid to bats crossing the A47, with flight height and direction recorded. The locations of the origins of the bat calls were plotted on a map. Bat calls were recorded in full spectrum format using the Anabat Walkabout detector for later analysis using Anabat Insight and AnalookW analysis software. The recordings and the field notes were used to help identify any bats crossing the A47, and the point of crossing, by comparing the notes of surveyors at each side of the A47."  Post-note: The Applicant submitted at Deadline 2, within document '9.6 Applicant's Response to the Examining Authority's First Written Questions (ExQ1)' (REP2-014), a response to Q3.0.10 and Q3.0.13 clarifying the bat mitigation approach, reasons for the final design position of the underpasses	Under discussions	



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
				and how this mitigation will be monitored and managed. See above response to reference 75 for more detail.		
81	Ecology: Bat Crossing point	Relevant Representation response RR- 037.42 (REP1-013) PEIR ES Appendix 8.13 Bat Crossing Point Report (APP-108) ES Chapter 8 Biodiversity (APP- 047)	In reference to the Bat Crossing Point Report (Appendix 8.13):  We previously recommended in our response to the PEIR document the use of infrared/thermal imaging equipment when undertaking emergence surveys of the trees to obtain more accurate population counts, and the use of IR/TI is also important for identifying the height that bats cross the landscape and collision risk modelling.  It is noted that the use of the thermal imaging scope (Pulsar Helion XP28) was proposed for a minimum of two of the six further surveys at each of the four chosen crossing points, however due to COVID restrictions it was only possible to employ thermal imaging equipment on one survey at crossing points one, seven and nine. It is not clear which element of the COVID restrictions prevented the use of the scope in accordance with the original proposals. That being said, it is not clear why the scope could not be used on every occasion at the survey points.  Section 4.1.2 of the bat crossing points report states "in order to identify any further 'potential unseen bat crosses' which may not have been visually observed. Due to visibility limitations as light levels fall during the surveys it becomes harder to see bats and bats may cross the road without being seen (particularly on darker, more overcast nights). This is a common, unmanageable limitation of bat surveys." However, this would be manageable with the use of thermal imaging equipment as outlined above. Hop overs and fencing are recommended at bat crossing points, however it has not been demonstrated that this would be an effective mitigation measure to protect bats. Mitigation measures must take into account specific species differences. Many factors are likely to affect levels of use and the "attractiveness" of the proposed mitigation measures for bats, including size, alignment, connection to existing flight lines, roadside vegetation and land use.  The monitoring recommendations in section 5.4 of the bat crossing points report are vague and do not outline the criteria fo	COVID restrictions at the time required surveyors to be at home self-isolating. All nonessential retail and accommodation was closed so there was no safe suitable accommodation for staff, particularly at the beginning of the survey season. Obtaining use of specialist equipment at this time was also problematic. This led to thermal imaging equipment being deployed at one survey only at crossing points one, seven and nine. Crossing point eight was not surveyed using a scope, but this does not invalidate the results as visibility was very good and the road is narrow at this point. Crossing point surveys were undertaken under best practice guidance (WC1060 Development of a Cost Effective Method for Monitoring the Effectiveness of Mitigation for Bats Crossing Linear Transport Infrastructure) (Berthinussen and Altringham, 2015). Bats crossing the road were recorded by sight and by survey equipment. The number of bats observed during transect, static and emergence re-entry surveys compares favorably to the data set of biological records. On that basis, it can be concluded that the Applicant's surveys give a fair representation of bats present and crossing the road.  With regards the effectiveness of hop overs and fencing, Table 8-14 in ES Chapter 8 Biodiversity (APP-047) acknowledges that it is unknown whether mitigation at the underpasses, overpasses and River Tud Crossing to enable bats to fly safely across the new road will work until monitoring surveys are complete. However, Section 8.4 of ES Chapter 8 confirms the Applicant consulted Anna Fullford (formerly Berthinussen), at Conservation First. Ms Fullford has published papers in 2012 and 2015 on bats use of gantries and underpasses to cross roads safely. It is acknowledged that mitigation effectiveness in terms of 'hop overs' (dependent on design and approach) is currently unknown and there is a lack of published research within this field. As such, on a precautionary basis, the assessment assumed the absence of mitigation in the project design, complying with L	Agreed pending rewording	
				response regarding Anna Fullford's (formerly Berthinussen) research. This		



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
				stated "Ms Fullford has published papers in 2012 and 2015 on bats use of gantries and underpasses to cross roads safely." To clarify, Ms Fullford has published researching testing mitigation to determine whether bats use underpasses and gantries to cross road safely. Research to date shows that bats do not use gantries to cross road, although further monitoring and research is needed.		
82	Ecology: Bat Hibernation	Relevant Representation response RR- 037.43 (REP1-013) ES Chapter 8 Biodiversity (APP- 047) ES Appendix 8.11 Bat Hibernation Report (APP-106)	In reference to the Bat Hibernation Report (Appendix 8.11): Section 8.7.57 of the Biodiversity Chapter states "Between December 2019 and February 2020 further automated detector hibernation surveys were undertaken on T1, T8 and T9. Results for all ten trees are that hibernacula are likely absent and five trees contained features that could be used as summer roosts and not for hibernation. The five trees were surveyed for summer roosts during 2019. However, Section 5.2.1 of the hibernation survey report highlights that "As it is not possible to conclude with a degree of certainty whether bats are or are not hibernating in trees one, eight and/or nine based upon this data an accurate impact assessment on hibernating bats cannot be undertaken." The report outlines in section 5.3 of the report that further surveys are required.	The Applicant will further assess these three trees (T1,T8 and T9) for hibernation roost potential. Surveys (static monitoring) will be undertaken in advance of construction works and by appropriately qualified specialists. Should any or all of these trees be reported as having hibernation roosts appropriate mitigation will be applied and this will be managed under licence from Natural England.  In absence of definitive conclusions from the ES Appendix 8.11 Bat Hibernation Report (APP-106) relating to these 3 trees (T1, T8 and T9), ES Chapter 8 Biodiversity (APP-047) does assess the overall impact to bats (which includes the loss of habitat and roosts) on a worst case scenario and assigns a level of impact pre-mitigation as major adverse for both construction and operational impacts (ES Chapter 8 Tables 8-9 and 8-10). With mitigation in place, the impact is reduced slightly and a large adverse significance of residual effect is given.  The Bat Hibernation Report (APP-106) confirms in Section 5.1.2 that T1 has been subject to access restrictions during surveys and is also noted to be covered in ivy which has highlighted health and safety restrictions with aerial mount surveys. T1 is located within the DCO boundary and should be retained and as such, appropriate mitigation during construction is to be applied. These mitigation measures are detailed within the Environmental Management Plan (APP-143) and will also be managed within the Natural England licence.  Unfortunately, T9 will be lost as part of the construction works for a new slip road, as noted in section 5.1.4 of the Bat Hibernation Report (APP-106). However, the results of the future surveys will ensure that appropriate mitigation is applied if this tree is found to have hibernation roost potential.  Mitigation measures specified for construction are recorded in Table 3.1 Record of Environmental Actions and Commitments in the Environmental Management Plan (APP-143). Table 3.1 also details the measures that have been incorporated into the Scheme design t	Agreed	02/11/21
83	Ecology: Otter & Water Vole Survey	Relevant Representation response RR- 037.44 (REP1-013) ES Appendix 8.14 Otter and Water Vole Survey (APP- 109) ES Chapter 8 Biodiversity (APP- 047)	In reference to the Otter and Water Vole Survey (Appendix 8.14):  Section 4.2.1. states "one potential otter holt was found at Point 3." The full scale of the impacts on otters has not yet been determined because it is unclear if this is an otter holt.  Section 3.4.1 states "Throughout the survey area, there were sections that could not be surveyed due to the water depth or dense vegetation. These sections were bypassed, and the survey continued in areas that were accessible further along the water courses. This is a significant constraint, as an accurate density of water voles on each water course could not be calculated." It is not clear if various methods of access were explored to enter the water course, such as a using a boat or using waders was explored.	ES Chapter 8 Biodiversity (APP-047) assesses the overall impact to otters and water voles on a worst case scenario assuming presence of both species site wide. This has been done in the absence of definitive conclusions as noted in the representation regarding the potential otter holt in the Otter and Water Vole Survey Report (APP-109). The surveys were limited by health and safety considerations as working in water in either waders or using a floatable craft was not allowed since appropriate safe access to the water was not achievable. For both species, the assessment assigns a level of impact pre-mitigation as major adverse for both construction and operational impacts (see ES Chapter 8 Tables 8-9 and 8-10) (APP-047). With mitigation in place, the impact is reduced and a neutral significance of residual effect is given.  Mitigation measures specified for construction are recorded in the Record of	Agreed	02/11/21



Ref.	Issues	Document	Norfolk County Council Position	Highways England Position	Status	Date
No.		References				Agreed
		(if relevant)				
			Area 3c is not shown on the plans showing the results of the surveys in Appendix A.  The report and biodiversity chapter recommends the translocation of water voles in the area where the Proposed Scheme will cross the river to a receptor area that has previously been enhanced with vegetation and allowed to mature so the site is suitable to receive the water voles. The location of the proposed receptor area needs to be provided.	Environmental Actions and Commitments which forms Table 3.1 in the Environmental Management Plan (EMP)(APP-143). Table 3.1 also details the measures that have been incorporated into the Scheme design to minimise any operational impacts. Furthermore, and as detailed in the EMP, pre-construction and follow up surveys will be undertaken for these protected species by a suitably qualified specialist. These surveys will update the information already received.  The environmental actions and commitments specified in the EMP (APP-143) will be secured by Requirement 4 in the dDCO (APP-017), which will ensure that they are provided as part of the Scheme.  The water vole relocation will be managed under licence from Natural England. Areas identified for water voles are also shown on Sheet 10 of the Environmental Masterplan, Rev.1, (AS-007) and will continue to be developed as the detailed design progresses.  Following consultation with Natural England's advice service, Natural England has advised the Applicant that it sees no impediment to a licence being issued based on the information provided.		
84	Ecology: Reptile Survey report	Relevant Representation response RR- 037.45 (REP1-013) Froglife (1999) Advice Sheet 10 ES Appendix 8.7 Reptile Survey Report (APP-102) ES Chapter 8 Biodiversity (APP- 047) Environmental Masterplan, Rev.1 (AS-007)	In reference to the Reptile Survey Report (Appendix 8.7):  This report, detailing surveys undertaken in 2019, is intended as an update to the reptile survey undertaken by Amey in 2016 (Amey, 2017).  The reptile report states "Field surveys, including one visit to place artificial refugia on site and nine subsequent visits undertaken in May, June, July, August and September to survey the refugia and site for reptiles." Froglife (1999) Advice Sheet 10 states "to establish presence, generally at least seven visits in suitable weather conditions at the appropriate time of year may be required. For detailed surveys to gain some idea of relative population size or to identify key areas, at least 20 visits per season, in suitable weather, are recommended". However, eight survey visits were undertaken in Area B to determine population size.	The Applicant acknowledges the comment regarding number of field site surveys which have been undertaken for reptiles across the site.  As noted in the representation, only Area B recorded evidence of reptiles and 8 visits were undertaken. ES Appendix 8.7 Reptile Survey Report (APP-102), in paragraph 5.1.3, notes "the lack of observations of other common reptile species, in Areas A, C, and E, does not prove their absence, but likely absence." The Applicant undertook more than the minimum recommended number of surveys to establish presence or absence (seven surveys over a minimum five-week period), as set out in the guidance (Froglife Advice Sheet 10). It is acceptable to base conclusions on presence on these surveys. It is also acceptable to base the conclusions on presence on these surveys. It is also acceptable to base the conclusions of the population size of reptiles being low on this number of surveys, using professional judgement, given the low number of reptiles encountered during the eight visits, and the fact the surveys were carried out over the extended survey period of May to September inclusive in suitable weather conditions.  The impact assessment presented in ES Chapter 8 Biodiversity (APP-047) and ES Appendix 8.7 Reptile Survey Report (APP-102) assumes a presence of reptiles and considers that the total area of suitable habitat which will be temporarily lost is relatively small. This is not considered to be significant in the wider landscape where further suitable habitat is available. The creation of road verges and planting detailed within the Environmental Masterplan, Rev.1, (AS-007) post-construction will replace and provide new habitat for reptiles.  Reptiles are highly mobile species and, therefore, their distribution is likely to change over time. Further reptile surveys will be required before the start of works to update these results; these will be scheduled appropriately and with sufficient time allowed for the consideration of further mitigation or avoidance works as required.  The R	Agreed	02/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
				subject to precautionary measures of fingertip searching prior to construction, if required.  Appropriate mitigation measures during construction works are also listed in the Record of Environmental Actions and Commitments which forms Table 3.1 in the Environmental Management Plan (APP-143). These environmental actions and commitments will be secured by the requirements in dDCO Requirement 4 (APP-017).		
85	Ecology: Barn Owls	Relevant Representation response RR- 037.46 (REP1-013) ES Appendix 8.9 Barn Owl Survey Report (APP-104) LD 118 Biodiversity design Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester	In reference to the Barn Owl Survey Report (Appendix 8.9): Table 6.1 highlights that the development will result in the loss of a breeding site at location 5, however elsewhere it is stated that a breeding site will only be lost at location 3. Two alternative barn owl nest boxes to mitigate for the loss of a single nest box at site 3 and five additional nest boxes appear to be proposed in locations less than 1.5km from the A47 road, for example within Type 1 habitat or in areas of created rough grassland. Barn owl boxes must be placed no closer than 1.5km from the road (Shawyer, 2011).  It is noted that the barn owl report recommends "compensatory rough grassland should be created alongside the motorway" to compensate for foraging habitat that will be lost". The report also states, "efforts should also be undertaken to render the roadside verges unsuitable for foraging barn owls, though regular cutting, this will deter them from foraging alongside the carriageway", this contradicts the earlier statement. The recommendations must be consistent.  Section 4.5 of LD 118 Biodiversity design states "only mitigation measures that are effective and proven shall be included in project design".  Shawyer, C.R., 2011. Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester.	The loss of a breeding site at location 5 in Table 6.1 of ES Appendix 8.9 is an error; Site 5 is located outside the DCO boundary and will not be lost as confirmed in Section 6.5, Section 7 and drawing 778575-MLM-ZZ-XX-DR-J-0001 in ES Appendix 8.9. A breeding site will only be lost at location 3.  Replacement nest boxes should be placed within 200m of the original box within 30 days ahead of the impact with a clear line of sight to the original from the hole of the two erected boxes; see https://www.barnowltrust.org.uk/wp-content/uploads/BarnOwls-and-Rural-Planning-Applications-a-Guide-2015.pdf.  Compensatory rough grassland will be created in areas where tree screening will prevent them flying low to cross the road, requiring the barn owls to cross the road at a safe height. Where no tree screening exists the low nutrient flower-rich grassland that will be managed for wildflower diversity will be unfavourable foraging for barn owls. This approach is based on guidance on the Barn Owls and Major Roads document produced by the Barn Owl Trust. Under the section "The creation of obstacles which force birds to fly higher across roads" (see https://www.barnowltrust.org.uk/wpcontent/uploads/Barn_Owls_and_Major_Roads.pdf) there are further references of individual studies that support these findings here. The approach is also covered in the Shaw 2011 document they reference: http://ousewashes.org.uk/wpcontent/uploads/2017/07/Survey_Methodology.pdf	Agreed	10/11/21
86	Ecology: Bird Survey Reports	Relevant Representation response RR- 037.47 (REP1-013) ES Appendix 8.8 Breeding Bird Survey Report (APP-103) ES Appendix 8.10 Wintering Bird Survey Report (APP-105) ES Chapter 8 Biodiversity (APP-047)	In reference to the Breeding Bird Survey Report (Appendix 8.8) and the Wintering Bird Survey Report (Appendix 8.10):  Section 2.4 highlights that a data search from the National Biodiversity Network (NBN) Atlas was undertaken. A record search of Local Records Centre data does not appear to have been undertaken but instead NBN gateway data is relied upon. NBN gateway data is not necessarily comprehensive or are not at a fine enough resolution to inform local decisions. Some sensitive records (such as rare species data) are not available for public view, and this could result in an erroneous assumption being made that a given species is absent from a particular area.  Whilst web-based sources such as the NBN Atlas, a biodiversity database, provide a useful dataset, these should be used to complement, rather than as a substitute for, records held by the Local Environmental Records Centre (LERC) or equivalent. In all cases it should be made explicit in the ecological report that a data search has not been undertaken, justification for the absence of a data search should be included, the likelihood of key information being missed as a result should be assessed, and the implications of this clearly set out (CIEEM; 2020).	Section 8.4 of ES Chapter 8 Biodiversity (APP-047) confirms the Norfolk Biodiversity Information Service (NBIS) were consulted for records of designated sites and protected and notable species. The bird survey reports are only used to provide a point in time record of field survey data alongside other data considered in ES Chapter 8. Therefore, local records centre data has informed the final ecological impact assessment of the DCO application scheme design.	Agreed	10/11/21
87	Ecology: Nest Boxes	Relevant Representation	It is noted that nest boxes are proposed but it is not clear what type of nest boxes. The locations of nest boxes would need to be appropriate and	Action BD1 and BD5 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143),	Agreed	10/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
88	Ecology: Terrestrial Invertebrates	(if relevant) response RR- 037.48 (REP1-013) LD 118 Biodiversity design Environmental Management Plan (APP-143)  Relevant Representation response RR-	consideration should be given to the increased risk of collision in close proximity to the carriageway.  Section 4.5 of LD 118 Biodiversity design states "only mitigation measures that are effective and proven shall be included in project design".  CIEEM; March 2020. Guidelines for accessing, using and sharing biodiversity data in the UK. Available at: https://cieem.net/wp-content/uploads/2016/03/GuidelinesforAccessing-and-Using-Biodiversity-Data-March-2020.pdf  In reference to Terrestrial Invertebrate Survey Report (Appendix 8.3):  No desk study was undertaken as part of the assessment. The report	require provision of nest boxes. Delivery of this commitment will be secured through dDCO Requirement 4 'Environmental Management Plan' (APP-017).  Section 8.4 of ES Chapter 8 Biodiversity (APP-047) confirms the Norfolk Biodiversity Information Service (NBIS) was consulted for records of designated sites and protected and notable species. The invertebrate survey	Under discussion	
		response RR- 037.49 (REP1-013) ES Appendix 8.3 Terrestrial Invertebrate Survey Report (APP-098) ES Chapter 8 Biodiversity (APP- 047) CIEEM) Guidelines on Ecological Impact Assessment (EcIA Site Analysis for Freshwater Invertebrate Surveys) Version 30	states "It is assumed that a data search will be undertaken as part of the impact assessment at a later stage." However, an impact assessment including invertebrate records does not appear to have been undertaken. Further surveys are recommended for Units K,L and RY1, which could not be accessed for survey during 2019 because of continuous livestock presence, these do not appear to have been undertaken yet. The report states "Three areas of district value for invertebrates were identified – off Church Lane, East Tuddenham (Unit TU), south of Hall Farm, Honingham (Hall Farm Meadows), and off Mattishall Road, Hockering (Unit 88). A further area, Easton Church fields, is considered to be of local value." The report goes on to state that "Hall Meadows are due to be bisected by the new route of the A47, which will also cross the River Tud. This would represent a major negative impact on this invertebrate habitat, valued at district level, and will therefore require mitigation. The habitats might be more challenging to mitigate, as they are less replaceable than the drier grasslands, and may require offsite compensation. Remaining areas should be managed in order to provide continuity of invertebrate habitat." However, section 8.7.27 of Biodiversity – Chapter 8 of the ES states "The terrestrial and aquatic invertebrate assembly has been assessed as a biodiversity resource of local level importance. The reports must be consistent and mitigation/ compensation must be effective and proven. There is no mention of off-site compensation for terrestrial invertebrates in Chapter 8 – Biodiversity of the ES.	designated sites and protected and notable species. The invertebrate survey reports are only used to provide a point in time record of field survey data alongside other data considered in ES Chapter 8. Therefore, local records centre data has informed the final ecological impact assessment of the DCO application scheme design.  The Applicant acknowledges the comment regarding lack of invertebrate survey data for units K, L and RY1 which could not be accessed in 2019 due to the presence of livestock, or in 2020 due to both access and COVID restrictions. The Applicant will integrate invertebrate surveys into the detailed design stage if safe access to the fields can be obtained (i.e. landowner can remove all cattle from the field to allow safe access). Significant effort will be made to liaise with landowners to achieve permission to carry out these surveys at the detailed design stage. The Applicant is committed to developing a landscape design that is considerate of invertebrate habitat and provide adequate mitigation for the loss of part of Hall Meadows, required for the new River Tud Crossing, in consultation with the relevant planning authority; this will be secured through dDCO Requirement 5 'Landscaping'. All land for provision of all ecology mitigation and compensation requirements, including for terrestrial invertebrates, is within the DCO boundary.  The assemblage of invertebrates and specific areas of habitat that support them, as reported in ES Appendix 8.3 Terrestrial Invertebrate Survey Report (APP-098), were assessed in accordance with The Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines on Ecological Impact Assessment (EclA). The Applicant acknowledges that "district" level importance is not defined in the CIEEM guidelines. Section 6 "Site evaluation" states "The district context is defined as the catchment of the River Tud, in which the site is situated."  The assessment of the identified species assemblages, in ES Appendix 8.4 River Tud Corridor Aquatic Invertebrate		



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
89	Ecology: vegetation and trees	Relevant Representation response RR- 037.50 (REP1-013) ES Appendix 8.1 Botanical Survey	In reference to the Botanical Survey Report (Appendix 8.1): The botanical report refers "offsite compensation may be required for Unit RYW", however there is no mention of offsite compensation in Chapter 8 of the ES. It is not clear from the information provided if the entirety of Unit k will be retained. Unit K is woodland on a shoulder of the Tud valley, which has continuously occupied the site since the Tithe map of 1836-1850 and is	reports most accurately meets the definition of local importance and does not meet the criteria required to be classified as county importance.  Finally, with regards reports needing to be consistent, please see the response to RR037.39, above.  Post Note:  We would like to clarify that the most up to date records search will be shared with the entomologist appointed to carry out the detailed design stage surveys, that will include units K, L and RY1 provided safe access to the fields can be obtained (i.e. landowner can remove all cattle from the field to allow safe access). We acknowledge the discrepancy between the invertebrate report and chapter 8, and intend to review updated survey effort in line with the conclusions of the terrestrial invertebrate report. The areas identified as possibly being of district value for invertebrates will be subject to further invertebrate survey in 2022; these include: off Church Lane, East Tuddenham (Unit TU), south of Hall Farm, Honingham (Hall Farm Meadows), off Mattishall Road, Hockering (Unit 88), and also the area considered to be of local value (Easton Church fields). Highways England will liaise with landowners to achieve permission to carry out these surveys at the detailed design stage.  The Applicant confirms they are committed to developing a landscape design that is considerate of the habitat in Unit RYW and provides adequate mitigation for the loss of part of Unit RYW, required for the new River Tud Crossing, in consultation with the relevant planning authority. This will be secured through dDCO Requirement 5 'Landscaping'. Off-site compensation is not required since all land for provision of all ecology mitigation and compensation	Agreed	10/11/21
		Report (APP-096) ES Chapter 8 Biodiversity (APP-047) Section 4.2 of LD 118	In accordance with section 4.2 of LD 118 Biodiversity design needs to address adverse impacts on biodiversity resources as far as possible through the use of a hierarchical system for the identification and assessment of impacts in accordance with requirements in LA 104. Examples of measures to avoid or prevent impacts include consideration of alternative route corridors, or alternative design options, to avoid sensitive sites. It has not been demonstrated that the mitigation hierarchy has been followed, for example it is not clear if Unit K "could be completely avoided by a relatively minor southward shift in the route" as recommended in the botanical report.  In reference to the Arboricultural Impact Assessment: We fully support the recommendations of the Arboricultural and Woodland Officer's comments including that the significant number of category A and B trees designated for removal should be considered for retention if the road layout changes. Ancient and veteran trees are irreplaceable habitats.	With regards Unit K, the alder woodland east of the new River Tud Crossing, the Scheme design would require a partial permanent loss of the eastern edge of the woodland. The DCO boundary extent into the woodland also allows for a safe temporary construction work area, though efforts will be made to minimise the loss of woodland habitat. However, the botanical survey report was authored in 2019 when the Scheme design proposed a walking and cycling route under the River Tud Crossing, which would have required permanent loss of approximately a third of the woodland area, plus a construction work area, to create this graded access. This was subsequently removed and replaced by the Honingham Church underpass within the Scheme design in the DCO application. Although the main dual carriageway alignment could not be moved to avoid any loss of the woodland, the area at risk is significantly less than was presented at the 2020 statutory consultation. Please see the comparative impacts below, with the proposed Scheme on the left, from the Sheet 12 of the Works Plans (APP-007), and statutory consultation design on the right <sup>5</sup>		

<sup>&</sup>lt;sup>5</sup> From the drawing available at: https://highwaysengland.citizenspace.com/he/a47-north-tuddenham-to-easton-february/supporting\_documents/A47%20North%20Tuddenham%20to%20Easton%20%20Scheme%20boundary%20plan.pdf



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)		With regards protecting category A and B tree, especially ancient and veteran trees, please see the Applicant's response to RR-037.18 and RR-037.19. There is no ancient woodland in Unit K, and no ancient woodland will be lost.		
90	Ecology: Badger Survey Report	Relevant Representation response RR- 037.51 (REP1-013) ES Appendix 8.15 Badger Survey Report (APP-110) ES Chapter 8 Biodiversity (APP-047)	In reference to the Badger Survey Report (Appendix 8.15): There are areas of suitable badger habitat located immediately outside of the survey area. It is not clear why these areas were not included within the survey area given their proximity to the site and their suitability to support badgers.  Natural England's standing advice is that sett entrances must be monitored over an extended period of time, eg up to 4 weeks, to see if they're active. The setts were not monitored in accordance with Natural England's advice on survey effort therefore it is not possible to have confidence in the results provided to date. There are several setts that are listed as partially active in sections 4.1.1 of the report and in Table 4.1.17 and therefore it is not clear if these setts are active or disused. Further surveys were recommended at one of the setts, however this survey work has not yet been undertaken. Section 3.2.2 and 3.2.3 highlights that some areas of the survey area were not surveyed and were inaccessible. The ecologist must attempt to gain access to these areas to survey for badgers.  It is not clear from the information in the biodiversity chapter or the badger survey report the impacts on any setts identified and the mitigation measures proposed. The details provided in the badger survey report do not match the details provided in the biodiversity chapter. The proposed locations of badger underpasses have also not been provided. Sett 13 is marked on Appendix A as disused, however it is stated within the report that this is a 'potential sett'.	Surveys were carried out at all parcels where land access was granted. In some instances land access to parcels, particularly land outside of the DCO boundary, was not achievable. The 'survey area' includes land within the Scheme plus a 50m buffer zone, where accessible.  Further surveys for biodiversity resources that are to be licensed (including badger) will be undertaken as stated in the respective licence method statements to update results, as stated in ES Chapter 8 Biodiversity (APP-047), paragraph 8.7.80. Monitoring of setts for four weeks is not required to determine use of setts to inform the impact assessment, since badgers will regularly move around between different setts over time. The monitoring of setts for four weeks is a requirement for surveys required to support a licence application, and for this survey remote cameras as well as other methods will be used to accurately categorise the status of setts. Setts that are disused at the time of a survey may still be a potential sett in use at other times of the year.  Due to the confidential nature of badger sett information, a separate confidential note has been provide to the ExA and Norfolk County Council responding to the request for further details regarding mitigation and status of badger setts.  POST NOTE: In the November hearings, Highways England confirmed to the ExA that applications for a licence in relation to badgers is now complete, with a letter of no impediment received from Natural England. See responses under 'Agenda Item 5 - Consents, Licenses and Other Agreements' within the Applicant's Written Summary of Oral Submissions at ISH1 (REP4-014).	Agreed	11/01/22
91	Ecology: County Wildlife Sites	Relevant Representation response RR- 037.52 (REP1-013) ES Chapter 8 Biodiversity (APP- 047) Environmental Masterplan, Rev.1 (AS-007)	County Wildlife Sites must be shown on Figure 8.1. The Biodiversity Chapter outlines potential indirect impacts on County Wildlife Sites, however from the information provided including the Environmental Master Plan some of the County Wildlife Sites appear to be directly impacted by the proposed works, for example there is a drainage feature proposed in a section of Brook House Marshes CWS.	Table 8-5 in ES Chapter 8 Biodiversity (APP-047) lists 21 non-statutory designated County Wildlife Sites (CWSs) plus one proposed CWS within 2km of the DCO boundary. No CWSs are located within the DCO boundary footprint, with the closest being Old Covert, Wood Land, CWS adjacent to the DCO boundary. Brook House Marshes is not listed as a County Wildlife Site in ES Chapter 8 or on the NBIS records, but may have a different official name. The assessment has assessed the risk of indirect effects (e.g. pollution risks and air emissions) and conclude a neutral (no change) residual effects on all CWSs.  POST NOTE: At Deadline 6, Highways England submitted document '9.25 Additional Environmental Information' (REP6-019). Chapter 2 assesses the following new ecological information obtained during the Examination period:  • Updated biological records data from Norfolk Biodiversity Information Service (NBIS); and  • Newly designated County Wildlife Sites from July 2021 – this includes an assessment of effects and proposed mitigation on new CWS.  The only biodiversity resources that required an additional assessment are the new County Wildlife Sites identified post the DCO application submission in March 2021. The original assessment in ES Chapter 8 Biodiversity (APP-047) remains unchanged, but it should be read in conjunction with this document. It is anticipated that the Scheme will have a neutral effect on all CWSs outside of the DCO boundary during both construction and operation phases.	Agreed – subject to EIA Addendum	10/11/21



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				It is anticipated that there will be a slight adverse residual effect on River Tud at Easton and Honingham CWS, Fen West of East Tuddenham CWS and Brook House Marshes CWS during construction, due to the requirement to remove habitats to make way for construction. This does not change the original assessment conclusions in ES Chapter 8 Biodiversity (APP-047), which considered the construction effects on the habitats within these new CWS designated areas. Construction activities will be planned to avoid temporary negative effects on habitats as much as possible and the aim overall will be to enhance the habitat on site, including where appropriate implementing measures for water voles and to increase coverage and extent of wetland plants that are found in other more biodiverse areas of the sites that have led to the sites to be designated CWS.  During the operational phase, the effect on Fen West of East Tuddenham CWS will be neutral since the site is outside of the development area. The effect on the River Tud CWS at Easton and Honingham will also be neutral, mainly because habitat enhancements for other areas of the River Tud will compensate for loss of habitat resulting from construction of the bridge over the crossing point. The residual effect on Brook Hall Marshes will be slight beneficial since a new wetland/grassland complex will be created on an area of species-poor grassland, increasing coverage and extent of wetland plants and biodiversity.		
92	Ecology: Inter-project effects assessment	Relevant Representation response RR- 037.53 (REP1-013) ES Chapter 15 Cumulative Effects Assessment (APP- 054) NWL EIA Scoping Report	Cumulative Effects Assessment (Chapter 15) Section 15.5.32 states "an assessment of inter-project cumulative effects has not been undertaken for other environmental topics as no scoping report has been submitted for the proposed NWL development. This is considered a Tier 3 development under Advice Note Seventeen guidance and it is assumed that the NWL will assess the Proposed Scheme in their coming EIA." However, a scoping report has been submitted for the Norwich Western Link (planning ref: SCO/2020/0001) which is located on Norfolk County Council's planning portal.	Please refer to the Applicant's response to RR-037.29. The Applicant agrees that, in light of the clarification on the NWL Scoping Report, ES Chapter 15 should be updated to reflect the NWL scheme as a Tier 2 development and provision of a new section to be added to ES Chapter 15 Cumulative Effects Assessment (APP-054) assessing the inter-project cumulative effects with the NWL scheme for topics other than just air and noise.  The Applicant will seek to provide an updated ES Chapter 15 by Deadline 3 or 4.  POST NOTE: At Deadline 6, Highways England submitted a revised ES Chapter 15 Cumulative Effects Assessment (REP6-030) with additional analysis of cumulative effects with Norwich Western Link Scheme. The potential cumulative impacts considering the NWL do not elevate the level of impact already estimated for the Scheme in ES Chapter 8 (APP-047).	Under discussion	
93	Geology & Soils: Geology & Soils	Relevant Representation response RR- 037.54 (REP1-013) ES Chapter 9 Geology and Soils (APP048).	No comments in respect of this particular topic in the submission.	The Applicant acknowledges the feedback on ES Chapter 9 Geology and Soils (APP048).	Agreed	23/09/21
94	Geology & Soils: Mineral Impact Assessment	Relevant Representation response RR- 037.55 (REP1-013) ES Appendix 10.4: Minerals Impact Assessment (APP- 103)	The Mineral Planning Authority (MPA) welcomes the inclusion of a Mineral Impact Assessment as part of the proposed scheme.  The MPA agrees with the summary of mineral resources within the scheme and the constraints which are outlined in paragraph 10.4.4.  The MPA also agrees with the assessment of reuse suitability of site-won materials, as outlined paragraphs 10.6.5-10.6.24. The use of the Specification for Highway Works Series 600 to grade materials for use into classes is considered appropriate.	The Applicant acknowledges the positive feedback from the Mineral Planning Authority that ES Appendix 10.4: Minerals Impact Assessment (APP-103) appropriately assesses the safeguarded mineral resources and contains an appropriate strategy for identifying suitable material for reuse in the construction phases of the Scheme. The Applicant can confirm the Environmental Management Plan (APP-143) contains Annex B.3 Materials Management Plan (MMP), which will be secured through dDCO Requirement 4 'Environmental Management Plan' (APP-017).	Agreed	23/09/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		Environmental Management Plan (APP-143) Annex B.3 Materials Management Plan (MMP)	The MPA notes that an estimate of site won material likely to be extracted during the construction phase is included, for the following superficial geological deposits likely to be encountered.  • Alluvium: 4,450m3 approx 60% class 1, 40% class 2  • Sheringham Cliffs Formation: 29,500m3 approx 60% class 1, 40% class 2  • Lowestoft Formation: 580,000m3 approx 20% class 1, 80% class 2  The MPA recognises that this an estimate and that a full assessment of the reuse potential of material will be required as it is excavated. Paragraph 10.7.8 states that any opportunity to reuse the excavated material will be taken.  In conclusion, the MPA considers that the Mineral Impact Assessment appropriately assesses the safeguarded mineral resources for the proposed scheme and contains an appropriate strategy for identifying suitable material for reuse in the construction phases of the scheme.			
95	Construction: Traffic Management	Relevant Representation response RR- 037.56 (REP1-013) Outline Traffic Management' of the dDCO (APP-017).	The county council would expect disruption to be kept to a minimum during the A47 dualling construction period and would want to work with Highways England, or its contractors, on managing traffic during the works.	The Applicant has committed to keeping disruption to a minimum during the Scheme construction period and will work with Norfolk County Council, as the highway authority and other affected major developers (e.g. wind farm developers), to manage traffic during the works.  This commitment will be managed through the traffic management plan, secured through Requirement 10 'Traffic Management' of the dDCO (APP-017).	Agreed	23/09/21
96	WCHR / PRoW: Health Benefits	Relevant Representation response RR- 037.57 (REP1-013) ES Chapter 5 Air Quality (APP-044) ES Chapter 11 Noise and Vibration (APP-050) ES Chapter 15 Cumulative Effects Assessment (APP-054)	In addition to the previous comments on short term impacts of dust and air quality relating to construction process (Section 3.35). In addition, we would want to minimise long term impacts on accessibility to and use of walking, cycling and other active travel routes for the whole local population covering a range of health conditions. We would also want to avoid reduced ability to access, for example, open or wooded space for recreational activity. Additional active travel routes to join up communities are supported and if the overall proposal has the effect of making active travel appear more attractive in terms of, for example, segregated pathways and / or traffic speed and visibility, we would support this. Use of green or wooded space to mitigate traffic noise and maintain or enhance the cooling effects of such environments would be supported.	The ES reports on the potential impacts during construction and operation as well as the proposed mitigation and design decisions to minimise adverse effects and maximise beneficial opportunities of the Scheme where possible.  Noise, air quality and vibration assessments are presented in the following chapters:  • ES Chapter 5 Air Quality (APP-044)  • ES Chapter 11 Noise and Vibration (APP-050)  • ES Chapter 15 Cumulative Effects Assessment (APP-054)	Agreed	23/09/21
97	WCHR / PRoW: Missed Opportunities	Relevant Representation response RR- 037.58 (REP1-013) ES Chapter 12 Population and human health (APP-051)	Norfolk County Council fully supports the range of improvements and additional walking, cycling and horseriding (WCH) provision this scheme provides to the A47 corridor in this part of the county, but at the same time feel strongly that there are some very obvious missed opportunities or apparent lack of understanding of the breadth and range of WCH usage that could actually result in increased local and short-distant motor-vehicle usage rather than, as such provision is intended, encourage more cycling and walking as a travel or recreation choice.  Notable aspects of the scheme include the creation of a WCH route the full length of the scheme following the existing A47 corridor from Hall Lane in the west to Dereham Road at Easton. This is a significant increase in east-west WCH facilities providing the opportunity for WCH commuting and	The Applicant acknowledges the positive feedback and support from Norfolk County Council for the range of improvements and additional walking, cycling and horse-riding (WCH) facilities to be provided as part of the Scheme and the stopping up of Hockering FP12.  Hockering FP11 is located east of Hockering village and, according to the Definitive Map, provides a connection between The Street and the existing A47. This footpath has fallen into disuse and is no longer accessible. As such, it does not offer a meaningful route for either utility or recreational trips.  Whilst the request from NCC to stop up this section of footpath is acknowledged, the Applicant is not able to consider the request due to FP11 crossing a land parcel outside the Scheme DCO boundary.	Agreed	23/11/21



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	WCHR / PRoW: NWL		travel into Norwich. This is a combination of new provision with existing and local roads, although we are disappointed to note that some existing roads are not to be closed to motor vehicles as originally proposed, although the reasons for this are accepted. The other notable provision is the new WCH overbridge in the location of Easton roundabout providing a grade-separated crossing. Other proposed improvements to crossings, additional sections of segregated WCH routes along existing and new roads, and the diversion and upgrade of a public footpath to a cycle path or bridleway to provide a WCH connection between minor roads are all welcomed as improvements to the county's WCH provision.  We are pleased this scheme is a resolving a problematic short public footpath (Hockering FP12) created during the construction of the current A47 through closure but would like to see a solution for a similar situation – Hockering FP11 – put forward. In respect to any PRoW diversions, plans should depict the legal alignment of the PRoW as shown on the Definitive Map and not what is found on the ground, to avoid the creation of short, disconnected, unusable PRoW (as in Hockering FP12) and ensure new facilities on the ground correspond to the legal alignment.  Our main area of concern is that no crossing facility, either by underpass or overbridge in the immediate vicinity of Hockering FP7 is to be provided. The scheme will create a highways maintainable short, potentially inaccessible, cul-desac public right of way between the current and new A47. We feel this is a missed opportunity to provide another WCH overbridge (especially a green bridge). This is further segregation of communities than currently and will also remove from Hockering residents the current option of a quickly accessible countryside walk using the PRoW network to the south. The provision of WCH facilities along existing and proposed roads and bridges, does to some extent provide this link, but the significant area of WCH provision.	The Applicant has compared the legal alignments of the Public Rights of Way shown on the Definitive Map with those shown on the Rights of Way and Access Plans (APP008). A number of minor drafting errors have been identified. The Applicant proposes to revise the Rights of Way and Access Plans and issue an amended version at either Deadline 2 or 3 to allow for inclusion of other possible amendments arising from a review of both Relevant Representations and the ExA's first round of written questions. The decision not to provide a WCH overbridge along the route of Hockering FP7 was informed by the level of existing WCH usage. To provide an indication of current usage of Hockering FP7, WCH surveys were conducted at the junction of the footpath with the existing A47 between 7am and 7pm for 14 consecutive days between Monday 13 July and Sunday 26 July 2020. In the main, the weather during the surveys was dry and bright. As such, we would expect that the usage information collected is representative of the average use and is sufficient to inform the assessment of the Scheme.  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 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 Rights 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 Norfo		
98	interdependancies	Relevant Representation response RR- 037.59 (REP1-013) Sheet 10 of the	Another area of concern is the proposed WCH provision in the vicinity of the proposed Norwich Western Link. (see also Section 3.12-3.19). In addition to eastwest provision, the diversion and alignment of sections of Honingham Restricted Byway 1 (RB1) appear to be dependent on the alignment and WCH provision of the proposed Norwich Western Link (NWL). The county council would want to continue its dialogue with	The Applicant will continue dialogue with Norfolk County Council regarding WCH provision in the vicinity of the proposed NWL. With regards the section of new cycle track shown as CF1 to CF2a on Sheet 10 of the Rights of Way and Access Plans (APP-008), Highways England acknowledges the concern raised by NCC and the interaction with NWL's proposal to provide an overbridge	Agreed	23/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		Rights of Way and Access Plans (APP-008) Article 13 of the dDCO	Highways England on such matters to ensure that delivery of measures associated with the A47 scheme are coordinated with the delivery of the NWL and that any continuation of routes for WCH must be considered. The county council would also want to ensure that it will not be burdened with unusable additional PRoW or other WCH provision on completion of the schemes.  There are other matters of concern with the diversion of RB1. It appears that the section of it not being diverted does not link at its northern end with the new WCH provision. This needs to be addressed to provide continuity and accessibility even though there is additional WCH in the vicinity. Where the diverted RB is to cross a highway or be concurrent with the new private means of access, it is imperative that the public access rights on this type of PRoW (ie horse and carriage) are fully understood so that suitable crossing facilities, segregation methods, surfaces and most importantly widths of route, are installed.	further north to connect RB1 to Wood Lane; thus the request not to be required to replace CF1 to CF2a.  The Applicant confirms this is a temporary arrangement intended to provide a link between Wood Lane and the diverted restricted byway (Honingham RB1) during the interim period of the two schemes becoming operational. It may be that this temporary route is not implemented depending on the overlap of the schemes and construction sequencing.  The temporary route is defined in the dDCO, Schedule 1, as a standalone work item, Work No. 26a (APP-017), and is shown on drawing sheet 10 of the Rights of Way and Access Plans (APP-008) as CF1 to CF2a. Article 13 of the dDCO permits the Applicant to construct the cycle track between CF1 and CF2a and open it for use on such days as the Applicant may determine (i.e. provide a permissive route on a temporary basis as opposed to creating a permanent public right of way).  The retained southern section of Honingham Restricted Byway 1 (RB1), between the existing A47 and Dereham Road in Honingham, does not link at its northern end with the new WCH provision (reference point A39 on Sheet 9 of the Rights of Way and Access Plans (APP-008)). This issue will be rectified on a revised version of the Rights of Way and Access rights on the diverted section of RB1. The proposed width of RB1 will be 3 metres, making it suitable for use by horse and carriage. Where running concurrent to the new private means of access to Hall Farm, RB1 will be separated from the carriageway of the new access road by a 1025mm separation strip incorporating a pedestrian guard rail, for Structure S04 shown on the Engineering Drawings (APP-010).  Although the diverted RB1 will be of sufficient width for horse and carriage use, further liaison will be undertaken with Norfolk County Council's Public Rights of Way/Access Officer to understand the particular requirements of these uses at where the diverted RB1 will cross the existing A47; and a 2m wide cycle track between the RB1 crossing on the south side of the		
99	Flood Risk & Drainage: Flood Risk Assessment	Relevant Representation response RR- 037.60 (REP1-013)	We confirm that consultation has been on-going in August, September and November 2020 and January and February 2021. We acknowledge there are some remaining comments that require addressing. We acknowledge that some of the on-going activities relate to requests for clarification or	The Lead Local Flood Authority (LLFA) has requested clarification on a number of matters in relation to the Flood Risk Assessment and several aspects of the design related to Oak Farm and Hockering culverts and the requirement for compensatory flood storage. The Applicant confirms they are working with the	Agreed	11/01/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		ES Chapter 13 (APP-052) and the Flood Risk Assessment (APP-124 and APP-125) dDCO (APP-017) Requirements 4 'Environmental Management Plan' and 8 'Surface and foul water drainage'	further information comments from the Lead Local Flood Authority (LLFA) during 2020 and 2021.  These relate to the comments provided in March 2021 for the Flood Risk Assessment and the request for further clarification regarding several aspects of the design related to Oak Farm and Hockering culverts and the requirement for compensatory flood storage in February 2021. No agreement has yet been made. We have not stated that no flood floodplain compensation storage is acceptable. We acknowledge that, in principle, flood compensatory storage at Oak Farm and Hockering might not possible due to the local topography and land availability. However, further evidence previously requested must be provided to determine the extent of the off-site impacts before NCC can come to an agreement. The current Environmental Statement chapter has overstated the position of the LLFA, while the Flood Risk Assessment presents a fairer summary of the current position.  The Environmental Statement indicates further information about the flood storage compensation will be provided during detailed design stage. However, the LLFA seeks assurances that this work will be undertaken to determine the impacts of the current proposed design in its ability to manage the potential future flood risk that could be derived from this scheme.  We are aware that the temporary drainage design during construction is yet to be confirmed. At present, the high-level summary of the temporary drainage approach requires some clarifications. For example, are the proposed settlement ponds mentioned in section 13.5.6 of the Environmental Statement (ES) temporary ponds or are they the proposed permanent ponds? The LLFA seeks assurances that further information and work will be undertaken in the future in the interests of managing potential future flood risk that could be derived from this scheme. In relation to the drainage strategy, no information regarding the proposed drainage approach is provided for the construction drainage atrategy to ensure there is no incr	LLFA to provide the required additional information to clarify the Flood Risk Assessment and design and the outcome of these discussions will be recorded in this document. Additional information has been submitted at Deadline 3 with regards to the issues raised on flood risk pertaining to Oak Farm, Hockering and the River Tud Crossing.  ES Chapter 13 (APP-052) and the Flood Risk Assessment (APP-124 and APP-125) imply that the LLFA stated no flood floodplain compensation storage is acceptable. The Applicant tried to reflect its understanding that this position was not definitive in those documents by stating that this view was 'in principle' and that flood compensation 'might not be required'. ES Chapter 13 and the FRA also state that further information is required prior to determining any requirement regarding the off-site impacts, and that this information was provided within the flood risk assessment and will be further detailed during detailed design. This is also reflected by the DCO boundary still including land for the provision of potential flood storage compensation for works on watercourses at Oak Farm; which reflects the recognition that flood storage compensation may still be required. However, the Applicant agrees that there is potential for confusion and will seek to clarify the position in the Statement of Common Ground with Norfolk County Council.  It is noted that the final flood compensation need will be determined in consultation with Norfolk County Council as part of the detailed design development and in support of applications for the required land drainage compensation will be provided at detailed design stage. Delivery of this commitment will be secured through dDCO (APP-017) Requirements 4 'Environmental Management Plan' and Surface and foul water drainage'. Action RD9 in the Environmental Management Plan states the Drainage Strategy and Flood Risk Assessment to be approved by the Lead Local Flood Authority (Norfolk County Council).  Temporary drainage design work is yet to be completed		



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
100	Flood Risk & Drainage: Outfall Discharge	Relevant Representation response RR- 037.61 (REP1-013) ES Chapter 13 (APP-052) LLFA's Developer Guidance Greater Norwich Level 2 Strategic Flood Risk Assessment ES Appendix 13.3 Water Quality Assessment (APP- 128) Water and Road Drainage Environment (APP- 052) paragraphs 13.9.22-25 ES Appendix 13.2 Drainage Strategy Report, Part 1 of 2 (APP-126) ES Appendix 13.3 Water Quality Assessment (APP128)	In section 13.9.22 of the Environmental Statement, it is indicated that of the 12 outfalls, nine will be new outfalls. The new outfalls will discharge to surface water via filter drains and vegetated detention basins or wetlands to provide water quality or quantity improvements. While it is appreciated that the existing outfalls and drainage system are currently being surveyed, it is not clear what water quality processes will be applied to the existing outfalls in the current ES.  We note that the drainage strategy report does not refer to the LLFA's Developer Guidance.  Further Information We would like to make you aware that the Greater Norwich Level 2 Strategic Flood Risk Assessment was published in February 2021 and can be found at https://www.gnlp.org.uk/regulation-19-publication/evidence-base in its own section. We suggest appropriate consideration is given to relevant aspects of this recently published study.	A Highways England Water Risk Assessment (HEWRAT) was undertaken as part of the water quality assessment, with the results provided in ES Appendix 13.3 Water Quality Assessment (APP-128). The results are also summarised in ES Chapter 13 Water and Road Drainage Environment (APP-052) paragraphs 13.9.22-25 and Table 13.9, and ES Appendix 13.2 Drainage Strategy Report, Part 1 of 2 (APP-126). The HEWRAT assessment was undertaken on the proposed outfalls and existing outfalls to assess risks to the water environment from routine runoff and spillages.  Three existing outfalls are to be utilised as part of the Scheme where it ties into the existing drainage (drainage catchments M1, S3 and S4). The assessment indicated that water quality mitigation was not required for all three existing outfalls due to the risk of accidental spillage. For routine road run off, mitigation was only required for one drainage catchment M1. Filter drains are proposed as mitigation for this catchment. These assessments will be reviewed at detailed design level once the survey has been completed.  There are a further six existing outfalls on the existing A47 where it is to be retained (de-trunked) as a local access road. These outfalls are currently classed as low pollution risk and given the significantly reduced traffic forecast for the proposed local access road then no water quality treatment is required (subject to drainage survey).  This is stated in section 3.4 of ES Appendix 13.3 Water Quality Assessment (APP128). The relevant planning authority will be consulted on the final surface water drainage system design, reflecting the drainage strategy and the mitigation measures set out in Table 3.1 of the Environmental Management Plan (e.g. pollution control), under dDCO Requirement 8 'Surface and foul water drainage' (APP-017).  Norfolk County Council, the Lead Local Flood Authority (LLFA), Developer Guidance has been referenced in ES Appendix 13.2 Drainage Strategy Report, Part 1 of 2 (APP126) section 5.2 and paragraph 5.6.5. The documen	Agreed	10/11/21
101	Flood Risk & Drainage: Watercourse Consent	Relevant Representation response RR- 037.62 (REP1-013) Environmental Management Plan (APP-143) dDCO Requirement 4 'Environmental Management Plan' (APP-017).	In addition, please note that any works on ordinary watercourses and flow paths would normally require an ordinary watercourse consent prior to construction. The LLFA in Norfolk seeks assurances that this proposed scheme will be undertaken in accordance with the principles and regulations associated with ordinary watercourse consents and that applications will be made within an adequate timescale. This is to ensure the management of potential future and residual flood risk that could be derived from this scheme.	The Scheme will be undertaken in accordance with the principles and regulations associated with ordinary watercourse consents and that applications will be made within an adequate timescale.  Action RD8 in the record of environmental actions and commitments, which forms Table 3.1 in the Environmental Management Plan (APP-143), requires the Principal Contractor to obtain an ordinary watercourse consent from the Lead Local Flood Authority (Norfolk County Council) for any works associated with ordinary watercourses.  The commitment to deliver this action will be secured through dDCO Requirement 4 'Environmental Management Plan' (APP-017).	Agreed	10/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
102	Climate: Carbon Neutrality objectives	(if relevant)  Relevant Representation response RR- 037.63 (REP1-013)  ES Chapter 14 Climate (APP-053)  Norfolk County Council - Environmental Policy	Norfolk County Council adopted its Environmental Policy at the end of 2019. This included a commitment to move towards carbon neutrality across all sectors by 2030. Emissions from the trunk road network would be included within this. In order to help meet the commitment in its environmental polices the council would want Highways England to commit to undertaking work across the trunk road network to understand in more detail the carbon emissions arising from use of this network and how these might be mitigated.  Norfolk County Council supports Highways England's efforts to reduce the footprint of the construction process. The county council would want to work closely with Highways England to identify measures to reduce carbon emissions on the trunk road network, eg by installation of Electric Vehicle charging points to encourage electric vehicles, and understand how these will be brought forward, their impact on emissions reduction and how they dovetail with measures that local partners are taking on the local transport network and across other sectors	Information on carbon emissions relating to the Scheme is provided in the ES Chapter 14 Climate (APP-053).  The Applicant has recently secured additional funding to review potential environmental opportunities around the Scheme. The Applicant will work with Norfolk County Council to develop potential feasibility study to assess the implementation of such opportunities.	Agreed	20/10/21
103	Road Design: Amendments	Email correspondence, October 2021	NCC would like to retain ghost right turn islands. They are not a proven traffic mitigation measure and therefore it is not deemed to be an appropriate reason for a departure from standard in this case.	Highways England to provide Ghost Islands at:  • Existing A47 junction with the proposed Mattishall Lane Link Road  • Existing A47 junction with the realigned Dereham Road, Honingham	Agreed	14/10/21
104	Flood Risk and Drainage	ES Chapter 13 (APP-052) Response to ExAQ1's 15.0.1 (REP3-023)	The LLFA note the culvert at Hockering is within the Norfolk Rivers IDB area of jurisdiction who would provide any formal agreement or approval on this element of the scheme.	The Applicant has consulted with Norfolk Rivers IDB on the scheme prior to the DCO submission. In response to the LLFA's remark, the Applicant has consulted specifically on the proposed culvert at Hockering via email dated 31st August 2021. A response was received on 19th October 2021 confirming that the watercourse proposed for culverting is within the Norfolk Rivers IDB's Internal Drainage District, stating the proposed works will require consent under Section 23 of the Land Drainage Act 1991 which is regulated by the IDB within its district. This is also covered under the IDB's Byelaw 4. They have provided details of their consent application form and have offered pre application discussions.	Agreed	10/11/21
105	Flood Risk and Drainage	ES Chapter 13 (APP-052) Response to ExAQ1's 15.0.1 (REP3-023)	However, the LLFA would query the extent and the location of the River Tud Floodplain and the tributary's floodplain. Based on the information presently available from a limited 1D model, it is not clear whether the proposed crossing is causing a loss in either the tributary's or the River Tud's floodplains. The 1D modelling results have not been provided as a flood extent map. In addition, the model results do not appear to consider the effects of the River Tud's water levels on those of the tributary. Consideration of the River Tud's water levels would be appropriate given the close proximity of the road crossing to the confluence. The LLFA would suggest that further work is undertaken by the applicant to ensure that the scheme would not increase flood risk elsewhere. At present that evidence base is not presented.	Flood extent maps for the River Tud covering the scheme are provided in Annex D of the FRA (APP-124 and APP-125). These demonstrate that the section of the Proposed Scheme close to Hockering is outside of the predicted 1 in 100-year flood extent of the River Tud (35% climate change).  The Applicant acknowledges the concerns of the LLFA regarding the modelling of the Hockering watercourse. The model has been converted to 1D-2D as described in the additional flood risk information provided at Deadline 3 (REP3-026) using more recently available LIDAR data. Appendix B of REP3-026 contains flood extent maps for the Hockering watercourse. An updated hydraulic model report (previously submitted as Annex J of the FRA (APP-124) has been submitted to the Environment Agency and the LLFA along with the model for review.  The updates to the model were not found to significantly alter the model results with water predicted to remain within the Hockering tributary channel for the 1 in 100-year event (including 35% climate change). There will be a minor reduction in channel capacity due to the width of the culvert, however, the loss in volume was small and estimated to amount to 11 m³ for the 1 in 100-year event plus 35% climate change event. The impact of the new culvert in terms of water flow and level was predicted to be minor, very localised and within acceptable values.	Agreed	17/01/22



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
				The Applicant notes that the impact of the River Tud water levels (1 in 50-year and 1 in 100-year) on the results for the Hockering watercourse was included as part of the sensitivity analysis (Section 6.5 of the Hydraulic Model Report (APP-124)). The results within the immediate vicinity of the proposed culvert were found to be moderately sensitive to water levels in the River Tud. To account for this uncertainty a constant bank full level was applied at the downstream boundary of the Hockering model. Based on the assessment undertaken this was considered appropriate given the very low probability of coincident flood peaks on the River Tud and the Hockering watercourse.  Post Note: The Applicant has responded to comments provided by the LLFA on the Additional Information for LLFA and Environment Agency (REP3-026)		
				document. The LLFA has reviewed the updated modelling report and no queries raised.		
106	Water Environment: Environmental Assessment	ES Chapter 13 (APP-052) Response to ExAQ1's 15.0.3 (REP3-023)	The climate change section is likely to be considered out of date as the Met Office report stated in 13.7.94 is likely to have been succeeded by UK Climate Predictions 2018 report in December 2018. This report has been the basis for the Environment Agency to update their climate change allowances guidance for flood risk assessments amongst many other activities.	Section 13.7.94 sets out the baseline for the region and it was issued in 2016 and focused on the latest 30 year averaging period of 1981-2010. The UK Climate Predictions 2018 report in December 2018 does not give regional summaries of the current climate. Current site specific climate change allowances have been detailed in the policy section, in Appendix 13.1 Flood risk assessment and within the chapter (13.7 flood risk section of the baseline conditions and in 13.9 - Design, mitigation and enhancement measures).	Agreed	17/01/22
107	Water Environment: Environmental Assessment	ES Chapter 13 (APP-052) Response to ExAQ1's 15.0.3 (REP3-023)	In section 13.7.98, Table 13-7, the LLFA observes that the main rivers are assessed as separate features for their importance of water environment attributes in study areas, while the two ordinary watercourses that have properties potentially at flood risk are considered as one feature. This does seem to limit the quality of the targeted nature of the assessment. The remaining aspects of the section have been reviewed and considered acceptable.	With regards to the query raised on section 13.7.98 and Table 13.7 (the definition and importance of water environment attributes in the study), the Applicant notes that although these ordinary watercourses have been grouped for the assessment table, they have been described and assessed individually throughout the chapter, in particular when assessing the potential impacts and discussing mitigation. Furthermore, when the significance of effects has been assessed the worst case scenario from the watercourses have been assessed and presented	Agreed	17/01/22
108	Flood Risk & Drainage	ES Chapter 13 (APP-052) Response to ExAQ1's 15.0.11 (REP3-023)	The limited information about these ponds in Chapter 13 from a local surface water drainage network perspective and does not clear identify the seven ponds that are to be replaced. From looking at Figure 13.1 (sheets 1 and 2) and the catchment plans in the Drainage Strategy, the ponds are indicated to appear offline from the local surface water drainage network. However, the chapter acknowledges that the developer's investigations are limited, and that uncharted drainage system may exist.	Details of the pond locations, which are to be replaced, can be found in section 13.8.12 and in Figure 13.1. However, they have also been identified below:  • one pond north of Oak Farm adjacent to the existing A47 where the Proposed Scheme would be constructed (TG 06176 13562)  • a cluster of three ponds located east of Oak Farm adjacent to the existing A47 where the Proposed Scheme would be constructed (TG 06400 13436)  • one pond located south-east of the proposed River Tud crossing where the Proposed Scheme would be constructed (TG 10953 11624)  • one pond located south-east of St Andrew's Church where the Proposed Scheme would be constructed (TG 11610 10980)  • one pond located east of Blind Lane where a new road is required to connect Easton with Norfolk Road junction (TG 12480 10979)  Section 13.8.26 notes there is no direct discharges to the ponds and they are hydraulically disconnected from the Proposed Scheme. However, additional topographic survey and a water features survey to confirm this will be undertaken in the detailed design stage in 2022.	Agreed	17/01/22



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
109	Flood Risk & Drainage	ES Chapter 13 (APP-052) paragraph 13.9.22 ES Appendix 13.2 Drainage Strategy Report (APP-126 and APP-127) Response to ExAQ1's 15.0.13 (REP3-023)	The GI results reported in section 4.3 indicate that infiltration to ground is poor to very poor in the Lowestoft formation while in the Sheringham Cliff Formation were moderate to good. However, the availability of the Sheringham Cliff Formation is limited along the route and are mostly small, isolated areas of the formation that is surrounded by the Lowestoft Formation. Therefore, the opportunity in most areas is limited across the site. Along the existing A47 road there are 9 outfalls that discharge to the local surface water drainage network. The approach of discharging to a watercourse is considered acceptable. Supplementary GI was indicated for the first quarter of 2021, although as yet the LLFA has not had sight of this information. In section 6.3 of Appendix 13.2, the LLFA notes that the developer proposes to attenuate flow only in catchments where any increase in flow is found to be excessive. The developer confirms their intension to use either oversized pipes in the verge or ditches. This is considered by the LLFA to be a traditional drainage solution and would not be in accordance with the NPPF principles that seek the inclusion of SuDS on major developments and that there should be no increase in flood risk elsewhere from the development. It has not been possible to compare the prep and post development run off rates as no comparable information has been provided. The LLFA had previously raised the lack of clarity on this matter prior to DCO submission but there has not been addressed as yet. The scheme's drainage design has relied heavily on the guidance that is provided in the DMRB, yet there is only limited consideration of the LLFA guidance on the inclusion of SuDS that is derived from National Policy. The LLFA observes that of the 18 surface water drainage networks only 13 of the networks include SuDS features. This means that 5 of the networks are not including SuDS. The use of attenuation basins is the limited way that SuDS have been included within the scheme. Based on the report, the atten	We acknowledge the issue raised by the LLFA.  The Applicant is committed to working with the LLFA to address their concerns. Section 5.10 of the Drainage Strategy Report (APP-127) outlines the Pollution Control processes included within the drainage design of the Scheme.  Section 5.11 provides information on the SUDS features included within the drainage design of the Scheme.  Section 5.11.3 of the report outlines how the detention basins and wetlands promote the 4 pillars of SuDS.  Information on attenuation is contained within Section 6.6, with Table 6.2 providing information on the existing and proposed catchment areas.  The five networks highlighted by the LLFA as not including SuDS are proposed to tie into existing drainage systems. These are networks M1, S1, S2, S3 and S4 and described in Sections 6.3.1 and 6.3.11 to 6.3.14. In such locations it is not feasible to incorporate SuDS over such a short distance or as a result of the existing physical constraints. In these locations, the proposals are to utilise flow controls with oversized pipes in the existing verge / ditch if the flows are found to be excessive. This is covered within Section 6.6.3 and Table 6-2.  The Applicant notes that two wetlands are proposed as part of the Scheme as described in section 6.8.6 (Enhancement Measures), with Section 6.8.7 providing information on the enhancements for the remaining detention basins along the Scheme.	Agreed	10/11/21
110	Flood Risk & Drainage	ES Chapter 13 (APP-052) paragraph 13.9.29 ES Appendix 13.2 Drainage Strategy Report (APP-126 and APP-127) Response to ExAQ1's 15.0.14 (REP3-023)	The LLFA is satisfied with the 40% climate change allowance for the 100-year design life that would be associated with the 2080s epoch for the peak rainfall intensity allowances. It is noted that the drainage design life is considered to be 60 years in ES Appendix 13.2 Drainage Strategy. However, when assessing essential transport infrastructure in terms of assessing flood risk a 100 year design life would be applied.	The Applicant can confirm the assessment flood risk has considered a 100 year design life	Agreed	10/11/21
111	Flood Risk & Drainage	ES Chapter 13 (APP-052) paragraph 13.9.32	The LLFA is broadly satisfied with the proposed approach, however, there is one issue that the LLFA considers that further information is required. The LLFA would like to correct an assertation made in the ES Chapter 13, to date no agreement has yet been reached with the LLFA regarding the	See response RR-066.29 in the Applicant's Responses to the Relevant Representations (REP1-013).  The Applicant has issued further information at Deadline 3 (REP3-027) in	Agreed	10/11/21



Ref. No.	Issues	Document References	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(if relevant)				
		ES Appendix 13.1 Flood Risk Assessment (APP- 124 and APP-125) Response to ExAQ1's 15.0.15 (REP3-023)	flood storage compensation at both the Oak Farm and Hockering culverts. In addition, the LLFA have not stated that no flood floodplain compensation storage is acceptable. The LLFA does acknowledge that, in principle, flood compensatory storage at Oak Farm and Hockering might not possible due to the local topography and land availability. However, before this can be decided further information and evidence is required to determine the extent of the upstream off-site impacts before NCC can form an informed opinion. At the Oak Farm Culvert, the LLFA seek clarification and further information that demonstrates the flood storage volume is maintained, even if changed in its level, along with information quantifying the displaced volume. At present in the FRA, there is an assessment of volume for the post development scenario but not for the predevelopment scenario. This prevents a suitable comparison identifying the areas of potential loss and whether suitable compensation can be identified. At the Oak Farm Culvert, no information has been presented to the LLFA that justifies the selection of the orifice type and size as a suitable flow control structure for this location. In addition, no debris assessment has been presented for the structure. This would feed into the development of a credible blockage scenario being modelled and the results presented.	response to the concerns raised.  The Applicant is committed to working with the LLFA to address their concerns.		
112	Road Design: speed limits	NCC correspondence	<ul> <li>Following a request from Highways England to control road traffic and improve safety, it was agreed to:         <ul> <li>Extend the proposed 50mph limit along Main Road westwards from proposed junction with Lyng Road to the western DCO boundary to allow for a tie in with NCC's current plans to change the existing Main Road / Lyng Road speed limit.</li> </ul> </li> <li>Change the previously proposed 60mph national speed limit to 30mph on:         <ul> <li>Taverham Road, from the proposed Norwich Road junction to the River Tud bridge,</li> <li>Along the de-trunked existing A47 between west of St Andrew's Church, Honinghanm, and its new junction with the realigned Taverham Road in the east.</li> <li>Along Dereham Road west of Honingham to the junction with de-trunked existing A47</li> </ul> </li> </ul>	The proposed changes agreed with Norfolk County Council, as the local highway authority, were in response to commitments in RR-003, RR-007, RR-010.1/3/4, RR-046.1/2/4, RR-050.4 and RR-052.2 in the Applicant's Responses to the Relevant Representations (REP1-013).  Changes shown on the Traffic Regulation Plans, Rev 1, issued at Deadline 3 (REP3-005).	Agreed	11/08/21
113	Traffic Modelling: NATS model alignment	Correspondence with NCC	NATS model has been updated to reflect 2019 traffic conditions (the 2019 NATS model) using Mobile Network Data (MND) and a range of other observed data collected in October 2019.	It is agreed between Highways England and NCC that the differences between the 2015 NATS model and the 2019 NATS model are acceptable given the difference in base year flows	Agreed	11/11/21
114	Traffic Modelling: 2025 traffic routing	Correspondence with NCC	Select Link Analysis (SLA) has been undertaken using the 2015 NATS model and the 2019 NATS model. In general traffic patterns for 2015 NATS model and the 2019 NATS model are similar.	It is agreed between Highways England and NCC that the routing of traffic in the 2025 forecast year, under the Highways England and NCC models, is acceptable and is showing similar origin and destination of trips.	Agreed	11/11/21
115	Traffic Modelling: Annual Average Daily Traffic (AADT) factors	Correspondence with NCC	For the purposes of scheme design and appraisal, traffic flows are required at an Annual Average Daily Traffic (AADT) level.	It is agreed between Highways England and NCC that the Annual Average Daily Traffic (AADT) factors for the Highways England 2015 NATS model and the NCC 20291 NATS model are similar.	Agreed	11/11/21
116	Traffic Modelling: 2025 Forecast Year Models	Correspondence with NCC	Whilst there are some differences identified between the forecast year flows, it is noted that the 2025 NCC NATS model has been further developed to enable the assess of the Norwich Western Link and the impacts of the scheme locally. The 2025 A47 NATS model has more focus on the strategic road network. As a consequence of the slightly more	It is agreed between Highways England and NCC that the differences between the 2025 NCC NATS model and the 2025 A47 NATS model are understood and acceptable.	Agreed	11/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
			detailed local road network included in the 2025 NCC NATS model, any differences between the models can be seen to be related those additional network links being used.			
117	Road Design: Classification of de- trunked roads	Correspondence with NCC	The drawings show more B road classification on the detrunked network than is necessary, specifically south of Hockering and between the new Honingham interchange and existing Honingham roundabout.  All detrunked roads shown as a B class in these drawings should be a C class road, EXCEPT for the small section linking the new Honingham interchange to the existing B1535 Wood Lane.  The roundabouts on Honingham interchange itself should be an A class if NWL is approved, otherwise it will need to be a B class.	Local road classification and the fact that 2 roads are identified as Class B incorrectly which is a result of the discussions we had with the Network Safety team on cross sections (Class B 6.0m / Class C 5.5m) being misunderstood and following through to the classification plans.  NCC are happy with the proposed road cross sections and speed limits so this purely comes down to classification of B and C roads.  This relates to two sections:  (1) New sideroad linking Fox Lane junction to the de-trunked A47 through Hockering connecting to the norther Wood Lane Junction roundabout.  (2) New Sideroad from Wood Lane Southern Roundabout linking to de-trunked A47 through Honingham to Honingham Roundabout.  Updated DCO application Traffic Regulation Plans were submitted at Deadline 8 (25 January 2022).	Agreed	25/01/22



## APPENDIX B – Detailed Responses to Norwich Western Link Issues Raised by NCC (as the Local Authority)

Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
А	Local Road impacts: NWL connection	Statutory Consultation	The county council highlights the need to safeguard the Wood Lane junction so that the Norwich Western Link can make a suitable connection with the A47 at this location.	The interaction of the Scheme with the Norwich Western Link has been explored through on-going liaison with Norfolk County Council.	Agreed	01/11/21
В	WCHR / PRoW: Wood Lane	Relevant Representation response RR-037.5 (REP1-013) GENERAL ARRANGEMENT PLANS REGULATION 5(2)(0) SHEET 10 OF 23 RIGHTS OF WAY AND ACCESS PLANS – SHEET 10	Norwich Western Link Comments  1.3 Non-motorised user (NMU) route across NWL  The A47 scheme includes a proposed cycle track between the realigned Wood Lane and Hall Farm Underpass. This is shown as looping round the NWL arm of the Wood Lane junction. In discussions with Highways England, Norfolk County Council understands that this is a temporary arrangement and, on completion of the NWL, will be superseded by the permanent facilities being planned as part of the NWL scheme.  The county council considers that this is an acceptable arrangement.  However, we have concern that local users will not appreciate the temporary nature of Highways England's proposals in this area and would expect Norfolk County Council to provide a crossing of the NWL at the proposed A47 Wood Lane junction. This is not supported by the county council.  (Document reference: GENERAL ARRANGEMENT PLANS REGULATION 5(2)(o) SHEET 10 OF 23 HE551489-GTY-LSI-000-DR-CH-31010 The rights of way and access plans – sheet 10)	This is a temporary arrangement intended to provide a link between Wood Lane and the diverted restricted byway (Honingham RB1) during the interim period of the two schemes becoming operational.  It may be that this temporary route is not implemented depending on the overlap of the schemes and construction sequencing.  The temporary route is defined in the dDCO, Schedule 1, as a standalone work item, Work No. 26a (APP-017), and is shown on drawing sheet 10 of the Rights of Way and Access Plans (APP-008) as CF1 to CF2a.  Article 13 of the dDCO permits the Applicant to construct the cycle track between CF1 and CF2a and open it for use on such days as the Applicant may determine (i.e. provide a permissive route on a temporary basis as opposed to creating a permanent public right of way).  POST NOTE: The Applicant has agreed to amend Article 13(7) as follows:  "The cycle track with reference CF1 to CF2a in column (2) of Part 6 (footpaths, cycle tracks, footways and bridleways) of Schedule 3 and identified on the rights of way and access plans may only be constructed by the undertaker in the specified location if approved by the relevant highway authority and opened for use on such day as the undertaker may determine approved by the relevant highway authority.		11/11/21
С	Road Design: Honingham Lane	Relevant Representation response RR-037.8 (REP1-013) WORKS PLANS REGULATION 5(2)(j) SHEET 21, 22 and 23 Schedule 1 of the dDCO (APP-017) Article 20 of the dDCO (APP-017)	1.6 Honingham Lane Stopping Order  Honingham Lane has been included in the DCO order limits, but it is unclear what orders or works are proposed for this road. It is not listed in the draft DCO. (Document reference: WORKS PLANS REGULATION 5(2)(j) SHEET 21, 22 and 23)	No works are proposed along Honingham Lane, although Schedule 1 of the dDCO (APP-017) sets out a list of ancillary works which may be carried out anywhere in the Order limits if any minor alterations are needed.  Honingham Lane has been included within the Order Limits because it will be subject to a temporary Traffic Regulation Order to prevent vehicular use for a period to be agreed with Norfolk County Council. Article 20 of the dDCO (APP-017) provides the power to make such an order subject to the consent of the relevant traffic authority.	Agreed	23/09/21
D	Road Design: Wood Lane DCO order limit	Relevant Representation response RR-037.9 (REP1-013) Rights of Way and Access Plans, Sheet 9 Article 7 of the dDCO (APP-017)	1.8 Wood Lane junction – NWL Arm Order  The NWL arm of the Wood Lane Junction is not highlighted as a new / improved / altered highway or other road. Also, there is no reference number for this arm therefore it is not clear what order if any is proposed. (Document reference: TR010038-000208-2.5 Rights of Way and Access Plans, Sheet 9)	Article 7 of the dDCO (APP-017) has been included to ensure that if a planning permission is granted under the Town and Country Planning Act 1990 for the development of any land falling within the Order Limits, the implementation of the planning permission will not constitute a breach of the dDCO.	Agreed	24/09/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
E	Road Design: Wood Lane status	Relevant Representation response RR-037.10 (REP1-013) Rights of Way and Access Plans, Sheet 9	1.8 Wood Lane junction – NWL Arm Order  The NWL arm of the Wood Lane Junction is not highlighted as a new / improved / altered highway or other road. Also, there is no reference number for this arm therefore it is not clear what order if any is proposed. (Document reference: TR010038-000208-2.5 Rights of Way and Access Plans, Sheet 9)	There is no proposal to dedicate the NWL arm as 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 as part of the NWL scheme, if and when it is delivered.  POST NOTE: Highways England and NCC are in discussion to sign an agreement and a draft agreement has been developed which sets out how the construction and handover of the spur will be managed between the two parties. Discussions are on-going to finalise this agreement after the Examination period.	Under discussion	
F	Traffic Modelling: A47 & NWL phasing	Relevant Representation response RR-037.12 (REP1-013)	Highways Impacts Comments  1.10 Based on the assessment, Norfolk County Council's principal concern is the interim situation (following opening of the A47 dualling scheme and opening of the proposed NWL) as it is likely that the A47 dualling scheme will come into operation before the NWL is opened to traffic. If this situation does arise, it is proposed that Norfolk County Council and Highways England agree that they will work together to monitor the actual impacts of the introduction of the A47 dualling scheme on the local road network using traffic counts and other appropriate techniques. If it then becomes apparent that interim measures will be required until such time as the NWL is implemented, or if for any reason it is not to be delivered, Norfolk County Council and Highways England agree to work collaboratively using their respective powers to devise and implement appropriate interim measures. The presumption would be that any measures are funded by Highways England as they are essentially a consequence of the A47 scheme.	The Applicant confirms that it will continue to work with Norfolk County Council to identify and (where appropriate contribute towards funding of such) interim measures to the local road network that arise from actual impacts from the introduction of the A47 dualling scheme.	Agreed	11/11/21
G	TTRO Closure	Email correspondence, October 2021	NCC has concerns with the provision of the poacher protection system. Whilst it may be possible to paint the product in a conspicuous manner and to sign it appropriately, there would be a significant risk of roadside detritus building up around it and masking it. There may also be unforeseen drainage effects. We are therefore not supportive of its provision when more conventional means of restricting access, such as gates, are available. As is likely to be undertaken with the NWL, it is a normal practice to install gates to prevent fly-tipping or encampments, with farmers and emergency services given keys as necessary.	Highways England enquired if 'poacher blocks' would provide a solution for local farmers to still use Honingham Lane when it is closed to other traffic.  Highways England welcomes the guidance from Norfolk County Council and will continue to work collaboratively to develop and agree a scheme of mitigation measures for the implementation of the TTRO to close Honingham Lane to through traffic whilst minimising impact on agricultural access where possible.	Agreed	11/11/21



## APPENDIX C – Detailed Responses to Norwich Western Link Issues Raised by NCC (as the Promoter / Developer)

Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
NWL1	Draft DCO Work No.26a – optional cycle track	Relevant Representation response RR-077.1 (REP1-013)	This representation is submitted for Norfolk County Council in its capacity as the local highway authority promoting the proposed Norwich Western Link ("NWL scheme"), which is intended to connect to Highways England's ("HE") A47 North Tuddenham to Easton scheme ("A47 scheme") at the improved Wood Lane junction. A separate representation is submitted by Norfolk County Council in its wider capacity as a 'host' local authority under s.43 Planning Act 2008, commenting on the A47 scheme from its perspective as Highway Authority, Minerals and Waste Planning Authority, Lead Local Flood Authority and in having Public Health responsibilities.  As promoter of the NWL scheme, Norfolk County Council ("NCC") is fully supportive of the A47 scheme and welcomes HE's inclusion in the DCO application documentation of provision linking the NWL scheme with the proposed A47 ("the NWL spur"). NCC seeks clarification of HE's position on: 1. "Optional cycle track" – Work No.26a The A47 scheme includes provision for a cycle track between the realigned Wood Lane and Hall Farm Underpass, shown on the Rights of Way and Access ("RoWA") Plans as looping around the NWL spur. In discussion with NCC, HE indicated this arrangement would not be provided if the NWL scheme starts construction in the same period as the A47 scheme. NCC seeks assurance from HE that a new permanent nonmotorised user ("NMU") facility is not required at this location as part of the NWL scheme.	The Applicant confirms that a new permanent non-motorised user facility is not required at this location.  See response to NWL7 in Appendix C of this SoCG.	Agreed	11/11/21
NWL2	NWL spur delivery commitment	Relevant Representation response RR-077.2 (REP1-013)	2. Delivery of NWL spur NCC seeks clarification of HE's intention to construct the NWL spur. HE's Statement of Reasons (paragraph 4.16.4) anticipates delivery of the A47 scheme before the NWL scheme, and indicates that although the NWL spur is expressed (in the DCO) to be "optional", HE would construct it in anticipation of the NWL scheme, to minimise future disruption to the highway network. However, the Scheme Design Report (paragraph 9.2.7) states that the NWL spur "would only be created if the NWL obtained planning consent prior to the [A47] Scheme commencing the main construction works." NCC seeks HE's commitment to greater flexibility in collaborating to deliver both schemes.	The Applicant is willing to commit to work with NCC to ensure that the most appropriate solution is found to the delivery of the NWL spur so as to avoid potential disruption to the respective works.	Agreed	11/11/21
NWL3	NWL spur classification	Relevant Representation response RR-077.3 (REP1-013)	The NWL spur is not identified in the RoWA Plans as "new/improved/altered highway", notwithstanding its identification as Work No.98 in the Works Plans, reflecting DCO Schedule 1 and the intention presented in the Classification of Roads Plans and DCO Schedule 3, Part 1A, where it is identified as an 'A' road. NCC suggests amendment of the RoWA Plans to resolve inconsistency and clarify HE's intentions.	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.  The Classification of Roads Plans and DCO Schedule 3, Part 1A will be updated accordingly and issued at either Deadline 2 or 3.  POST NOTE: Issues discussed further in response to NWL8 in this Appendix C of this SoCG.  Highways England and NCC are in discussion to sign an agreement and a draft agreement has been developed which sets out how the construction and handover of the spur will be managed between the two parties. Discussions are on-going to finalise this agreement after the Examination period.	Under discussion	
NWL4	NMU provision on Dereham Road, Honingham	Relevant Representation response RR-077.4	NMU provision on Dereham Road. Noting HE's proposed NMU provision on/around Dereham Road, NCC would welcome opportunities for collaboration	The Applicant is willing to collaborate with NCC to explore how this element of the Scheme can be further developed.	Agreed	11/11/21



Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		(REP1-013)	with HE to ensure this element of the A47 scheme can be further developed to provide suitable NMU routes.			
NWL5	Delay to NWL delivery and Weston Longville	Relevant Representation response RR-077.5 (REP1-013)	4. Delay to NWL delivery. NCC has been working with HE to identify appropriate arrangements for local communities (in particular Weston Longville) should delivery of the NWL scheme be delayed. NCC would welcome the opportunity to settle the approach in agreement with HE, and to commit to a mutually acceptable solution.	The Applicant will continue to support and work collaboratively with NCC and Weston Longville Parish Council on the development of a proportionate scheme of mitigation works for the scenario whereby the A47 improvements are completed and the NWL is delayed.  The trigger point for the approval of such a scheme would be 9 months prior to the removal of the existing Easton roundabout and associated closure of Church Lane to through traffic. It was agreed that if the NWL construction has not been instructed (recorded by the formal confirmation of progressing with stage 2 of the NWL contract) at a point 9 months before the closure of the Easton roundabout, then a scheme of traffic mitigation measures for Weston Longville will be instructed by NCC to be delivered.  The above is therefore an agreed safeguard that will be implemented only in the scenario of a delay in delivering the NWL. Details of this approach have been agreed following meetings with Weston Longville Parish Council.	Agreed	11/11/21
NWL6	Barbastelle bats	Written Representation response (REP3- 022)	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.  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.	The Applicant welcomes this clarification, which supports the Applicant's response to the colony of barbastelle bat issue covered by Common Response 'I' 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).	Agreed	11/11/21
NWL7	Draft DCO Work No.26a  – optional cycle track	Written Representation response (REP3- 022)	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	Please see to response Q7.0.18 within the Applicant's Response to the Examining Authority's First Written Questions (ExQ1) (REP2-014):  "This section of cycle track is an optional element and will only be provided permanently if the NWL is not delivered. If the NWL is consented it will not be possible for this part of the proposed cycle track to remain in use.  Therefore, the Applicant intends to deliver this element of the Scheme and	Agreed	11/11/21



Ref. No.	Issues	Document References (if	Norfolk County Council Position	Highways England Position	Status	Date Agreed
		relevant) `	"the previous le"\	allow parmingly a upo by the multipline and will the ADAII algorithm		
			"the proposals").  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:	allow permissive use by the public unless and until the NWL planning application is determined. If the NWL scheme is not granted consent, the Applicant will consider dedicating the route as a public right of way, but may choose to leave it as a permissive route. If the NWL is granted planning permission, the Applicant will withdraw permission for the public to use the route so that construction of the NWL can be carried out.		
			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:  (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 part of NCC's NMU strategy for the NWL project);  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 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.	It is important to note that the A47 Scheme is only required to maintain the RB1 byway connection across the A47, east of the Wood Lane junction. As the B1535 Wood Lane provides a cycle network connection to the north, the optional section of cycle track offers an enhancement option to facilitate movement of cyclists northwards from east of Wood Lane junction in a no NWL scenario as an alternative to using the existing RB1. However, as NWL is expected to provide a new north bound byway route east of Norwich Western Link Road with a connection to Wood Lane in the north, the A47 Scheme's optional section of cycle track would not be required. The eastwest provision for non-motorised users is maintained via connections south of the Scheme A47, accessed via Hall Farm underpass and the new cycle track to Honingham via Dereham Road and across to Berrys Lane.  Therefore, this part of the cycle track is not required to mitigate any impacts and therefore its delivery does not need to be certain. However, the Applicant is seeking the power to construct the cycle track connection in the event the NWL is not consented.  So the drafting of Article 13(7) must provide the flexibility for the Applicant to decide if and when to dedicate the cycle track as public highway."  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.  POST NOTE: The Applicant has agreed to amend Article 13(7) as follows:  "The cycle track with reference CF1 to CF2a in column (2) of Part 6 (footpaths, cycle tracks, footways and bridleways) of Schedule 3 and		
			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.	identified on the rights of way and access plans may only be constructed by the undertaker in the specified location if approved by the relevant highway authority and opened for use on such day as the undertaker may determine approved by the relevant highway authority.		
NWL8	NWL spur classification	Written Representation response (REP3- 022)	<ul> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	As stated in response RR-077.3 in the Applicant's Responses to the Relevant Representations (REP1-013) [see row in Appendix A of this SoCG], 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	Under discussion	





Ref. No.	Issues	Document References (if relevant)	Norfolk County Council Position	Highways England Position	Status	Date Agreed
				(APP-008) and a highway classification is no longer assigned to the NWL stub by the A47 Scheme.  POST NOTE: Highways England and NCC are in discussion to sign an agreement and a draft agreement has been developed which sets out how the construction and handover of the spur will be managed between the two parties. Discussions are on-going to finalise this agreement after the Examination period.		