

Planning and Highways Delegations Committee

Date: Thursday 3 June 2021

Time: 2pm

Venue: Norfolk Showground, NR5 0TP

(situated just off the A47 Norwich Southern Bypass

at the A1074 Longwater Interchange.)

Advice for members of the public:

This meeting will be held in public and in person.

It will be live streamed on YouTube and, in view of Covid-19 guidelines, we would encourage members of the public to watch remotely by clicking on the following link: https://youtu.be/t_6dqRfb-eA

However, if you wish to attend in person it would be most helpful if, on this occasion, you could indicate in advance that it is your intention to do so. This can be done by emailing committees@norfolk.gov.uk where we will ask you to provide your name, address and details of how we can contact you (in the event of a Covid-19 outbreak). Please note that public seating will be limited to 30 spaces.

Councillors and Officers attending the meeting will be taking a lateral flow test in advance. They will also be required to wear face masks when they are moving around the room but may remove them once seated. We would like to request that anyone attending the meeting does the same to help make the event safe for all those attending. Information about symptom-free testing is available here.

Committee Membership

Voting Members: Non-Voting Members:

Cllr Andy Grant
Cllr Brian Long
Cllr Graham Plant
Cllr Eric Vardy
Cllr Martin Wilby
Cllr Mike Sands
Cllr Steve Riley

Clir Paul Neale

For further details and general enquiries about this Agenda please contact the Committee Officer:

Hollie Adams on 01603 223029 or email committees@norfolk.gov.uk

Under the Council's protocol on the use of media equipment at meetings held in public, this meeting may be filmed, recorded or photographed. Anyone who wishes to do so must inform the Chairman and ensure that it is done in a manner clearly visible to anyone present. The wishes of any individual not to be recorded or filmed must be appropriately respected.

Agenda

- 1. To receive apologies and details of any substitute members attending
- 2. Election of Chair
- 3. Election of Vice Chair
- 4. Minutes of last meeting

To agree the minutes of the meeting held on 23 February 2021

(Page 4)

5. Declarations of Interest

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is on your Register of Interests you must not speak or vote on the matter.

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is not on your Register of Interests you must declare that interest at the meeting and not speak or vote on the matter

In either case you may remain in the room where the meeting is taking place. If you consider that it would be inappropriate in the circumstances to remain in the room, you may leave the room while the matter is dealt with.

If you do not have a Disclosable Pecuniary Interest you may nevertheless have an **Other Interest** in a matter to be discussed if it affects, to a greater extent than others in your division

- Your wellbeing or financial position, or
- that of your family or close friends
- Any body -
 - Exercising functions of a public nature.
 - o Directed to charitable purposes; or
 - One of whose principal purposes includes the influence of public opinion or policy (including any political party or trade union);

Of which you are in a position of general control or management. If that is the case then you must declare such an interest but can speak and vote on the matter.

6. Any items of business the Chairman decides should be considered as a matter of urgency

7. A47 North Tuddenham to Easton Dualling

(Page 7)

Report by the Executive Director of Community and Environmental Services.

8. Sheringham and Dudgeon Windfarm Extension Projects Consultation

(Page 46)

Report by the Executive Director of Community and Environmental Services.

9. A47/A11 Thickthorn Junction

(Page 65)

Report by the Executive Director of Community and Environmental Services.

Tom McCabe Head of Paid Service County Hall Martineau Lane Norwich NR1 2DH

Date Agenda Published: 25 May 2021



If you need this document in large print, audio, Braille, alternative format or in a different language please contact Customer Services on 0344 800 8020 or 18001 0344 800 8020 (textphone) and we will do our best to help.



Planning and Highways Delegations Committee

Minutes of the Meeting held on 23 February 2021 at 2pm on Microsoft Teams (virtual meeting)

Voting Members Present:

Cllr Martin Wilby (Chair) Cabinet Member for Highways and Infrastructure Cllr Andy Grant (Vice-Chair) Cabinet Member for Environment and Waste

Cllr Graham Plant Deputy Leader

Non-Voting Members Present:

Cllr Mick Castle Planning (Regulatory) Committee Independent Group

Spokesperson

Cllr Colin Foulger Planning (Regulatory) Committee Chair Cllr Brian Long Planning (Regulatory) Committee Vice-Chair

Cllr Eric Seward Planning (Regulatory) Committee Liberal Democrat

Group Spokesperson

Officers Present:

David Cumming Strategic Transport Team Manager

1 Apologies for Absence

1.1 No apologies were received; Cllr David Collis was absent.

2. Election of Chair

2.1 Cllr Martin Wilby was duly elected as Chair for the ensuing Council year.

3. Election of Vice-Chair

3.1 Cllr Grant was duly elected as Vice-Chair for the ensuing Council year.

4. Minutes

4.1 The minutes of the meeting held on 19 August 2019 were agreed as an accurate record.

5. Declarations of Interest

5.1 There were no interests declared.

6. Urgent Business

6.1 There was no urgent business discussed.

7. A47 Blofield to Burlingham Dualling

7.1.1 The Committee received the report dealing with consultation by the Planning

Inspectorate on a proposal by Highways England on proposals to dual the A47 between Blofield and Burlingham. The project was deemed to be a Nationally Significant Infrastructure Project and would be determined by the Secretary of State.

7.1.2 The Strategic Transport Team Manager introduced the report to the Committee:

- When responding to the consultation, officers intended to mark the Council as an interested party and outline the Council's views on the project to prepare for the examination process. There would be 3 months to prepare followed by a pre-examination meeting prior to moving to examination of the scheme.
- The Planning Inspectorate would make recommendations to the Secretary of State who would then have three months to make the final decision on whether to grant approval of the scheme.
- If granted the scheme was forecast to start in January 2022 and finish in 2024-25.
- The report to Committee set out the Council's draft response to the Planning Inspectorate for their agreement.

7.2 The following points were discussed and noted:

- Some of the consultation had been delayed due to the Covid-19 pandemic, and it was therefore queried if enough time was available for all necessary paperwork to be completed. The Strategic Transport Team Manager confirmed that there was a team of specialists in place to complete such applications and was confident the paperwork would be completed in time for submission. The 28 day period started on Friday 26 February 2021 allowing time for officers to refine the Council's response; it was unlikely that the response would differ greatly from that shown in the report although documents not available at time of writing the report would need reviewing and this may result in some changes.
- Cllr Eric Seward arrived at 14:09
- Concerns were raised about officers not being able to access the Planning Inspectorate website for a period of time. The full suite of documents was now available to view on the website and the Strategic Transport Team Manager did not think the late receipt of these documents would greatly affect the submission.
- Areas of concern outlined in the report would continue to be discussed. These could be addressed at examination if not addressed by this point.
- Concerns were discussed about ongoing costs to the Council following the detrunking at North Burlingham. Discussions were ongoing with Highways England about this including the option of the Council paying for ongoing maintenance or bringing the road up to a higher standard. It was hoped that progress would be made on this before the application was put in.
- The Strategic Transport Team Manager clarified that condition reports were required to confirm the condition of the road and discussions were ongoing.
- Members discussed the lack of provision in the Development Consent Order plans for non-motorised users between Lingwood and Burlingham and agreed that it was important for a footbridge to be provided here. Highways England had undertaken surveys about provision for people walking and cycling in this area which showed few people crossed the A47, providing justification for them to not provide such provision. The Members of the Committee asked officers to pursue provision of a footbridge here with Highways England.
- Side road junctions along the scheme would be stopped and access would instead be via overbridges

The Committee:

1. **SUPPORTED** the principle of dualling the A47 between Blofield and Burlingham subject to:

- (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.
- 2. **ASKED** officers to ask Highways England to install an overbridge for pedestrians and cyclists between Lingwood and Burlingham
- 3. **DELEGATED** the approval of the final response to the Cabinet Member for Highways, Transport and Infrastructure.

The meeting ended at 14:31

CHAIRMAN



If you need this document in large print, audio, Braille, alternative format or in a different language please contact Customer Services on 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

Planning and Highway Delegations Committee

Item No: 7

Decision making report title:	A47 North Tuddenham to Easton Dualling
Date of meeting:	03 June 2021
Responsible Cabinet Member:	Cllr Wilby (Cabinet Member for Highways, Transport and Infrastructure)
Responsible Director:	Tom McCabe: Executive Director, Community and Environmental Services
Is this a key decision?	No

Introduction from Cabinet Member

The county council has strongly advocated improvements to the A47 and has engaged at officer-level with Highways England in bringing these proposals forward. We are also working, through the A47 Alliance, for further improvement schemes to be included in subsequent Road Investment Strategies.

Highways England's case for the North Tuddenham to Easton scheme sets out that this single carriageway section of the road no longer meets the needs of its users. The section acts as a bottleneck, resulting in congestion that leads to longer journey times, increasing the need for the scheme. The scheme is also needed to address safety concerns along this section of the A47.

Dualling this section of the A47 will complete the dual carriageway between Norwich and Dereham, helping to improve the strategic function of the A47 unlocking economic growth and development in the area. Dualling will also support access to the proposed Norwich Western Link Road which will provide connectivity to the north of the county.

Responding as suggested in this report will enable the county council's detailed points on the Proposed Scheme to be considered and taken on board. This will help bring forward the vital dualling of this section of the A47, a measure that the county council has long supported due to the benefits for road users, businesses, residents and visitors and is increasingly important now as an aid to economic recovery from the pandemic.

Executive Summary

This report deals with an opportunity to submit representations to the Planning Inspectorate on a proposal by Highways England to dual the A47 between North Tuddenham and Easton. The proposal is deemed to be a Nationally Significant Infrastructure Project (NSIP). Highways England's application for development consent will be determined by the Secretary of State.

This is a formal Development Consent Order (DCO) consultation under Section 56 of the Planning Act 2008. This is an opportunity to make any initial formal representations on the

merits of the proposal prior to the statutory Examination, although the county council will have an opportunity to submit a Local Impact Report (LIR) under Section 60(3) of the Act as part of the Examination process.

Members should be aware that comments on the pre-application version of this proposal (Section 42) were agreed by the Cabinet Member following cancellation of the Planning and Highway Delegations Committee in March 2020.

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 comments in respect of, amongst other things, local highway and access matters, flood risk and environmental management that will need to be resolved ahead of any final decision and on the DCO application for the proposed scheme.

The most significant items of concern relate to the arrangements for transfer of the current trunk road assets to the county council following delivery of the proposed scheme (this is detailed in Sections 3.10-11), the interaction of the scheme with the Norwich Western Link (Sections 3.12-19) and access to the Food Enterprise Park (Sections 3.27-29).

Recommendations

- 1. Support the principle of dualling the A47 between North Tuddenham and Easton subject to:
 - (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.
- 2. Agree the initial representation to the proposal, as set out in the relevant sections of the report.

1. Background and Purpose

- 1.1. This is a Development Consent Order (DCO) application for dualling part of the A47 between North Tuddenham and Easton, which will be determined by the Secretary of State. The application is defined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008.
- 1.2. The pre-application version of this proposal was dealt with by the Cabinet Member under Delegated Powers following cancellation of the Planning and Highway Delegations Committee in March 2020. Norfolk County Council supported the principle of dualling the A47 between North Tuddenham and Easton subject to a number of detailed comments being taken into account.
- 1.3. The DCO application is now being handled by the Planning Inspectorate under the above Act. This is the final opportunity to respond to the DCO application ahead of the formal Examination process and a registering as an interested party and submitting a relevant representation at this stage will facilitate the council's

involvement in the Examination process. The county council will also, however, be able to submit a Local Impact Assessment (LIR) under Section 60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the county council's function. The LIR will be based on the detailed representations set out in this report. The county council will also continue to work with Highways England to resolve the matters of concern.

1.4. The county council is a statutory consultee and can make comments on the DCO application and the supporting Environmental Impact Assessment (EIA) / Environmental Statement (ES). The full application, together with the supporting documents can be found on the Planning Inspectorate's website.

A video, developed by Highways England, outlining the A47 dualling scheme can be found <u>here</u>.

1.5. The county council could also submit separate representations as promoter of the Norwich Western Link. This report deals with the representations by the county council in respect of the Authority's statutory role as: Highways Authority; Minerals and Waste Planning Authority; and Lead Local Flood Authority (LLFA); and in having Public Health responsibilities, given the need for separation of county council functions in relation to the Norwich Western Link scheme.

2. Proposals

2.1. Members are asked to agree comments in response to a Development Consent Order application for dualling the A47 between North Tuddenham and Easton. The proposals contained within this DCO are set out in Section 2.2 below. A plan showing the proposals is shown as Appendix A.

Members are asked to:

- 1. Support the principle of dualling the A47 between North Tuddenham and Easton, subject to:
 - 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.
- 2. Agree the initial representation to the proposal, as set out in the relevant sections of the report.
- 2.2. The proposal comprises nine kilometres of new dual carriageway between North Tuddenham and Easton, running to the south of the existing A47 at Hockering and north of the existing A47 at Honingham.

Once the scheme is opened, it would form part of the A47 trunk road and the wider strategic road network. It would be managed by Highways England. The existing A47 would be de-trunked and become the responsibility of Norfolk County Council.

New / amended junctions comprise:

 Two new junctions where the A47 passes over the local roads: one where Berrys Lane meets Wood Lane (described throughout as Wood Lane

- Junction) and one where Blind Lane meets Taverham Road (Norwich Road Junction)
- Removal of the existing roundabout at Easton to create a free-flowing A47 road. Access west of Easton would be via the new Wood Lane junction. The Norwich Western Link would also connect at this junction
- Building four bridges for the existing A47 to pass over or under: the new Mattishall Lane Link Road, the proposed Wood Lane junction, the River Tud and the proposed Norwich Road junction
- Two new lay-bys on the A47 between Fox Lane and the proposed Wood Lane junction, and police observation points
- Closure to through traffic of: Church Lane (East Tuddenham), Berrys Lane, Blind Lane and Church Lane (Easton), north of the A47
- Widening of the junction of Rotten Row and Church Lane (East Tuddenham)

Converting sections of the existing A47 for local needs involves:

- Converting to a Class B road north of Honingham, with a new cycle track between, and the new Dereham Road link road and Honingham roundabout
- Reducing to a single lane in front of St Andrews Church, Honingham, with inclusion of passing places, parking places, turning area and security gate

New walking, cycling and public rights of way amenities include:

- A new route for walkers and cyclists linking Honingham with St Andrew's Church below the A47 via the proposed Honingham Church underpass
- A new route for walkers and cyclists linking Easton with Lower Easton over the A47 via a proposed Easton footbridge

New drainage systems include:

- New outfalls to the River Tud
- Dry culverts to maintain overland flow paths
- New attenuation basins, with pollution control devices, to control discharges to local watercourses

Other details include:

- Compounds, material storage areas and temporary vehicle parking located within the scheme boundary when construction is taking place
- Diverting or installing new utilities infrastructure, such as a high-pressure gas pipeline, electricity cables, water pipelines and electronic communications cables
- Environmental measures embedded into the Proposed Scheme design to reduce the environmental effects and deliver wider benefits, such as noise barriers, low noise road surfaces, permanent mammal crossings and new wetland habitats.
- 2.3. Local Member comments will be reported orally at Committee.

3. Impact of the Proposal

3.1. The proposal is to provide nine kilometres of new dual carriageway between North Tuddenham to Easton, running to the south of the existing A47 at Hockering and north of the existing A47 at Honingham.

Full dualling of the A47 has been long supported by the county council. Responding to the submission of the Development Consent Order will allow the county council to raise issues that we would want to continue to work with Highways England on resolving as the project goes through the approval process.

- 3.2. The principal role of the county council in responding to the above proposal will be in respect of the Authority's statutory role as:
 - Highways Authority
 - Minerals and Waste Planning Authority
 - Lead Local Flood Authority (LLFA)
 - Having Public Health responsibilities.
- 3.3. In addition, the county council has an advisory environmental role and economic development function, which also need to feed into any response made to the proposal.
- 3.4. The remainder of this section of the report assesses the Environmental Statement (ES) and other supporting documentation in respect of the county council's key functions and sets out the authority's proposed response and comments. The ES is summarised in the Environmental Statement: Non-Technical Summary and this has been referred to in many of the sections below.
- 3.5. **Main points of concern**

Although it is not recommended that Members raise objections to the proposals, there are a number of areas where we have concerns. Many of these are detailed concerns. The most significant relate to resolving issues related to:

- How to deal with traffic issues arising 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 (see Section 3.12-3.19)
- Connections to the Food Enterprise Park (see Section 3.27-3.29)
- The county council taking on responsibilities for parts of the existing A47 trunk road that will be de-trunked following the scheme (Section 3.10-11).

Other considerations include:

- Ensuring mitigation planting to address impacts on landscape is appropriate to replace the vegetation and trees that have been lost
- Ensuring data on biodiversity, and more specifically bats, is up to date and demonstrating that mitigation measures are effective.
- Recommendations on bat surveying should be taken into account such as the use of thermal imaging
- Further clarifications regarding drainage and flooding need to be made
- Ensuring full consideration of climate change mitigation has been made and will be implemented with the proposed scheme

- 3.6. Our proposed response in respect of highway matters is set out in Sections 3.10 and 3.11. To date there have been very limited discussions with Highways England about which parts of the existing A47 provision are proposed to be taken on by Norfolk County Council following the improvement scheme. At present 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.
- 3.7. The following sections go through each issue in turn, providing a summary of the impacts of the proposal as set out by Highways England in their submission, followed by the council's proposed representation on that issue.

3.8. Overview

The proposal is outlined in Section 2.2 and shown in Appendix A. Detailed plans are available on the Planning Inspectorate's website.

In summary, the proposal is to dual the existing single carriageway section of the A47 between North Tuddenham and Easton. Together with the proposals to dual Blofield to Burlingham, this scheme will result in the A47 being to dual carriageway standard all the way from Dereham to Acle. Highways England is also bringing forward a major improvement at the A47 / A11 Thickthorn Junction, Norwich, and improvements – yet to be devised – at Vauxhall and Harfreys junctions in Great Yarmouth.

3.9. **Proposed representation**

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.

3.10. **De-trunking**

Following completion of the scheme, those parts of the existing A47 that would no longer form part of the trunk road network, for example, the original single carriageway sections of the A47 between North Tuddenham and Easton which will be superseded by the new dual carriageway, would be de-trunked. Responsibility for ongoing management and maintenance would fall to Norfolk County Council as the local highway authority.

Whilst the county council would receive additional maintenance funding through the national grant agreement formula (due to the additional road length being maintained) this is not likely to be of any significance. It would not be sufficient to bring roads or structures up to standard (if they require this). To date we have not been provided with data indicating what assets might require attention in the short to medium term.

3.11. **Proposed representation**

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 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.

3.12. Norwich Western Link

This scheme and the county council promoted Norwich Western Link Road (NWL) are in close proximity geographically as well as in their timing. The dualling scheme would provide a connection to the proposed NWL via the Wood Lane junction, as can be seen in Appendix B. In terms of timing, the NWL is programmed to start on site in 2023 with the road completed and open to traffic in late 2025. Easton to Tuddenham dualling is programmed for a start date in 2023 and be open for traffic in 2024.

There has been, and continues to be, extensive dialogue between Highways England and Norfolk County Council as scheme promoters. This has provided an understanding of the two schemes' impacts – both as individual, stand-alone schemes and in combination – and design and construction details where the two schemes physically would join.

The next section details the comments the council is proposing to make on these two aspects. This takes into account that construction of the A47 dualling will have impacts, particularly traffic impacts on the surrounding road network. Some of these would be addressed when the NWL is open to traffic. However, should delivery of the NWL not subsequently come forward, or come forward some time after completion of A47 dualling, it would be expected that any significant issues should be addressed as part of the A47 scheme.

3.13. **Proposed representation**

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)

3.14. Wood Lane junction – single carriageway link

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 capacity of this, its possible future long-term capacity and also about its resilience should there be an incident on the underpass.

This part of the network is proposed to form part of the local, non-trunk road network and future maintenance and management would fall to the county council. The county council needs to be assured that its design can 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.

(Document reference: GENERAL ARRANGEMENT PLANS REGULATION 5(2)(o) SHEET 9 OF 23 HE551489-GTY-LSI-000-DR-CH-31009)

3.15. Wood Lane street lighting

The lighting strategy for the Wood Lane junction has not been sufficiently defined to assess the interface with the NWL. This issue needs 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.)

3.16. 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)

3.17. DCO Order Limits overlap with NWL site extent

The DCO Order limits at the Wood Lane junction overlap the proposed NWL site extent boundary. Granting of the DCO should ensure that the NWL proposals can be delivered after the DCO is in force.

(Document reference: GENERAL ARRANGEMENT PLANS REGULATION 5(2)(o) SHEET 10 OF 23 HE551489-GTY-LSI-000-DR-CH-31010)

3.18. 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)

3.19. Wood Lane speed limit

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-GTY-LSI-000-DR-CH-35010)

3.20. Highways Impacts

The highway impacts of the A47 North Tuddenham to Easton Dualling scheme are set out in Development Consent Order (DCO) document 7.1 Case for the Scheme.

- 3.21. With regard for the need for the scheme this document notes that "The main issues for the route relate to capacity; some of the links and junctions are currently over capacity and/or will be over capacity. The limited capacity impacts on the route reliability and creates journey time delays. It also can cause traffic to divert onto the highway network and generate further issues. There are safety issues in certain locations where there are currently high collision and incident rates that could be addressed."
- 3.22. The DCO report sets out the traffic impact of the scheme on the A47 trunk road and the adjoining roads which are the responsibility of Norfolk County Council. In the main analysis (Core Scenario), these figures assume that the Norwich Western Link (NWL) will be in place because it is classified as "near certain" due to being in government's Large Local Major scheme programme. In order to identify the impacts attributable to the A47 scheme and those due to the NWL alone, the DCO report also sets out a diagram showing the main analysis figures alongside an alternative set with the NWL scheme removed.
- 3.23. From the report it is clear that the combination of both schemes (A47 dualling and the NWL) increases traffic levels on the A47 as they provide more attractive routes and draw traffic from minor roads. The analysis also demonstrates the impacts of the NWL in providing an alternative route around Norwich because at the eastern end of the A47 dualling scheme, traffic levels would increase further if it wasn't for the NWL.
- 3.24. What is also clear is that with no NWL in place traffic levels on Sandy Lane, Wood Lane and Taverham Road increase due to the A47 dualling scheme. Ringland Parish is concerned about a potential intermediate condition whereby the A47 dualling is complete but the NWL is not. With the removal of the Easton roundabout they are expecting higher traffic from the new junction at Blind Lane / Taverham Road with traffic from the A47 using Taverham Road through to Ringland and

beyond to the A1067. To counter this, they have proposed that Honingham Lane south of Ringland is stopped up.

The obvious mitigation measure for these impacts is the NWL. However, we need an understanding with Highways England as to how to deal with the interim situation as it is likely that the A47 dualling scheme will come into operation before the NWL is opened to traffic.

It should also be noted that the county council has been working with Weston Longville to deal with mitigation measures (traffic calming) should the NWL be delayed.

3.25. **Proposed representation**

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.

3.26. 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.

3.27. Food Enterprise Park

Broadland District Council adopted a Local Development Order for the Food Enterprise Park (FEP). This sets out that development of the site, comprising some 19 hectares, will be permitted for (amongst other things) the following purposes: Agri-tech businesses which make use of the local agri-science base; food technology; processing and manufacturing; and storage and distribution. The LDO sets out that, prior to commencement of development, a scheme of works shall be agreed by Broadland District Council in consultation with the county council and, where appropriate, Highways England. The scheme of works shall include the following, unless otherwise agreed with Broadland, and identify triggers for the implementation of each component:

- Realignment of priority at the junction of Dereham Road / Church Lane
- A right turn Lane from Dereham Road into Church Lane
- A scheme of widening improvements to Church Lane
- Vehicular access to the LDO site either off Church Lane / Red Barn Lane or directly from the A47
- Enhanced footway and cycle facilities to connect with Dereham Road

- The closure of Blind Lane to vehicular traffic.
- 3.28. The proposal from Highways England shows a repositioned Easton roundabout at the junction with Blind Lane (the Taverham Road junction). Blind Lane is however not proposed to be connected into this junction since Highways England propose that it be closed. This is due to local stakeholders' concerns about additional traffic using Blind Lane, and its unsuitability for this, should it be left open. (Berry's Lane, a similar north-south route south of the A47 is also proposed to be closed for similar reasons.) Whilst the new proposed junction arrangements potentially provide excellent access to the FEP, Highways England's scheme does not currently provide an access, or allow a new access to be constructed from Bind Lane, since this is not proposed to be connected to the roundabout junction. Therefore, whilst the proposed junction is an integral element of delivering the FEP vision an access is not proposed to be delivered at this point by Highways England. Their expectation appears to be that an access would be delivered post-scheme by the FEP at their expense; the likely cost of such an access being potentially significantly higher following the trunk road scheme than it would be today (because it would require not only a connection to Blind Lane to be made but also significant construction work to connect Blind Lane to the proposed new junction).

Discussions with Highways England are ongoing and Highways England are investigating whether such an access could be constructed as a part of the main A47 dualling works. Whilst the additional cost would still be expected to be met by the developer, it is potentially significantly cheaper than undertaking it as a separate scheme post-A47 dualling. To enable this, the FEP would need to secure any necessary consents, such as planning consent, prior to A47 construction.

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.

3.29. **Proposed representation**

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.

3.30. Socio-Economic Impacts

There are potentially significant economic benefits arising from the dualling proposal in terms of:

- Local employment creation
- Business sectors affected by construction
- Productivity benefits to businesses, and other wider economic benefits arising from dualling.

3.31. **Proposed representation**

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.

3.32. 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.

3.33. Environmental Issues

An Environmental Statement (ES) has been prepared to accompany the DCO Application. This sets out a description of the proposed scheme and the reasonable alternatives considered in the development of the design, the environmental setting, potential impacts and the likely significant effects of the Proposed Scheme on local communities and the environment, and the measures proposed to mitigate these effects.

The Environmental Statement: Non-Technical Summary provides a summary of the ES in non-technical language. This section considers each of the issues in the non-technical summary in turn.

3.34. **Air Quality**

The Highways England assessment concluded that it is unlikely that the construction of the scheme would have a significant effect on air quality or affect the UK's ability to comply with the Air Quality Directive.

The assessment also concluded that during the operation of the scheme there would be no significant adverse effects on the air quality at both human and ecological receptors.

With no significant effects predicted, no mitigation is required.

3.35. **Proposed representation**

The county council supports improvements to air quality and would want to see continued monitoring including in operation of the scheme following construction. We would expect the construction phases to be co-ordinated 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

3.36. Cultural Heritage

Cultural heritage includes archaeology, historic buildings / structures and historic landscapes including parks and gardens.

The Environmental Statement: Non-Technical Summary sets out that the Proposed Scheme will have both beneficial and adverse effects on cultural heritage, but also states that potential adverse impacts have been reduced or eliminated through the design and mitigation. A programme of archaeological recording and publishing is proposed to mitigate adverse impacts where they could not be avoided.

Residual adverse effects on setting have been identified as a result of construction and operation activities on the following heritage assets:

- St Peter's Church (NHLE 1305921 Grade I Listed Building) Moderate
- St Andrew's Church (NHLE 1170701 Grade II* Listed Building) Large
- Church Farm House (NHLE 1051542 Grade II Listed Building) Slight
- Berry Hall (NHLE 1396730 Grade II Listed Building) Slight

Positive impacts are noted as being:

- The setting of the Grade I listed St Michael's Parish Church in Hockering and three other Grade II listed buildings near the existing A47 in Hockering due to moving traffic further away and maintaining an appropriate density of planted screening
- Planned conservation of two mileposts along the route of the existing A47, which Highways England will also propose for listing by Historic England.

3.37. **Proposed representation**

Archaeology

A significant amount of archaeological investigations have 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 sub-paragraph (1) and the provision to be made for analysis, publication and dissemination of results and archive deposition has been secured.

3.38. *Arboriculture*

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 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
- Size
- 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:

- 1. Avoid impacts
- 2. Reduce (mitigate) impacts
- 3. And compensate as a last resort.

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
- Selective veteranisation of specific trees.

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.

3.39. Landscape

The Landscape and Visual Effects Assessment has identified that during construction there would be a loss of existing trees and hedgerows and a change to the existing agricultural land use. People's views would also be affected, including views of earthworks, construction vehicles and work associated with the installation of overbridges.

During the initial stages of operation, the scheme, including the road, vehicles and structures along the highway, would be visible however once tree and hedgerow planning is established, visibility of the Proposed Scheme and associated landscape features would revert to a state comparable to that of the existing situation.

The assessment concludes that the Proposed Scheme would not result in an overall significant residual effect on the landscape.

3.40. **Proposed representation**

In reference to Chapter 7 of the Environmental Assessment – Landscape and Visual Effects:

Norfolk County Council considers that:

- Paragraph 7.2: Suitable expertise is provided for such an assessment.
- 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.
- Paragraph 7.4.1: Suitable guidance is being used and adhered to, and we welcome other relevant references being taken account of.
- Paragraph 7.4.5: Comments on Visual Receptors are discussed below.
- 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.
- 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.
- 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.
- Paragraph 7.4.11: Comments on Cumulative Effects Assessment are discussed below.
- Paragraph 7.4.12: Verified Photomontage Methodology is discussed below.
- 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.
- 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.
- 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.

- Paragraph 7.4.18: We are satisfied that the viewpoint locations have been agreed with both Breckland District Council and South Norfolk District Council.
- 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.
- 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.
- Paragraph 7.7.17: Landscape Character areas are discussed below.
- 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.
- 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.
- Paragraph 7.9.1: We support the measures proposed for mitigation during construction.
- 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.
- 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.
- 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.
- 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.
- 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.

- Paragraph 7.10.16: We broadly agree with the effects on representative viewpoints as laid out in Table 7-8 during the construction phase.
- 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.
- 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.
- Paragraph 7.10.49: We note and agree with the conclusions drawn that the visual impacts of night-time effects, it appears that no conclusion is given to day-time effects, but the assessments given for the representative viewpoints are agreeable.
- 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.
- 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.
- 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.

In reference to Chapter 15 – Cumulative Effects Assessment:

(Please note only elements relevant to Landscape and visual effects have been reviewed).

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.

- 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.
- 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.

• 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.

In reference to ZTV and Verified Photomontage Methodology (Appendix 7.2):

1.1.3 Suitable methodology has been used and relevant and industry standard best practise and recommendations referred to.

In reference to Landscape Character Areas (Appendix 7.3):

1.1.1 Suitable Landscape Character Studies have been used to conduct this assessment.

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.

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.

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. 1.1.2 I have been unable to locate: Figure 8.4 (Visual Context) (TR010038/APP/6.2)

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 development, but also be reflective and respectful of the wider landscape.

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.

3.41. **Biodiversity**

The Environmental Statement Non-Technical Summary notes that there are valuable habitats and species of nature conservation importance that could be adversely affected by the proposed scheme and that, although avoidance of impacting trees and hedgerows was a key consideration throughout the design stage, there will be some areas of these habitats that will need to be lost.

The summary states that mitigation measures have been identified to safeguard the conservation status of wildlife populations through both the construction and operational phases.

The summary identifies potential unmitigated impacts of the proposed works as being the loss of nesting, roosting, resting, commuting and foraging habitat for a range of protected and notable species. Mitigation measures will be implemented during the construction and operational stages to reduce the effects of the scheme on individuals and populations of such protected and notable species.

The summary states that following the implementation of the mitigation measures during construction and operation, there would be residual significant effects on barn owls, this significant effect would be until agreements are in place with landowners to place suitable nest boxes, and bats.

Also following mitigation, there will be a moderate adverse residual effect on hedgerows, deciduous woodlands, and grazing marsh as a result of the long maturity period for planting; grasslands and ponds will however have a slight beneficial effect.

All other biodiversity resources are not considered to be significant.

3.42. **Proposed representation**

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.

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.

In reference to survey areas:

The bat activity 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.

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.

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 gain will be achieved. If there is off-site mitigation/ compensation proposed no details of off-site mitigation/ compensation has been provided.

3.43. 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.

3.44. Bats

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 provided. Section 7.1.3 refers to "although 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.

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.

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 for determining success.

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.

3.45. Otters and Water Voles

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.

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.

3.46. Reptiles

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.

3.47. Barn Owls

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.

3.48. Birds

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).

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 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/Guidelinesfor-Accessing-and-Using-Biodiversity-Data-March-2020.pdf

3.49. Terrestrial Invertebrates

In reference to Terrestrial Invertebrate Survey Report (Appendix 8.3):

No desk study was undertaken as part of the assessment. The report 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.

3.50. Vegetation and trees

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 off-site 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 possibly ancient woodland.

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.

3.51. Badgers

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'.

3.52. Designated Sites and Priority Habitats

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.

3.53. 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.

3.54. **Geology and Soils**

No designated geological sites are located in the study area. The land surrounding the Proposed Scheme is mainly agricultural fields with small residential areas dispersed along the existing A47.

The Proposed Scheme would result in permanent land take and temporary land take of Grades 2, 3a, 3b and 4 agricultural land (very good through to poor quality), though the scheme has sought to minimise the areas of land take. The permanent land take from the Proposed Scheme would result in significant residual effects on agricultural soil. A Soil Management Plan will be developed to preserve the land quality and restore the areas of temporary land take to their previous condition.

Only minor evidence of contamination has been found from historical activities. Therefore, there are no special remedial activities recommended for the Proposed Scheme.

3.55. **Proposed representation**

No comments in respect of this particular topic in the submission.

3.56. Material Assets & Waste

The assessment concludes that there is not predicted to be any significant environmental effects from the use of material assets and generation of waste during the first year of operational activities due to limited material use and waste generation from infrequent maintenance activities.

Overall, the materials used are predicted to include over 31% of recycled material and over 70% of the material generated will be re-used or recycled.

3.57. The comments set out below relate to Norfolk County Council in its capacity as the Minerals and Waste Planning Authority. The comments have been made on the Environmental Statement Appendix 10.3 - Mineral Impact Assessment.

3.58. **Proposed representation**

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 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.

Norfolk County Council, in its capacity as the Mineral Planning Authority considers that if the scheme is required to follow the strategy outlined in the Mineral Impact Assessment this will effectively address mineral safeguarding issues relating to resource sterilisation.

3.59. Noise and Vibration

The Environmental Statement Non-Technical Summary notes that there will be sensitive receptors, such as residential homes, near to the proposal, and that receptors that are close to the A47 are already exposed to relatively high noise levels due to road traffic.

The assessment concludes that:

- Significant effects due to construction noise are unlikely however a significant adverse temporary effect is predicted at Acorn Barn due to construction noise from the adjacent drainage works
- Significant effects due to construction vibration are not expected, subject to monitoring and effective implementation of mitigation
- Potential significant effects from construction traffic are unlikely.

At the operational stage there will be a number of significant residual traffic noise effects, both adverse and beneficial. A majority of the beneficial noise effects are due to the expected change in road user behaviour (traffic re-routing) due to the Proposed Scheme.

Significant adverse effects at the majority of receptors are due to traffic re-routing at locations where mitigation is not practical. Adverse effects at the remaining receptors are due to:

- More road users choosing to access the improved A47.
- Significant effects remaining at some locations despite mitigation being included

 Some noise barriers not being provided for receptors far from the proposed scheme where the marginal benefits provided by a noise barrier does not affect the outcome of the assessment

Noise Important Areas are not predicted to experience any significant effects due to the Proposed Scheme.

3.60. **Proposed representation**

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.

3.61. **Population and Human Health**

The Environmental Statement Non-Technical Summary notes that the main communities located by the Proposed Scheme include Hockering, Honingham and Easton, with scattered properties along the length of the Proposed Scheme. The surrounding area is predominantly arable with some areas of woodland used by the community. Paths are mostly located between Hockering and Honingham communities.

The assessment concludes that, during construction:

- Access along the local road network for local residents and businesses across the study area may be disrupted whilst traffic management measures are in place, resulting in longer journey times and a degree of temporary severance
- There would be some adverse amenity effects for human health, specifically in terms of noise, dust and visual intrusion. Mitigation measures would minimise these effects.
- Agricultural holdings within the DCO boundary would experience disruption to farming operations including, in some cases, severance of farm and field access. Where possible, new access arrangements have been designed though these result in longer journey times and requires the removal of mature trees and hedgerows.

Permanent impacts would include:

- Changes in severance for private property and housing, community land, community assts, development land and businesses in the communities of Great Witchingham, Upper Wensum, Mattishall and Easton
- Access arrangements to some private properties and businesses would change, some of which would result in a significant moderate adverse effect
- Permanent land take from a consecrated field adjacent to St Peter's Church, resulting in a significant adverse effect
- Users of footpaths Hockering FP7, Honingham RBI and Ringland Lane / Dog Lane crossing, are anticipated to experience significant residual adverse effects as a result of path closures and journey length increases
- Improved connectivity between Hockering and Easton for pedestrians and cyclists through the provision of a new footway/cycleway and safe crossings as part of the Proposed Scheme

 Permanent agricultural land-take is required which will impact the wider agricultural holdings in different ways, potentially leading to increased costs or a reduction in turnover. Three agricultural holdings would result in permanent significant adverse effects.

3.62. **Proposed representation**

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.

3.63. Norfolk County Council fully supports the range of improvements and additional walking, cycling and horse-riding (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 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 additional distance, makes this a WCH travel (or long-distance recreation) choice and not a short distance recreation choice and so is excluding a significant area of WCH provision.

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 east-west 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 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.

3.64. Road Drainage and the Water Environment

The Environmental Statement Non-Technical Summary identified the key surface water receptors to be the River Tud, ordinary water courses and ponds local to the Proposed Scheme, with the River Wensum identified as a potential receptor as it is located immediately downstream of the River Tud.

Potential impacts to the surface water environment include:

- Flooding of nearby downstream receptors
- Increased pollutants in routine runoff and from accidental spillage
- Loss or degradation of natural channels
- Change in surface water quality and aquatic environment due to construction
- Loss of seven ponds.

Key groundwater receptors include Secondary superficial aquifers and the Chalk principal aquifer. Potential impacts to the groundwater environment include:

- Subsurface structures acting as a barrier to groundwater flow
- Temporary groundwater control within the saturated aquifers, impacting on indirect receptors
- Water quality impacts.

The non-technical summary states that the new carriageway will discharge primarily to the River Tud and its tributaries. Drainage has been designed to attenuate to runoff rates of a 1 in 100-year storm event (plus a 20% climate change allowance). The Proposed Scheme design incorporates the treatment of road drainage prior to discharging.

Mitigation measures required include habitat restoration and the replacement of ponds one for one.

No significant adverse residual effects are expected as a result of the Proposed Scheme during construction or operational phases with the adoption of specified mitigation measures.

3.65. **Proposed representation**

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 ongoing activities relate to requests for clarification or 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 stage. Therefore, the information presented in the ES chapter 13 is not substantiated by the current evidence base. The LLFA seeks assurances that further information will be provided regarding the construction drainage strategy to ensure there is no increase in flood risk during the construction phase, prior to the permanent surface water drainage system becoming operational.

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.

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.

3.66. **Climate**

The construction, operation and use of the Proposed Scheme is predicted to increase carbon emissions. The Environmental Statement Non-Technical Summary states that guidance on gauging the significance of carbon emissions in EIA is evolving, but that a definitive assessment of materiality is not possible.

Additional measures have been adopted as part of the design of the Proposed Scheme to reduce carbon emissions. This is on top of the recent UK government announcement on ending the sales of new petrol and diesel vehicles by 2030 which will further reduce the Proposed Scheme's end user carbon emissions.

The non-technical summary also sets out that the vulnerability of the proposal to projected changes in climate during operation has been assessed, and it has been deemed resilient. Therefore, no significant effects as a result of climate change are anticipated. This will be reviewed when updated climate projections become available.

3.67. **Proposed representation**

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.

4. Evidence and Reasons for Decision

4.1. Responding to the consultation as suggested will enable the county council's detailed points on Highways England's proposed dualling scheme to be considered and taken into account during the Development Consent Order process prior to a final decision being made by the Secretary of State. This will help to bring forward the best scheme to dual this section of the A47, a measure that the county council has long supported due to benefits for road users, businesses, residents and visitors.

5. Alternative Options

5.1. The council could choose not to respond, but this will not enable the county council's detailed points on Highways England's proposed dualling scheme to be considered and taken into account.

6. Financial Implications

6.1. **Staff:**

- 6.2. Staff have engaged with the applicant at the technical scoping stage; attending steering group and topic-based meetings and provided technical advice and information in respect of the county council's statutory responsibilities. The county council has charged for some of this advice and technical data provided.
- 6.3. There will be an ongoing future implication for the county council in respect of the transfer of assets to us as the local highways authority, see Section 3.10 to 3.11. Ensuring that we reach an agreement, 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, prior to any assets being transferred to us will minimise any financial risk for the authority.

7. Resource Implications

7.1. **Staff:**

Staff resources for dealing with this project are being met from existing resources.

7.2. **Property:**

No implications (other than the transfer of highways assets).

7.3. **IT:**

No implications

8. Other Implications

8.1. **Legal Implications**

N/A

8.2. Human Rights implications

N/A

8.3. Equality Impact Assessment (EqIA) (this <u>must</u> be included)

An Equality Impact Assessment has been undertaken by Highways England to inform development of the proposals.

8.4. Health and Safety implications

N/A

8.5. Sustainability implications

These are considered in the main text of the report.

8.6. Any other implications

N/A

9. Risk Implications/Assessment

9.1. The county council is a statutory consultee on any Nationally Significant Infrastructure Project determined by the Secretary of State within Norfolk or on the borders with Norfolk. The county council will also be invited to submit a Local Impact Report (LIR), the content of which is a matter for the local authority and can include local transport issues and the local area characteristics.

Officers will continue to work with Highways England on resolving the key points prior to, and during, Examination prior to determination of the Development Consent Order application.

10. Select Committee comments

10.1. N/A

11. Recommendations

11.1. To support the principle of dualling the A47 between North Tuddenham to Easton subject to:

- (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.

Agree the initial representation to the proposal, as set out in the relevant sections of the report.

12. Background Papers

12.1. The National Planning Policy Framework

https://www.gov.uk/government/publications/national-planning-policy-framework--2

The Planning Act (2008)

https://www.legislation.gov.uk/ukpga/2008/29/contents

A47 North Tuddenham to Easton Dualling: Planning Inspectorate Website

https://infrastructure.planninginspectorate.gov.uk/projects/eastern/a47-north-tuddenham-to-easton/

A47 North Tuddenham to Easton Dualling: Highways England Website

https://highwaysengland.co.uk/our-work/east/a47-north-tuddenham-to-easton-improvement/

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

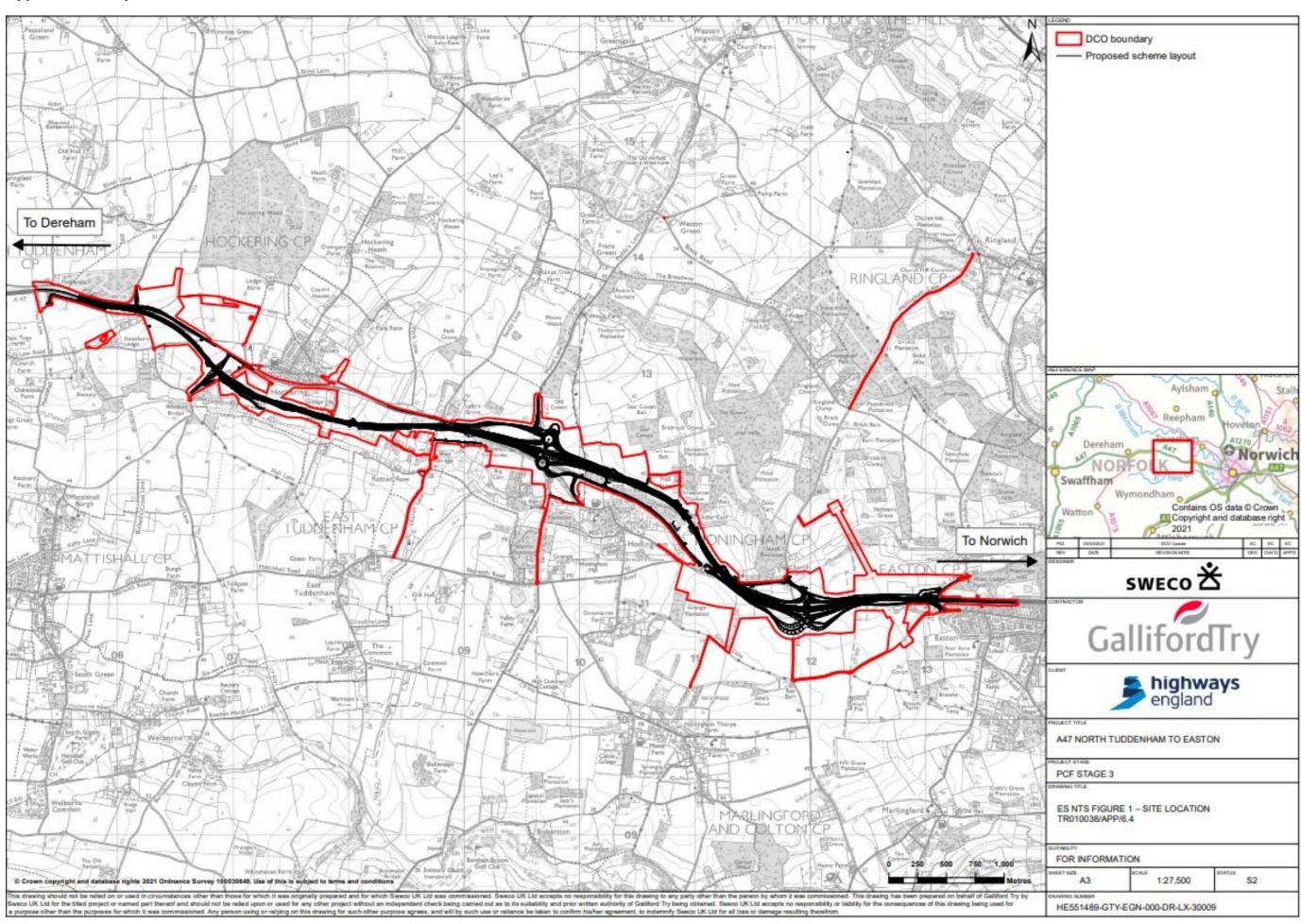
Officer name: David Cumming Tel No.: 01603 224225

Email address: David.cumming@norfolk.gov.uk



If you need this report in large print, audio, braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

Appendix A: Proposed Scheme Plan



Appendix B: Wood Lane Junction showing connection to Norwich Western Link (in pink) FOR DCO SUBMISSION TR010038/APP/2.4(K) And resident and resident free laws are a fairful bredward. Park States of the States and States and Marchine Service Control Control Artifette or culpineer to be appoint a ded souther reproductive that had brother time GallifordTry ANT NORTH TUDGENHAM TO EASTON DUALLING KEY PLAN LAYOUT POF STAIRE 3 TRAFFIC REQULATIONS PLANS REGULATION 5(2)(c) BHEET 10 OF 23 AUTHORISED AS STACE 3 COMPLETED 1:1250

HESS1489-GTY-LSI-000-DR-CH-35010

Planning and Highway Delegations Committee

Item No: 8

Decision making report title:	Sheringham and Dudgeon Windfarm Extension Projects Consultation
Date of meeting:	03 June 2021
Responsible Cabinet Member:	Cllr Wilby (Cabinet Member for Highways, Transport and Infrastructure)
Responsible Director:	Tom McCabe - Executive Director, Community and Environmental Services
Is this a key decision?	No

Introduction from Cabinet Member

The above offshore windfarm and onshore grid connection infrastructure projects will be determined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. Norfolk County Council is a statutory consultee on such projects and therefore has the opportunity to comment and influence the final decision. Responding to such consultations will ensure the County Council's views are formally considered prior to a final decision being made by the Secretary of State.

These proposals directly support the Government's target of delivering 40GW of offshore wind by 2030 set out in the Energy White Paper (2020) and The Ten Point Plan for a green industrial revolution (2020). These proposals will contribute towards these targets, which includes powering every home in the UK from green energy and support up to 60,000 jobs. The County Council is working with both the offshore wind farm developers and National Grid to explore how these projects can support our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change, offering opportunities for growth and job creation.

Executive Summary

Consultation by Equinor (Norwegian Energy Company) to extend the existing Dudgeon (DEP) and Sheringham Shoal (SEP) offshore wind farms, closest point to the coast being 13.6km from SEP and 24.8km from DEP comprising: up to 56 turbines; and ancillary onshore supporting infrastructure including: buried cable route (approximately 62 km); and construction of a new sub-station near the existing Norwich Main sub-station. The proposal has a generating capacity of up to 786MW or enough for 820,000 homes doubling the output of the existing projects. Given the scale of the development it is deemed to be a NSIP and will be determined by the Secretary of State for Business, Energy and Industrial Strategy.

This is a formal pre-application consultation under Section 42 of the Planning Act 2008. There will be a further opportunity to comment on this proposal when the application is formally submitted under Section 56 of the Act. The County Council will also be able to

submit a Local Impact Report (LIR) under S60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the County Council's function. The County Council will continue to work with Equinor to resolve any outstanding issues.

The DEP is to the north and southeast of the existing Dudgeon Offshore Wind Farm and SEP is to the north and east of the existing Sheringham Shoal Offshore Wind Farm. Both projects would reduce greenhouse gas emissions, provide energy security, and maximise economic opportunities from investment in the offshore renewable sector.

While the DEP and SEP have different ownership and are consented NSIPs in their own right, a single application for a Development Consent Order (DCO) will be made to address both wind farms, and the associated transmission infrastructure. The County Council would favour an integrated approach to this development and we fully support Equinor's aim to develop DEP and SEP as an integrated project with an integrated grid option providing transmission infrastructure which serves both projects. Such an approach will particularly benefit the planning and construction of the electrical infrastructure system and is likely to reduce the overall environmental impact.

Recommendations

- 1. To support the principle of these offshore renewable energy proposals, subject to the detailed comments set out in this report and Appendix 1 being resolved through the DCO process; and
- 2. To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.

1. Background and Purpose

- 1.1. The purpose of this report is to assess the proposals for an offshore windfarm and onshore ancillary grid connection infrastructure in Norfolk. It should be noted that the final decision for these proposals will be determined by the Secretary of State for Business, Energy and Industrial Strategy (Kwasi Kwarteng) as it is defined as a NSIP under the Planning Act 2008. This is a formal pre-application consultation by Equinor under Section 42 of the above Act. It is important to note that the County Council as a statutory consultee will also have an opportunity to formally comment on the submitted Development Consent Order (DCO) application (under Section 56 of the above Act), which is expected at the end of 2021. The county council will also be able to submit a Local Impact Report (LIR) under S60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the county council's function. The county council will also continue to work with Equinor to resolve any outstanding issues.
- 1.2. At this stage the County Council is invited to make comments on the Preliminary Environmental Information Report (PEIR), made in support of the proposals. The

PEIR presents the findings of the Environmental Impact Assessment (EIA) to date. The PEIR consultation documents can be found here alongside the virtual-exhibition

1.3. Members will be aware the existing Sheringham Shoal offshore wind farm generating 317MW has been operational since 2012 and the Dudgeon wind farm generating 402MW since 2017. The County Council had raised concerns with the original Sheringham Shoal Windfarm when it responded in August 2006, in respect of the impact on the North Norfolk Area of Outstanding Natural Beauty and Heritage Coast, as well as the impact on the local fishing industry. However, with regard to the original Dudgeon Windfarm, this Committee recognised the environmental benefits of the windfarm and did not raise any objections when it responded in September 2009. This DEP is to the north and southeast of the existing Dudgeon Offshore Wind Farm and SEP is to the north and east of the existing Sheringham Shoal Offshore Wind Farm (See Figure 1 Appendix 2) and will have an expected capacity greater than 100MW.

In addition, Members will be aware that there are separate offshore proposals being taken forward by developer Orsted, for Hornsea Project Three (2.4GW) (consented in December 2020) and Vattenfall, for Norfolk Vanguard (1.8GW) (NB the DCO is being redetermined by the Secretary of State) and Norfolk Boreas (1.8GW) (Decision from the Secretary of State is pending).

1.4. The DEP/SEP projects comprise up to 56 offshore wind turbines, array cables, offshore substations, interlink cables, cable protection, export cables (Up to 102 KM), onshore cables (60 KM), an onshore project substation, and grid connection.

2. Proposal

2.1. If the DEP/SEP proposals are approved and progress as set out in the PEIR the following infrastructure will be required to deliver the projects:

(a) Offshore

Location and	:	The closest point to the coast is 13.6 kilometres	
Distance Offshore		(km) from SEP and 24.8km from DEP (see Figure 1	
		Appendix 2).	
Total Site Area	• •	196 sq.km.	
Proposed Capacity	• •	Installed combined capacity of 786 MW	
Number and size of	:	Range between 30 x 14MW to 56 x 26MW turbines	
turbines		with a maximum tip height of up to 330 metres	
Offshore works	• •	Interconnector Cables and foundations:	
	:	Up to two cables to landfall totalling a maximum of	
		102 km (62km DEP North via SEP to landfall and	
		40km from SEP to landfall).	
	:	Up to 2 Offshore electrical (sub-station) platforms	
		and 1 minor platform crane. Maximum size 28,000	
		sqm. per platform and maximum height of up 50 m.	

(b) Onshore

Landfall Location	:	Weybourne, at a preferred location to the west of Weybourne beach car park (1.5 km zone identified - see Figure 4.4 and Figure 5.4 Appendix 2) – all associated infrastructure will be located underground.
Cable route	:	Buried cable route between Weybourne and grid connection at Norwich Main Substation – approximately 60 km (See Figure 5.1 Appendix 2). Up to 2 cable trenches will be required along an identified 60 m search corridor and would also include a haul road to deliver equipment to the installation site from construction compounds, storage areas for topsoil and subsoil and drainage. The above works would be sufficient to facilitate both extension projects.
Norwich Main - New Sub-station	:	The new onshore substation will be required with a total maximum land requirement maximum of 62,500 sqm. Maximum building height 15 m; Plus, temporary construction area up to 1 ha The proposed substation will be located in close proximity to the existing Norwich Main National Grid Substation – see Figure 5.10 Appendix 2
Overhead Line Connections	:	The DEP and SEP onshore substation is located adjacent to the existing Norwich Main substation, an overhead connection between the two substations will be considered. An underground cable connection will be used if the two substations are not adjacent to each other. The cable corridor between the two substations will be similar to the export cable corridor in design and width. No new overhead power lines are proposed in respect of this proposal.
Ancillary Works	:	 The onshore work will require, inter alia: Ducts installed underground to house the electrical cables along the onshore cable corridor; Onshore cables installed within ducts Joint bays and links boxes installed along the cable corridor; Trenchless crossing points at certain locations such as some roads, railways and sensitive habitats (e.g. rivers of conservation importance); and

	Temporary construction compounds and accesses.	
Construction timetable	Pre-construction works are expected to take place from 2024. The main pre-construction activities are noted below and would be applicable to the onshore substation and works to install the onshore export cables: • Ground investigations and pre-construction surveys; • Road/junction modifications and any new junctions off existing highways; • Pre-construction drainage – installation of buried drainage along the cable corridor an at the substation, which requires an understanding of the existing agricultural drainage environment; • Hedge and tree removal – hedge and tree removal are seasonal and can be influence by ecological factors. Removing these ahea of the main works mitigates against potential programme delays; • Ecological mitigation – any advanced preconstruction mitigation activities, for examp installation of great crested newt fencing; and • Archaeological mitigation – pre-construction activities agreed with Historic England and Norfolk Historic Environment Services The earliest construction start date for the main works is expected to be 2025 and the latest is 2028.	e re d d ad al

3. Impact of the Proposal

- 3.1. The principal role of the County Council in responding to the above wind farm proposals, and the onshore infrastructure requirements, will be in respect of the Authority's statutory role as:
 - Highways Authority;
 - Minerals and Waste Planning Authority;
 - Lead Local Flood Authority; and
 - Public Health Responsibilities.
- 3.2. In addition, the County Council has an advisory environmental role and economic development function, which also needs to feed into any response made to the above windfarm proposals.

Other statutory consultees include:

3.3.		
	Natural England	Highways England
	Historic England	Drainage Boards
	Marine Management Organisation	Public Health England
	Maritime and Coastguard Agency	Energy and utility companies with cable and pipeline interests
	Civil Aviation Authority	Parish, District and other County Councils

3.4. The remainder of this section of the report assesses the PEIR in respect of the County Council's key functions and sets out the Authority's proposed response / comments. The response largely relates to the onshore infrastructure required to connect the electricity generated to the National grid.

Assessment

- 3.5. The two extension proposals have a maximum capacity of 786 MW of electricity and will generate double the energy of the existing Sheringham Shoal and Dudgeon wind farms. As such the proposal would make a serious contribution to the Government's Renewable Energy targets and objectives relating to clean growth (see Section 5 below).
- 3.6. The PEIR has considered the cumulative impacts arising from:
 - Projects that are under construction;
 - Permitted application(s) not yet implemented;
 - Submitted application(s) not yet determined;
 - All refusals subject to appeal procedures not yet determined;
 - Projects on the National Infrastructure Planning programme of projects;
 and:
 - Projects identified in the relevant development plan

This will cover the Norfolk Vanguard, Norfolk Boreas and the Hornsea Project Three offshore Wind Farm Projects in its assessment.

- 3.7. The principle of these offshore renewable energy proposals is supported as it is consistent with national renewable energy targets and clean growth objectives, subject to the detailed comments below being resolved with the applicant through the DCO process.
- 3.8. Grid Connection and Electricity Supply Issues
- 3.9. Grid connection is proposed at Norwich Main and there would be the need for a new substation for the SEP and DEP with an operational compound area of up to 62,500 sqm.

- 3.10. Members will be aware that County Council officers have been in discussion with offshore windfarm developers regarding the potential for electricity generated from these proposals to be used within the local distribution networks (132 kv and below) i.e. to assist where there are electricity deficits. These discussions have also involved National Grid who have made a formal and legally binding grid connection "offer" to Equinor.
- 3.11. National Grid have indicated that the onshore cables from the wind farms will ultimately belong to a future Offshore Transmission Operator (OFTO). In such circumstances, where the main connection point for the OFTO system is at a transmission substation (National Grid), the regulatory arrangements governing OFTO infrastructure do not provide for secondary interconnection between the OFTO system and a local distribution network operator (DNO) (i.e. UK Power Networks). In other words, there is currently no opportunity of "tapping" into the transmission cables and feeding into the local electricity transmission network. The County Council is working collaboratively with National Grid to explore what benefits could be captured as a result of new energy infrastructure and to understand what regulatory changes would be required to achieve this. Members will be aware that there is an ongoing Offshore Transmission Network Review being led by the Department of Business, Energy and Industrial Strategy, which is looking into potential regulatory reforms; and options for a more integrated grid connection infrastructure. The County Council is engaged in this Review process and has already commented to National Grid on their Option Scenarios; and written to the Secretary of State (BEIS) on the need for a strategic review of the existing and future electricity transmission networks.
- Equinor regarding the potential impact on the County's infrastructure. As part of these discussions Equinor have assured officers that they will seek to develop DEP and SEP as an integrated project with an integrated grid option providing transmission infrastructure which serves both projects. Such an approach will particularly benefit the planning and construction of the electrical infrastructure system and is likely to reduce the overall environmental impact.

 However, given the different ownership of the projects, a separated grid option (transmission infrastructure which allows each project to transmit electricity entirely separately) will allow the projects to be constructed in a phased approach, if necessary. Therefore, the application will seek consent for alternative grid solutions in the same overall corridors to allow for both the integrated and separated grid options. The EIA will consider the appropriate realistic worst-case scenario and present the results accordingly.

There have been on-going officer and member discussions/meetings with

3.13. **Comment**

3.12.

3.14. It is felt that Equinor should work with National Grid and UK Power Networks to consider options regarding the potential to feed electricity into the local transmission networks.

In addition, the County Council will continue to work with the New Anglia Local

Enterprise Partnership (LEP) through the TRI Local Energy Strategy (endorsed by this Committee in July 2018), in order to lobby central government to make legislative changes to overcome the obstacles to secondary inter-connection raised above.

The County Council would favour an integrated approach rather than a "separated" approach as this would be less disruptive in terms of construction of the onshore infrastructure needed.

3.15. Socio-Economic Issues

- 3.16. There are potentially significant economic benefits that may arise from the DEP and SEP proposals in terms of:
 - Local employment creation;
 - · Business sectors affected by construction; and
 - Operations and Maintenance (O&M) of the wind turbines.
- 3.17. County Council officers have had good engagement with Equinor in terms of maximising the wider economic benefits from the projects. The County Council fully expect and would support the longer term operations and maintenance benefits to be experienced locally. In addition, the County Council would be keen for the project to enable/encourage manufacturing to be attracted to Norfolk. The PEIR suggests that the DEP and SEP projects will in total create up to 430 jobs during construction and up to 140 jobs during operation, across East Anglia.
- 3.18. The County Council is working with all energy companies and the New Anglia LEP to promote this sector and develop a Skills Strategy for the types of skills required for young people in schools and colleges.

In addition, the County Council is working to create:

- Apprenticeships,
- Work experience; and
- Internship opportunities at an appropriate stage.
- 3.19. It is felt that the given the scale of these proposals and potential disruption it may cause to local communities and business that there should be suitable local community benefits arising and appropriate compensation for local businesses.

3.20. **Comment**

- 3.21. The County Council welcome, on economic development grounds and supporting the Norfolk economy, the decision to use the Port facilities at Great Yarmouth for:
 - Construction; assembly and manufacture of windfarm components; and
 - Operations and maintenance.

The County Council would wish to see the applicant develop through the DCO process an Employment and Skills Strategy to accompany the development and

- secure demonstrable benefits to both the local economy and workforce.
- 3.22. Equinor should set out clearly in the following application stage (Section 56 submission) and the accompanying Environmental Statement (ES):
 - (a) how local communities impacted by the onshore construction (e.g. Cable Route and Substation) can have such impacts mitigated; and
 - (b) the need for a "local community fund" to assist the wider community affected by the proposal.
- 3.23. Equinor should, given the potentially long timescales for construction address the cumulative impact/s on local businesses and communities and provide appropriate compensation for those businesses and communities adversely affected by the construction works.

3.24. Commercial Fishing

- 3.25. While commercial fishing is an offshore issue it is considered appropriate to comment on the impacts the above proposals may have on this sector as Norfolk is home to many commercial fishing activities from its numerous ports and landing areas (i.e. potential economic issue).
- 3.26. The PEIR considers the impact of the proposed windfarm and ancillary infrastructure (offshore cable route and substations) on the commercial fishing sector. The type of fishing carried out in the Array area comprises:
 - Local UK Static gear Fishing potting by UK vessels (i.e. for brown crab, lobster and Whelk);
 - Dutch and French Vessels undertaking trawling.
- 3.27. The PEIR indicates that fishing will be permitted within the DEP and SEP areas following construction and therefore much of the current activity will be able to recommence during operation of the wind farm. The PEIR does, however, accept that there could potentially be a significant impact during the construction phase on those UK vessels using static gear. As such Equinor have indicated that where necessary appropriate mitigation could be arranged.

3.28. **Comment**

3.29. It is felt that where there is likely to be a demonstrable impact on commercial fishing affecting communities in Norfolk that Equinor should provide appropriate mitigation and compensation to those fishing communities affected.

3.30. Local Highway Issues

3.31. The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out in Appendix 1.

3.32. Strategic Highway Issues

3.33. Highways England (HE) has proposed six highway improvement schemes for the A47 as part of the Road Investment Strategy (RIS). The schemes that could

potentially impact on the Traffic and Transport Study Area are: -

- A47 North Tuddenham to Easton RIS;
- A47 Blofield to North Burlingham RIS; and
- 47/A11 Thickthorn junction improvement RIS.

HE has requested that the inter-relationship between the A47 Corridor Improvement programme and DEP/SEP be investigated and this will be assessed by HE.

The applicant is asked to ensure that their underground Cable Route does not fetter any future highway improvement schemes in Norfolk i.e. the Norwich Western Link and that where any reinforcement or diversion is needed to the cable route as a result of such highway works, they will be responsible for any upgrades or diversion of the cables and will fully meet the costs of these works.

The County Council, as Local Highways Authority is working closely with the applicant on the above matters.

3.34. Minerals and Waste

3.35. Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the proposer of the DEP and SEP; regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues.

The Mineral Planning Authority considers that the Preliminary Environmental Impact Report for the DEP/SEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 19.6.1.4. The further mitigation suggested in section 19.6.1.4.5 is considered likely to be effective.

Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the Proposed DEP/SEP provided that the proposer constructs the cable corridor in the manner set out in the PEIR, and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.

3.36. Flood and Drainage Issues and Comments

3.37. The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out in Appendix 1.

3.38. Historic Environment

3.39. Welcomes the positive, proactive and comprehensive approach taken by the applicant's consultants Royal Haskoning in relation to onshore below-ground archaeology and the historic environment more generally. The approach taken so far for the Sheringham Shoal and Dudgeon offshore wind farm extensions in

is similar to that taken for Vattenfall Vanguard/Boreas schemes, which has so far been effective. In general, we are content with the approach and scope of the archaeological desk-based assessment. The coverage of air photograph and Lidar data is comprehensive. We welcome the applicants willingness to undertake geophysical survey as part of the EIA/NSIP application process.

Further considerations are;

A number of the priority areas for geophysical were not survey due to crop conditions and other access issues. We strongly advise the applicants to extend the geophysical survey into these areas, and indeed the rest of application corridor at the earliest possible opportunity regardless of what stage the EIA/NSIP application has reached.

We note that Geoarchaeological desk-based review, including assessment of potential for Palaeolithic archaeology is yet to be undertaken. We appreciate there may be good reasons for this, for instance waiting for the results of GI works. We seek to gently remind the applicants about this aspect of the onshore archaeology.

3.40. **Ecology**

3.41. Ecological surveys are ongoing, and the results should inform the proposed route of the cable. Where ecological receptors are affected by the proposals the mitigation hierarchy should be followed. We welcome DEP and SEP commitment to voluntarily deliver measurable biodiversity net gain onshore. If they have not already been contacted, WSP and Dr Charlotte Packman should be consulted with regards to barbastelle bat colony in the Easton/Ringland/Lenwade area. Upon submission to the Planning Inspectorate we would request that species records are shared with Norfolk Biodiversity Information Service.

Careful consideration needs to be given to the cumulative impacts as research currently being undertaken as part of the Norwich Western Link by Dr Charlotte Packman indicates that this area is likely to be of national importance for barbastelle bats (the results of her work are not publicly available at the present time). The A47 North Tuddenham to Easton Dualling scheme (NSIP), proposed Norwich Western Link (NWL) (being developed by Norfolk County Council), and the proposed cable routes for Hornsea Project 3, and DEP/SEP and will affect the same area within a short space of time. Measures should be considered that minimise construction time. Please note that while the planning application for the NWL has not yet been submitted, the A47 North Tuddenham to Easton Duelling scheme includes a new junction connection to the proposed NWL.

For information, an EIA screening opinion has been sought for Anglian Water's 13km pipeline from Norwich to Wymondham (South Norfolk Council planning reference number 2021/0791). This pipeline and the cable route will overlap.

3.42. Landscape

3.43. We support the use of the Rochdale Envelope method to consider the worst-

case scenario and that DEP and SEP could be undertaken either concurrently or sequentially.

We understand the reasons for not replanting in the final cable easement, but would encourage replanting proposals to be undertaken holistically with the assessment in order to restore planting in spaces that minimise the overall impact in the landscape and where possible enhance it, overall we'd encourage the applicant and aim for a 'no net loss' of trees.

Details of removals and planting are proposed to be included at the DCO submission stage as part of the Outline Landscape and Ecological Management Plan, we will be able to provide further comments at this stage. However, we would expect to see phased and layered planting around the substation sites to afford long distance screening in the landscape without creating block planting that will not appear congruent with the landscape. As well as losses minimised where possible and suitable mitigation proposed, we would support a "no net loss" approach.

We have concerns regarding the cumulative impacts on the landscape to the North West and West of Norwich where several proposals (albeit at different stages) are currently in discussion or in the planning system. The impact of necessary vegetation removal and construction operations for all these schemes in a comparatively short period of time has the potential to cause large scale impacts on the same areas, especially where some of these proposals overlap. Whilst individually or when considering the combination of 2 or 3, the impacts may be minimal, the perception and experience of the landscape with such extensive works over a period of a few years should be considered.

3.44. Local Member Views

3.45. Due to local elections we have been unable to consult with Members however if we are able to share documents with newly elected members and receive comments prior to the committee, we will report these orally. As set out in 1.1 the County Council will have further opportunities to formally comment on the submitted Development Consent Order (DCO) application (under Section 56 of the above Act) and will also be able to submit a Local Impact Report (LIR).

4. Evidence and Reasons for Decision

4.1. Responding to the PEIR consultation as suggested will enable the County Council's detailed points on Equinor's proposed offshore wind farm proposals to be considered through the Development Consent Order process prior to a final decision being made by the Secretary of State. This will help to bring forward the best scheme supporting our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change whilst minimising the environmental impact of the project.

5. Alternative Options

5.1. The Council could choose not to respond, but this will not enable the County Council's detailed points on Equinor's proposed offshore wind farm proposals to be considered and taken into account.

6. Financial Implications

6.1. Staff have engaged with the applicant at the technical scoping stage; attending steering group and topic based meetings and provided technical advice and information in respect of the County Council's statutory responsibilities.

7. Resource Implications

- 7.1. **Staff:** Staff resources for dealing with this project are being met from existing resources.
- 7.2. **Property:** N/A
- 7.3. **IT**: N/A

8. Other Implications

8.1. **Legal Implications**

N/A

8.2. Human Rights implications

N/A

8.3. Equality Impact Assessment (EqIA)

The Council's Planning functions are subject to equality impact assessments. A detailed equality impact assessment has not been carried out as this report is responding to a consultation, however, consideration has been given to equality issues. The Council's Planning functions are subject to equality impact assessments. The recommended comments relate to the County Council's role as a statutory consultee. This report and the comments aim to ensure that any new onshore development will have minimal impact on communities; while supporting our own clean growth ambitions in line with the Government's vision for economic recovery.

8.4. Health and Safety implications

N/A

8.5. Sustainability implications

These are considered in the main text of the report.

8.6. **Any other implications**

N/A

9. Risk Implications/Assessment

9.1. The County Council is a statutory consultee on any Nationally Significant Infrastructure Project determined by the Secretary of State within Norfolk or on

the borders with Norfolk. The County Council will also be invited to submit a Local Impact Report (LIR), the content of which is a matter for the Local Authority and can include local transport issues and the local area characteristics.

10. Select Committee comments

10.1. Given the timetable to respond to this consultation there has not been an opportunity to take this item through the Select Committee process.

11. Recommendations

- 11.1. 1. To support the principle of these offshore renewable energy proposals, subject to the detailed comments set out in this report and Appendix 1 being resolved through the DCO process.
 - 2 To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.

12. Background Papers

The Planning Act (2008)

The National Planning Policy Framework (2012)

Energy Act (2013)

The Clean Growth Strategy (2017)

The ten point plan for a green industrial revolution (2020)

The Energy White Paper (2020)

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

Officer name: Laura Waters Tel No.: 01603 638038

Email address: <u>Laura.waters@norfolk.gov.uk</u>



If you need this report in large print, audio, braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

Appendix 1 – Detailed Comments

Local Highway Issues and Comments

The construction phase generates the greatest number of vehicle movements with the cable installation representing the maximum construction intensity. Construction teams would work on sections of up to 1km at a time with a typical presence of four weeks along each 1km section.

Three different scenarios are considered (1) Construct DEP and SEP in isolation (2) Construct DEP and SEP concurrently and (3) Construct sequentially with a gap of up to four years between the two projects.

Constructing concurrently offers the minimum realistic duration (minimum of 36 months) but results in the highest traffic demand. The earliest start date would be summer 2024, however the main construction works would likely start in 2025. Therefore 2025 has been adopted as a baseline year for background traffic growth.

Highway Comment 1

It is agreed the concurrent scenario represents the worst-case scenario and accordingly assessing the impact in this manner is appropriate. However, traffic data was collected during pandemic lockdown and may not represent actual baseline levels. We have previously indicated that we would accept historical data provided there was a re-survey when traffic patterns started to settle down and originally suggested after May. The Governments roadmap has subsequently been published with a lifting of restrictions from 21 June, so would now accept a re-survey after 21 June 2021.

During the operational phase, traffic movements would be limited, and the onshore substation will not be manned. Accordingly, no operational scenarios are assessed. Traffic associated with offshore construction will be dealt with by means of a requirement for a Port Traffic Management Plan.

Highway Comment 2

It is agreed that assessing the impact in this manner is appropriate.

An assumption to inform the assessment of construction traffic has been made against a total of 259,200 tonnes of stone being required for the construction of the haul road and 110,274 tonnes of surplus material being removed (due to ducting, joint bay construction and associated stabilised backfill). Daily HGV movements are based upon 22 working days per month (equivalent to five day working) and profiled over a 10-hour window. A 12 hour "delivery window" has been assumed with ten hours delivery time allocated.

Highway Comment 3

The delivery of materials and plant to the cable installation locations could occur between 7am and 7pm. Excessive deliveries should be avoided at traffic sensitive times on some key routes. This will need to be clarified.

The study Area (TTSA) is divided into 156 links with the anticipated construction traffic shown for each link. A preliminary Transport Assessment (TA) will be provided which will be updated when the Development Consent Order (DCO) is submitted. 'Traffic sensitive' routes including the A148, A149, A1067 and the B1436 including details of existing and potential HGV caps are identified.

Highway Comment 4

The basic methodology is acceptable and further detail is awaited. At this stage officers are still assessing the applicants projected impact for each of the 156 links including the proposed HGV traffic caps.

Options for accessing the substation from either the A140 or the B1113 are being considered. The access strategy will be finalised post-PEIR and further discussions will be held with highway stakeholders to agree the extent of any cumulative assessment required at this location.

The worst-case month for the onshore substation construction activities occurs between months 19 and 25 when there are up to 144 employees working on the substation.

Highway Comment 5

The TA for Hornsea 3 windfarm indicated the A140 and B1113 junction is already operating at capacity. In addition, the workforce associated with the Hornsea 3 substation will utilise this junction. Permission has also been granted for commercial land use which will alter the junction alignment. Further assessment will be needed to show cumulative impacts.

Four onshore substation transformers are required (Length: 11.6m Width: 4.7m Height: 4.6m Weight: 224 tonnes) which need to be transported by Abnormal Indivisible Load (AILs). An AIL Study will be included with the DCO but no AILs will route via the A140/ B1113 junction.

Highway Comment 6

Permission has been granted for commercial land use at the junction of the A140 with the B1113 making access difficult for AIL's. The PEIR states that Section 26.4.3.1.9 of the document provides details of the routes to be used by AILs but this section appears to be missing.

Temporary Construction Compounds (TCC) will be close to main A roads wherever possible and away from population centres to reduce impact on local communities. Five TCCs are to be shown graphically on Figure 26.4: -

- Compound 1, located at the landfall;
- Compound 2, located at Bodum;
- Compound 3, located south of Oulton on the B1149;
- Compound 4, located on Hethersett Road; and
- Compound 5 located at the substation.

Highway Comment 7

We have previously indicated that if Oulton is to be considered as a location for a compound that traffic impacts need to be investigated. We are unable to identify the proposed compounds on Figure 26.4 and further clarification is required.

The onshore cable corridor would cross approximately 56 roads. The final crossing types and locations will be reported within the DCO, however the DCO will contain a commitment to trenchless cross the A11, A47, A148, A149, A1067, B1145, B1149, B1354, Old Fakenham Road and the Norwich Western Link Road (not yet constructed).

Highway Comment 8

Officers have previously asked for Taverham Road, Inkwood Lane, Ringland Lane and Oulton Street to be included in the list of trenchless crossings and are assessing the impact of their omission.

An Outline Traffic Management Plan (OTMP) and Outline Travel Plan (TP) will be submitted as part of the (DCO) and then completed when the contractor is appointed. The OTMP will include details of a liaison strategy and measures for seasonal sensitivities/event planning. The DCO will also contain a commitment to undertake pre-condition surveys of all routes so that any damage can be identified during the works and rectified by the developer.

Highway Comment 9

It is agreed that assessing the impact in this manner is appropriate.

Details of the currently anticipated construction programme for projects likely to have a cumulative impact are included in the PEIR, together with an indication of when the peak period for deliveries are expected to occur and how this could overlap with DEP and SEP.

Highway Comment 10

It is agreed the correct projects have been identified, however officers are still considering the cumulative impact assessments. See also highway comment 5 above regarding cumulative impacts for the A140/B1113 junction.

Wider Strategic Highway Issues

Highways England (HE) has proposed six highway improvement schemes for the A47 as part of the Road Investment Strategy (RIS). The schemes that could potentially impact on the TTSA are: -

- A47 North Tuddenham to Easton RIS;
- A47 Blofield to North Burlingham RIS; and
- 47/A11 Thickthorn junction improvement RIS.

Highway Comment 11

HE has requested that the inter-relationship between the A47 Corridor Improvement programme and DEP/SEP be investigated and this will be assessed by HE.

The construction of the proposed A47 Great Yarmouth Junction Improvements Including Reconstruction of the Vauxhall Roundabout RIS is projected to start by 2023/2024 and should be complete by 2024/2025 prior to the commencement of the Projects' construction. However, HE noted that the scheme has been paused pending a review. A review of the project will be undertaken prior to submission of the DCO application.

This will be assessed by HE.

Highway Comment 12

It is anticipated that the construction works associated with the Great Yarmouth third river crossing will be completed prior to commencement of the Project's construction phase. A review of the project will be undertaken prior to submission of the DCO application.

Highway Comment 13

It is agreed that assessing the impact in this manner is appropriate.

There is potential for the construction traffic associated with the Norwich western link to interact with DEP and SEP. In addition, the new road layout would provide alternative routes for the Projects construction traffic.

Highway Comment 14

The County Council, as LHA is working closely with the applicant on the above matters.

The applicant is asked to ensure that their underground Cable Route does not fetter any future highway improvement schemes in Norfolk i.e. the Norwich Western Link and that where any reinforcement or diversion is needed to the cable route as a result of such highway works, they will be responsible for any upgrades or diversion of the cables and will fully meet the costs of these works.

Flood and Drainage Issues and Comments

The comments made in Norfolk County Councils response to the Environmental Impact Assessment Scoping Report in October 2019 remain valid and further detailed technical considerations are set out below:

During construction

Impact: 20.6.1.1.5 Where temporary dams are needed for the trenched crossings and/or temporary culverts for haul roads, again as per our Scoping Opinion response any works within these ordinary watercourse will require Land Drainage Consent from NCC (as LLFA or the relevant IDB if within their district). This includes all permanent and temporary works. We would recommend the applicant discusses

these with LLFA before submission to streamline the process and whether the applications need to be supported by an ecology check i.e. disturbance to hedges and aquatic habitat. However, I note that they reference some mitigation measures in this section i.e. fish passage. Overall, there are no concerns with summary tables for this section.

Impact 3 and 4: 20.6.1.3.5 / 20.6.1.4.5 - A Construction Surface Water Management Plan is recommended as a mitigation measure for the substation and all significant constructions compounds. There should be a CSWMP detailing how flood risk and pollution is dealt with during the construction stages of all the infrastructure elements, especially the top three:

- Max Substation Footprint (construction area) = 7.25ha.
- Up to 2 main compounds of 60,000m2 each
- 8 secondary compounds of 2,500m2 each
- HDD compounds = 1,500m2 4,500m2

Overall, there are no concerns with summary tables for this section.

During operation

Impact 1: Supply of contaminants to surface and groundwater 20.6.2.1.5 mitigation should include reference to Phase 1 and Phase 2 Ground Investigation Reports especially if the operational drainage strategy focuses on utilising infiltration techniques to dispose of surface water. Agree that no mitigation is necessary for the onshore cable corridor but as above the temporary compounds during construction should consider surface water impacts. Overall, there no concerns with summary tables for this section.

Planning and Highway Delegations Committee

Item No: 9

Decision making report title:	A47/A11 Thickthorn Junction
Date of meeting:	03 June 2021
Responsible Cabinet Member:	Cllr Wilby (Cabinet Member for Highways, Transport and Infrastructure)
Responsible Director:	Tom McCabe: Executive Director, Community and Environmental Services
Is this a key decision?	No

Introduction from Cabinet Member

The county council has strongly advocated improvements to the A47 and has engaged at officer-level with Highways England in bringing these proposals forward. We are also working, through the A47 Alliance, for further improvement schemes to be included in subsequent Road Investment Strategies.

Highways England's case for the Thickthorn Junction scheme sets out that approximately 3,000 new residential dwellings are potentially planned near the junction, along with commercial business units. This local growth is likely to increase congestion on the junction and roads that feed into it. Highways England aim to improve the traffic flow, reduce journey times on the route, increase the route safety and resilience, and improve the environment.

Thickthorn is a key junction of two trunk roads just outside Norwich. Improvements will help to improve traffic conditions as well as the economic vitality of Norwich and the wider area.

Responding as suggested in this report will enable the county council's detailed points on the proposed scheme to be considered and taken on board. This will help bring forward the best scheme for the junction, a measure that the county council has long supported due to benefits for road users, businesses, residents and visitors.

Executive Summary

This report deals with an opportunity to submit representations to the Planning Inspectorate on a proposal by Highways England to upgrade the existing A47/A11 Thickthorn Junction. The proposal is deemed to be a Nationally Significant Infrastructure Project (NSIP) and Highways England's application for development consent will be determined by the Secretary of State.

This is a formal Development Consent Order (DCO) consultation under Section 56 of the Planning Act 2008. This is an opportunity to make any initial formal representations on the merits of the proposal prior to the statutory Examination, although the county council will

have an opportunity to submit a Local Impact Report (LIR) under Section 60(3) of the Act as part of the Examination process.

Comments on the pre-application version of this project (Section 42) were agreed by the Cabinet Member under delegated powers (urgent decision) in July 2019.

While the county council supports upgrading the Thickthorn junction, there are a number of detailed issues in respect of, amongst other things, local highway and access matters, flood risk and environmental management that will need to be resolved ahead of any final decision on the DCO application for the proposed scheme.

The most significant item of concern relates to the transfer of assets, including a major new structure, to the county council following the scheme, and the classification of this link as a B class road, which is likely to encourage traffic to use unsuitable routes between the B1172 and points to the southwest via Cantley Lane south. This is detailed in Sections 3.9-3.20.

Recommendations

- 1. To support the principle of upgrading the existing A47/A11 Thickthorn Junction subject to:
 - (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.
- 2. Agree the initial representation to the proposal, as set out in the relevant sections of the report.

1. Background and Purpose

- 1.1. This is a Development Consent Order (DCO) application for upgrading the existing A47/A11 Thickthorn Junction, which will be determined by the Secretary of State. The application is defined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008.
- 1.2. The pre-application version of this proposal was signed off by the Cabinet Member in July 2019. Members supported the principle of the proposed junction improvements subject to a number of detailed issues and comments being resolved with Highways England.
- The DCO application is now being handled by the Planning Inspectorate under the above Act. This is the final opportunity to respond to the DCO application ahead of the formal Examination process and a registering as an interested party and submitting a relevant representation at this stage will facilitate the council's involvement in the Examination process. The county council will also, however, be able to submit a Local Impact Assessment (LIR) under Section 60(3) of the Act ahead of the Examination providing further details and evidence in respect of the application's overall impact on the county council's function.

The LIR will be based on the detailed representations set out in this report. The county council will also continue to work with Highways England to resolve the matters of concern.

1.4. The county council is a statutory consultee and can make comments on the DCO application and the supporting Environmental Impact Assessment (EIA) / Environmental Statement (ES). The full application, together with the supporting documents can be found on the Planning Inspectorate's website.

2. Proposals

2.1. Members are asked to agree comments in response to a Development Consent Order application for upgrading the existing A47/A11 Thickthorn Junction. The proposals contained within this DCO are set out in Section 2.2 below. A plan showing the proposals is shown as Appendix A.

Members are asked to:

- 1. Support the principle of upgrading the existing A47/A11 Thickthorn Junction, subject to:
 - (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.
- 2. Agree the initial representation to the proposal, as set out in the relevant sections of the report.
- 2.2. The proposal, shown in Appendix A, comprises a new free-flowing connector road between the A11 northbound and the A47 eastbound (ie to connect the two trunk roads directly for traffic travelling from the London to Gt Yarmouth directions). This is one of the main movements through the junction and will therefore remove a considerable amount of traffic. The new connector road will re-route traffic away from the junction via a new underpass. The existing footbridge over the A47, east of the existing junction, will be removed and a new footbridge for walkers, cyclists and horse riders will be provided.

New / amended junctions comprise:

- A single-lane free-flowing road connecting the A11 northbound to A47 eastbound via two underpasses
- Widening the southern section of the Thickthorn roundabout from three lanes to four
- A new, segregated slip road for traffic travelling on the A47 from the Gt Yarmouth direction to the A11 London-bound
- Removal of the Cantley Lane South direct connections between the A11 and A47 exit slip roads
- A new link road connecting Cantley Lane South with the B1172 Norwich Road to the north and construction of two new bridges. The new link road will have a 40mph speed limit

- From the Thickthorn junction to Hethersett, a 40mph speed limit will be implemented on the B1172 Norwich Road and a new junction connecting to Cantley Lane Link road
- Improvements will be provided to the junction of Station Lane (north of the A11) and the A11 northbound
- A new junction will be provided connecting Cantley Lane South to Cantley Lane link road

New walking, cycling and horse-riding amenity:

- A new bridge over the A47 for walkers, cyclists and horse riders approximately 45m east of the existing footbridge (which will be demolished). The bridge will have higher railings to help improve safety for horse riders
- Paths for walking and cycling proposed along the new Cantley Lane link road providing access to local amenities and links to other recreational routes
- Access to the Park and Ride from the Cantley Lane link road for walkers and cyclist

Other details include:

- New traffic lights on the approach to and from the junction with the B1172
 Norwich Road (ie this leg of the junction will be brought under signal
 control as per all of the other legs currently)
- New road signs and road markings throughout the junction
- a 30mph speed limit will be implemented on Cantley Lane South
- The existing Cantley Stream and access track will be realigned, and one new stream culvert constructed.
- 2.3. Local Member comments will be reported orally at Committee.

3. Impact of the Proposal

- 3.1. The proposal is to upgrade the existing Thickthorn Junction by providing a new free-flowing connector road between the A11 northbound and the A47 eastbound. Responding to the submission of the Development Consent Order will allow the county council to raise issues that we would want to continue to work with Highways England on resolving as the project goes through the approval process.
- 3.2. The principal role of the county council in responding to the above proposal will be in respect of the Authority's statutory role as:
 - Highways Authority
 - Minerals and Waste Planning Authority
 - Lead Local Flood Authority (LLFA)
 - Having Public Health responsibilities.
- 3.3. In addition, the county council has an advisory environmental role and economic development function, which also need to feed into any response made to the proposal.

3.4. The following sections go through each issue in turn, providing a summary of the impacts of the proposal as set out by Highways England in their submission, followed by the council's proposed representation on that issue.

3.5. Main points of concern

Although it is not recommended that Members raise objections to the proposals, there are a number of areas where we have concerns. Many of these are detailed concerns. The most significant relates to:

 Unresolved issues around the county council taking on responsibilities for significant new infrastructure comprising a link from the B1172, across the A11 trunk road and Norwich-Cambridge railway line, to Cantley Lane south and the proposed classification of this new link as a B class road (see Sections 3.9-3.20).

3.6. Overview

The proposal is outlined in Section 2.2 and shown in Appendix A. Detailed plans are available on the Planning Inspectorate's website.

In summary, the proposal is to upgrade the existing Thickthorn Junction by providing a new free-flowing connector road between the A11 northbound and the A47 eastbound. The new connector road will re-route traffic away from the junction and flow it under via a new underpass.

3.7. Highways England is bringing forward major road improvements in addition to Thickthorn Junction, including proposals to dual Blofield to North Burlingham, Easton to North Tuddenham, and improvements – yet to be devised – at Vauxhall and Harfreys junctions in Great Yarmouth.

3.8. **Proposed representation**

The principle of upgrading the Thickthorn Junction is fully supported. The junction is a well-known congestion area and improving traffic flow will reduce journey times and increase safety and resilience. The need to upgrade the junction was established in the Greater Norwich City Deal that identified a programme of infrastructure required to support the growth plans of the area. The delivery of the Thickthorn improvement is a significant investment in our infrastructure programme and is a major element of infrastructure required to enable planned growth.

3.9. Highways Impacts

- 3.10. The highway impacts of the A47/A11 Thickthorn Junction scheme are set out in Development Consent Order (DCO) document 7.1 Case for the Scheme.
- 3.11. With regard for the need for the scheme this document notes that "The feasibility study identified the A47/A11 Thickthorn Junction as operating over capacity on a number of approaches and that the situation will get worse with traffic growth." The DCO report sets out the traffic impact of the improvement scheme on the existing junction and the predicted traffic flows on new road links that the scheme provides.

- 3.12. From the report it is clear that the scheme provides relief to the existing at grade signalised roundabout by removing the dominant movement from the A11 in the south to the A47 in the east and vice versa. These movements are diverted onto two new one-way road links, each of which is predicted to carry about 10,000 vehicles a day when the scheme opens rising to over 12,000 a day in 2040.
- 3.13. The rather compromised existing access arrangement to Cantley Lane South, which is from a tight slip road off the existing Thickthorn roundabout, and egress onto an existing off slip road is removed by the scheme. In order to access Cantley Lane South with the new arrangement, a new link from Hethersett Lane (B1172) is provided which incorporates a road bridge over the A11. This new road link is predicted to carry some 900 vehicles a day when the improvement scheme is opened.
- 3.14. The NATS Saturn Model was used as well as a microsimulation model. Base surveys were undertaken in 2015, 2016 (for the Saturn Model) and 2019 for the microsimulation. The county council is unsure if any growth factors were applied to Background traffic as this is not mentioned and there is an assumption that growth was incorporated into the NATS model.

The NATS model forecasts that in 2025 there will be an approx. increase in peak hour traffic of 14% and that increases to 25% in 2040. This is a substantial increase which is primarily attributable to growth in the NATS policy area and specifically around Wymondham, Hethersett and Cringleford. Without the proposed scheme the existing capacity issues will be significantly exacerbated.

The Transport Case mentions removing the bus lane on the B1172 approach to the roundabout. However, it is concluded that removing the bus lane will have very limited benefit in 2025 so it is proposed to revisit this once the scheme is opened.

Modelling of the B1172/MacDonald's roundabout (including the P&R extension) shows that in 2040 with the scheme open, the roundabout operates below capacity.

Whilst some walking links are removed, others are enhanced, and a new overbridge is provided to connect Cantley Lane and Cantley Lane South. This will also be a bridleway which will lead to the removal of the Pegasus facilities that currently exist (crossing the slip roads on the A47 on the eastbound approach to the junction).

The Transport Case summarises that in terms of journey time reliability, benefits will be introduced as capacity is increased, delays are shortened, and accidents are reduced. The scheme will provide additional capacity which will improve travel times, support housing and economic growth and provide additional capacity to support strategic growth linking Norwich to Peterborough and Cambridge.

3.15. The only approach which doesn't benefit from the A47/A11 Thickthorn Junction scheme is the A11 approach from Norwich.

3.16. **Proposed representation**

The Development Consent Order (DCO) document 7.1 Case for the Scheme, sets out projected changes to traffic patterns of the A47/A11 Thickthorn Junction scheme. There does not appear to be anything within the case that would lead to the local highway authority having any concerns over the proposed scheme. Therefore, the county council is recommending no objection.

3.17. Based on the assessment, it appears that the predicted traffic growth will make the A11 approach from Norwich the worst performing arm in the future in terms of capacity and delay. This appears to be exacerbated by the enhanced throughput of the junction which gives rise to additional traffic on this approach. The county council would want to discuss this issue in more detail with Highways England to see if anything could be done at this location as part of the scheme to minimise this effect.

3.18. **Detrunking**

The scheme includes proposals that, on completion of the scheme, would not form part of the trunk road network, but would become the responsibility of the county council. Chief amongst these is the proposed new link from Cantley Lane South to the B1172, comprising a major structure over the A11 as well as a stretch of new road. This is proposed as a B class road. This is not considered appropriate. We have previously voiced concerns to Highways England about this link road encouraging more west-to-east movements between Hethersett and Mulbarton, as have local parish councils. Cantley Lane South is currently effectively a single lane track with passing bays along it, predominantly used by northbound traffic. Highways England's modelling shows only minimal increase in traffic on Cantley Lane South. However, classifying the road as a B road is likely to indicate to traffic that that this is a through route and encourage further traffic, which would not be appropriate.

Whilst the county council would receive additional maintenance funding through the national grant agreement formula (due to the additional road length being maintained) this is not likely to be of any significance. It would not be sufficient to bring roads or structures up to standard (if they require this). To date we have not been provided with data indicating what assets might require attention in the short to medium term.

(The new underpasses connecting the A11 to the A47 would form part of the trunk road network.)

3.19. Proposed representation

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 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.

3.20. The county council does not support classification of the new link from Cantley Lane South to the B1172 as a B class road. Cantley Lane South is currently effectively a single lane track with passing bays along it, predominantly used by northbound traffic. Classifying the road as a B road is likely to indicate to traffic that that this is a through route and encourage further traffic, which would not be appropriate.

We would want to have further discussions with Highways England on the classification of this link and on the detail of the destinations signed along it from the B1172 Hethersett Road.

3.21. Socio-Economic Issues

There are potentially significant economic benefits arising from the dualling proposal in terms of:

- Local employment creation
- Business sectors affected by construction
- Productivity benefits to businesses, and other wider economic benefits, arising from upgrading the junction
- · Making journeys safer and more reliable

3.22. Proposed representation

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.

3.23. 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.

3.24 Environmental Issues

An Environmental Statement (ES) has been prepared to accompany the DCO Application. This sets out a description of the proposed scheme and the reasonable alternatives considered in the development of the design, the environmental setting, potential impacts and the likely significant effects of the Proposed Scheme on local communities and the environment, and the measures proposed to mitigate these effects.

The Environmental Statement: Non-Technical Summary provides a summary of the ES in non-technical language. This section considers each of the issues in the non-technical summary in turn.

3.25. Air quality

The assessment concluded that effects will not be significant and that in its operation the scheme is not predicted to affect the UK's ability to comply with the Air Quality directive, which sets exceedance limits for pollutants.

With no significant effects predicted, no mitigation is proposed.

3.26. **Proposed representation**

The county council supports improvements to air quality and would want to see continued monitoring including in operation of the scheme following construction.

3.27. Cultural Heritage

Cultural heritage includes archaeology, historic buildings / structures and historic landscapes including parks and gardens.

The Environmental Statement: Non-Technical Summary sets out there is the potential for both beneficial and adverse impacts, but that potential adverse impacts have been reduced or eliminated through the design and mitigation.

A designated heritage asset, No.4 grade II listed structure, is located inside the site boundary. Highways England have proposed protection with fencing throughout construction and therefore no impact is predicted.

A scheduled monument is located outside the site boundary 'Two Tumuli in Big Wood'. This site will have significant residual adverse effect as a result of operations from the proposed scheme. The proposal is to remove the last remaining preserved part permanently from the western barrow – the effects will be reduced for the eastern barrow due to thicker vegetation in the area.

It notes positive impacts as being a new viewpoint and information board, to enhance appreciation of cultural heritage.

3.28. **Proposed representation**

Arboriculture

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 February 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 x 5 category A, x 7 category B trees and x 1 category B tree group designated for removal that should be retained should any design changes allow. In addition, 27 tree groups and two woodlands will require partial removal. These include B grade tree groups G9, G10, G11, G13, G14, G21, G22, G23, G27, G38, G88, G89 and B grade woodland W2.

It should be noted that B category trees might only have been downgraded from category A due to an observed impaired condition. They are still of significance and should be retained where possible or compensated adequately for if removal is unavoidable (as recommended in BS5837:2012).

W2 has been described within 6.3 Environmental Statement - Appendix 8.1 Botanical Survey Report as 'a priority habitat and potentially ancient woodland (present since at least 1840).' However, this was not observed within the AIA (potentially because the Ancient Woodland Inventory only records ancient woodlands of over two hectares in size). This needs clarification as it could affect the scheme's design, mitigation and/or compensation due to the national significance of such habitats; explained in further detail below.

With regards to the x 5 category A trees with veteran and/or over-mature/ancient characteristics to be removed (situated within the new Cantley Lane Link Road section of the development), T14 has a stem diameter at breast height of over two metres which is quite exceptional. These trees are open-grown individuals, likely remnants of historic parkland or wood pasture. They have high arboricultural, landscape, conservation and cultural values.

These are irreplaceable habitats with some or all of the following characteristics (as stated in the government guidance note: www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#ancient-and-veteran-trees):

Ancient woodland

Ancient woodland takes hundreds of years to establish and is defined as an irreplaceable habitat. It's important for its:

- Wildlife (which include rare and threatened species)
- Soils
- Recreational value
- Cultural, historical and landscape value.

It's any area that's been wooded continuously since at least 1600 AD. It includes:

- Ancient semi-natural woodland mainly made up of trees and shrubs native to the site, usually arising from natural regeneration
- Plantations on ancient woodland sites replanted with conifer or broadleaved trees that retain ancient woodland features, such as undisturbed soil, ground flora and fungi.

They have equal protection in the National Planning Policy Framework (NPPF).

Other distinct forms of ancient woodland are:

Wood pastures identified as ancient

Historic parkland, which is protected as a heritage asset in the NPPF.

Many of these do not appear on the Ancient Woodland Inventory because their low tree density did not register as woodland on historic maps.

Highways England should give consideration to wood pasture identified as ancient in planning decisions in the same way as other ancient woodland.

'Wooded continuously' does not mean there's been a continuous tree cover across the whole site. Not all trees in the woodland have to be old. Open space, both temporary and permanent, is an important component of ancient woodlands.

Ancient and veteran trees

An ancient tree is exceptionally valuable. Attributes can include its:

- Great age
- Size
- 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 might 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 understood that this development is seeking a Development Consent Order to prove its 'wholly exceptional' status, but it must:

- 1. Avoid impacts
- 2. Reduce (mitigate) impacts
- 3. Compensate as a last resort.

In response to an earlier consultation (noted in document 5.2 Consultation Report Annex M: Table Evidencing Regard had to Statutory Consultation Responses), the Forestry Commission noted the loss of the veteran trees and suggested the felled timber should be moved to adjacent shared green space where 'the material can decay by natural processes and continue to provide natural deadwood habitat'. This prescription provides a degree of mitigation to the overall impact and is supported.

Threats to remaining trees

The AIA has identified that a site compound is shown within the RPA of A grade trees T16, T18, T19, T20, G20, T21, T23, T25; and B grade trees T17, T24 and G26. Should this location not be subject to change, these trees will be under

threat from damage such as compaction and pollution. The AIA gives guidance and methodology to avoid and reduce these impacts.

Threats to the health of remaining trees have also been identified with regards to construction of fence lines, change of soil levels, installing utilities and close proximity working.

AIA update

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:

- Tree Constraints Plan
- Tree Protection Plan
- Arboricultural Method Statement
- Timetable for Implementation of Tree Protection Works.

3.29. Environmental Masterplan

The Environmental Masterplan details replanting proposals in a clear visual format but without species detail or quantification. It is not clear at this stage, how planting design has been calculated to ensure adequate replacements for losses incurred will be achieved. This requires 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
- Selective veteranisation of specific trees

3.30. Landscape

The Environmental Statement: Non-Technical Summary sets out that during construction, there would be a loss of existing trees and areas of woodland and a change to the existing agricultural land use due to:

- The new slip road between the A11 and A47
- The new Cantley Lane Link road
- Temporary construction compounds and materials storage areas.

During the initial stages of operation, the proposed scheme carriageway, overbridge structures, junction lighting, signage and movement of vehicles along the highway would be visible. The scheme proposes tree planting, retaining / replacing / reinforcing existing vegetation, sourcing plant and grass species specific to the local area and creating a reptile habitat around the Cantley Stream. The tree planting would revert the visibility of the main trunk road proposed to a state comparable to the existing situation. Localised significant visual effects would persist at the residential properties in Cantley Lane South and a slight adverse effect to the landscapes character would persist away from the trunk road elements.

The assessment concludes that the proposed scheme would not result in significant long-term residual effect on visual amenity and landscape as a whole.

3.31. **Proposed representation**

The following comments are made from a Landscape perspective and are based on the review of the following documents:

Volume 6 6.1 Environmental Statement:

- Chapter 7 Landscape and Visual Effects
 - (Please note Chapter 6 Cultural Heritage assessed the effect of the scheme on Thickthorn Hall as a County designated Historic Park and Garden, this has however not been reviewed as part of the Landscape comments, and views should be sought from the Norfolk County Council Historic Environment Team.)
- Chapter 15 Cumulative Effects Assessment (Please note only elements relevant to Landscape and visual effects have been reviewed)
- Appendix 7.1 Planning Policy Context
- Appendix 7.2 ZTV and Verified Photomontage Methodology
- Appendix 7.3 Landscape Character Areas
- Appendix 7.4 Visual Receptors
- Appendix 7.5 Representative Viewpoints
- Appendix 7.6 Arboriculture Impact Assessment (Please note this has only been reviewed from a Landscape perspective and not in relation to Arboricultural expertise)
- Appendix 7.7 Lighting Assessment (Please note this has only been reviewed from a Landscape perspective and not in relation to any other expertise)

6.8 Environmental Masterplan:

 TR010037/APP/6.8 (Please note this has been viewed at a strategic level)

Volume 7 7.4 Environmental Management Plan:

Record of environmental actions and commitments

Documents have been reviewed with their associated figures where possible. Where documents have not been fully reviewed this has been noted, or where documents have not been located or unavailable this has also been noted. No documents outside of those mentioned have been reviewed or considered as part of this response. Please note Chapter 6 Cultural Heritage assessed the effect of the scheme on Thickthorn Hall as a County designated Historic Park and Garden, this has however not been reviewed as part of the Landscape comments, and views should be sought from the Norfolk County Council Historic Environment Team.

- 3.32. The paragraph numbers below refer to Chapter 7 Landscape and Visual Effects of the Environmental Assessment.
 - 7.2 Suitable expertise is provided for such an assessment
 - 7.3.2 States that "Retention of veteran, mature or otherwise significant trees, groups of trees or woodland (and where removal is proposed, replacement with those of similar amenity value) (Policy DM 4.8 of the DMPD)"

Veteran Trees are irreplaceable habitats and form an important part of the cultural and historical landscape, the loss of these trees in the landscape cannot easily be replaced with trees of similar amenity value, by nature of their scale and size, it would take a considerable length of time to achieve anywhere near the same amenity value. (www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#ancient-and-veteran-trees)

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 understood that this development is seeking a Development Consent Order to prove its 'wholly exceptional' status, but it must:

- 1. Avoid impacts
- 2. Reduce (mitigate) impacts
- 3. Compensate as a last resort.
- 7.4.1 Suitable guidance is being used and adhered to, and we welcome other relevant references being taken account of.
- 7.4.11 Comments on Cumulative Effects Assessment are discussed below.
- 7.4.13 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.

- 7.4.14 Tables 7-1 and 7-2 lay out the proposed scope in terms of both landscape and visual effects. Norfolk County Council broadly agrees with the elements which have been scoped in and out of the assessment. The table notes that there are no landscape designations. However, to the south east of the existing Thickthorn roundabout, close to where the proposed new slip road joins the A47 is Intwood Hall, a nationally registered grade 2 historic park and garden. This does not appear to be mentioned in this table, not even in a similar fashion to Thickthorn Hall. Justification might be needed to clarify this.
- 7.4.15 The council also acknowledges the change in guidance on Visual Representation of Development Proposals and is pleased to see that whilst it does not change the approach, that the amended guidance has been considered.
- 7.4.22 We support and share concerns regarding the key issues raised by consultees previously.
- 7.4.23 We are satisfied that viewpoints have been reviewed and agreed by South Norfolk District Council as the local planning authority.
- 7.6.1 We are happy with the 1km from the DCO boundary study area of the Landscape and Visual Impact Assessment (LVIA), considering the relatively low lying elements of the scheme, and the coincidence of the more visually obtrusive elements with the existing structures of the A47 and A11.
- 7.6.2 A reasoned argument is made for the exclusion of visual receptors to the west of Station Road and parts of Hethersett and Ketteringham. We understand this decision at this stage and appreciate that there are unlikely to be any significant visual effects caused by the proposed scheme in these locations.
- 7.7.2 Whilst the works at St Giles Park are expected to be largely complete by 2023, when the proposed scheme is programmed to begin, consideration of potential delays should be giving to the cumulative impacts of both works overlapping and the landscape and visual effects that these two schemes running concurrently may have on the surrounding local area.
- 7.7.6 This paragraph clearly lays out the importance of woodland and parklandstyle trees in the landscape surrounding the scheme. Large losses of this woodland and individual trees will have a detrimental effect on the area both in landscape and visual terms.
- 7.7.8 It will be important that, as identified in this statement, the impact of increased infrastructure within an area identified as a strategic gap between Cringleford and Hethersett and identified as a policy area seeking to protect openness and enhance the southern bypass is thoroughly considered. Whilst there area already extensive highways infrastructure in this area, bunding, embankments, linear planting or other road infrastructure has the potential to severely degrade the openness and landscape "gap" that is vital in the landscape here.

- 7.7.11 The impact on the setting of Thickthorn Hall historic park and garden is concerning, especially the loss of trees including two veterans. Where possible the loss of veteran trees should be avoided, and the scheme designed to allow these important trees to remain in the landscape.
- 7.7.13 We note that a majority of the individual trees identified in the AIA are A grade, and some of those are additionally noted as veteran species. These trees, both A grade and below, form an important part of the wider landscape.
- 7.7.20 Whilst minor, Cantley Stream is an important feature within the landscape and should be unaffected where possible by any proposals.
- 7.7.21 Details the current road network and the rural character of these roads, particularly noting Cantley Lane South. This raises concerns regarding the link road proposed from B1172 Norwich Road, down to Cantley Lane South, which would have a detrimental impact on the rural nature of this road, both in terms of the introduction of a new junction, but also an increase in traffic. The council has had discussions with Highways England in respect of the justification for this road, which not only raises concerns regarding Cantley Lane South, but also involves the removal of some notable large and veteran trees.
- 7.7.38 We agree with the conclusions drawn that existing proposals might begin to introduce additional lighting, and that there will therefore be a need for this scheme to minimise any additional lighting of the area and work to retain that gap between rural and urban areas.
- 7.7.49 The concurrent construction of St Giles with the Thickthorn Junction proposals should be considered. The extent of this consideration will likely depend on how much work will still be ongoing at St Giles.
- 7.8.1 Construction compounds should be sited where minimal impacts are likely, for example it would not be appropriate to remove trees to site a compound, which would not need to be removed for the proposed scheme.
- 7.9.3 There are 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.
- 7.10.3 We agree that the overall removal of existing vegetation including woodland and prominent trees, realignment of Cantley Stream, 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.
- 7.10.6 The loss of woodland and large and visually prominent specimens located along Cantley Lane South is of concern, whilst this is noted as an effect

during the construction period, this is a long term effect that cannot be easily replaced by the planting of new young trees.

- 7.10.8 Depending on the progress of St Giles Park, it will be important that the haul road proposed in this area does not require the removal of installed landscape buffer. If this element of St Giles Park has already been completed, it would be inappropriate to remove it.
- 7.10.10 The level of visual disruption for these receptors (R1, R2, FP2, R5, R6 and FP1) is of concern.
- 7.10.21 The disruption at Cantley Lane South is of most concern, it appears that there will be considerable disruption here to the views, tranquillity and overall landscape during both construction and operation.
- 7.10.25 -7.10.26 Similar concerns are raised for the footpaths Hethersett FP6 and Cringleford FP4.
- 7.10.31 The scale of loss of vegetation in the landscape, particularly when involving mature woodland and trees, and veteran trees is of concern both in a landscape and visual sense. Wherever possible this should be avoided and if opportunities arrive during the finalising of the design to retain any of these important landscape features they should be utilised.
- 7.10.35 The loss of existing rural character and sense of tranquillity on Cantley Lane South is disappointing, and whilst will be partially restored, this is an irreversible change to the road and the local area. The loss of veteran trees, and mature roadside trees should be avoided where at all possible, where the scheme doesn't allow this and the justification is there, suitable mitigation should be allocated for these loses. Whilst new young trees, cannot go anywhere towards replacing veteran trees, it would be hoped that the scheme can at least plant substantial trees that will in the long-term future offer distinct value to the landscape.
- 7.10.50 7.10.55 Whilst it is appreciated by year 15 the effects have been assessed as neutral or slight adverse, the combination of construction effects, plus 10+ years of operational effects are significant, particularly on residential receptors. Where a large adverse visual effect is left at year 15 (locations redacted), this is concerning.
- 7.12.8 We understand the conclusions drawn that the scheme would not result in widespread significant residual visual effects and are limited to a localised impact. Whilst this is detrimental to those living in and using this local area, we understand that under the DMRB LA107 this is considered minor. However, we would consider that the removal of such mature woodland, trees, and veteran trees, the realignment of watercourse and introduction of additional infrastructure into the landscape should be considered with more weight. Particularly where this relates to veteran species which cannot be replaced with mitigation planting.

3.33. Chapter 15 – Cumulative Effects Assessment (Please note only elements relevant to Landscape and visual effects have been reviewed)

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. Whilst some elements are redacted due to (we believe) addresses, we believe we've been able to establish the locations that the assessment relate to and broadly support the conclusions drawn.

Appendix 7.4 – Visual Receptors: 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.

Appendix 7.5 – Representative Viewpoints: 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.

Appendix 7.6: Arboriculture Impact Assessment (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 including areas of mature woodland, and a number of irreplaceable veteran trees. 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 development, but also be reflective and respectful of the wider landscape.

Environmental Masterplan TR010037/APP/6.8: 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. Whilst net gain is not a requirement for DCO applications, a clear understanding of how mitigation planting numbers have been reached, and demonstration that they are calculated to suitably compensate losses needs clarifying. Detailed design might be required for some elements when specifications are confirmed further during the process. We note that a Landscape and Ecology Management Plan will be produced. There are dispensaries with some trees at the end of Cantley Lane south, clarification needed on whether these are to be retained. Mapping of the Meadow Farm

county wildlife site across documents should be confirmed as there are some discrepancies.

3.34. Biodiversity

The Environmental Statement Non-Technical Summary notes that there are valuable habitats and species of nature conservation importance that could be adversely affected by the proposed scheme and that, although avoidance of impacting trees and hedgerows was a key consideration throughout the design stage, there will be small areas of these habitats that will need to be lost.

The potential unmitigated impacts of the proposed works include the loss of nesting, roosting, resting, commuting and foraging habitat for protected and notable species.

The summary states that mitigation measures have been identified to safeguard the conservation status of wildlife populations through both the construction and operational phases.

The summary states there would be significant effects to deciduous woodland and hedgerows due to the time delay in reaching their former maturity. There would be a significant effect from the loss of two veteran trees as they are irreplaceable.

There will be a net gain of more biodiverse grasslands with the introduction of species-rich and marshy, wet grassland. There will be riparian planting along Cantley Stream which will increase habitat for aquatic invertebrates.

There is a slight impact overall for bats due to the time delay between loss of habitat and the remediated habitats reaching maturity.

All other residual effects after mitigation are not considered significant.

3.35. Proposed representation

Scheme Design: Has the scheme been reviewed by the Strategic Design Panel?

Environmental Statement - Chapter 8: Biodiversity: There are several inconsistences in that Chapter 8 does not accurately reflect the conclusions and/or mitigation recommendations made within the ecological reports, and the mitigation measures proposed are not always specific to the predicated impacts (or proven to be effective). Equally there are also inconsistencies between Chapter 8 and the Record of Environmental Actions and Commitments (REAC). Further details (examples) are provided although it is not exhaustive.

General Comments:

Scope

The Zone of Influence (ZOI) should be evidence based and refer to relevant guidelines. For example, it would be expected that the bat Core Sustenance Zone (CSZ) would be used. The CSZ was designed to indicate:

- The area surrounding a communal roost within which development work might impact the commuting and foraging habitat of bats using that roost
- The area within which it might be necessary to ensure no net reduction in the quality and availability of foraging habitat for the colony, and CSZ are also important when considering/designing Biodiversity Net Gain see Bat-Species-Core-Sustenance-Zones-and-Habitats-for-Biodiversity-Net-Gain.pdf LD 118 Biodiversity Design provides guidance on species specific approaches to surveying. For example, for badger surveys 'a corridor of 500m (250m either side of the centre line of the road is usually sufficient'. Where deviation from guidelines is provided this should be justified.

Ecology surveys

Paragraph 99 of the ODPM Circular 06/2005 advises that the presence or otherwise of protected species, and the extent to which they might be affected by the proposed development, must be established before consent is granted. Therefore, if there is a reasonable likelihood of protected species being present and affected by the development, the surveys should be completed and any necessary measures to protect the species should be in place before the permission is granted. It is therefore recommended that where surveys are outstanding, or out of date, the are undertaken and the results used to update the Environmental Statement (eg see para 8.5.3, 8.7, of Chapter 8, and para 5.3.7 of the Bat Roost and Crossing Point Survey Report).

Similarly, where the red line site boundary has been amended, ecological surveys should be updated accordingly. For example, the survey area for the botanical surveys is substantially different from the order limit boundary submitted to PINS.

It is not clear why documents have been heavily redacted. Except for badger surveys, the information contained within is not sensitive.

Data should be passed on to Norfolk Biodiversity information Service as the earliest opportunity.

Avoidance

Unit 9 has been identified within the botanical surveys, as an area of potential ancient woodland which will be impacted by the scheme. As this has been omitted from subsequent assessments (Chapter 8) it is not clear if this has been considered and measures taken to avoid impacting irreplaceable habitat.

Paragraph 5.32 of the National Policy Statement National Networks (NPSNN) states that 'Aged or veteran trees found outside ancient woodland are particularly valuable for biodiversity and their loss should be avoided'. Where

veteran trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.

Mitigation

As per comments made in the scoping opinion (TR10037-000010_THIC Scoping Opinion), mitigation measures in Chapter 8 should be described in full, and in detail. Evidence of the effectiveness of mitigation should be provided, and effectiveness defined.

Scoping opinion response (Ref 25) notes mortality (from collision risk) should be assessed in the Environmental Statement. Collision risk has been identified as an impact during construction (eg for great crested newts and bats) but mitigation has not specifically/clearly addressed the risk.

The proposed mitigation areas and enhancement areas are shown on Environmental Masterplan.

Enhancement

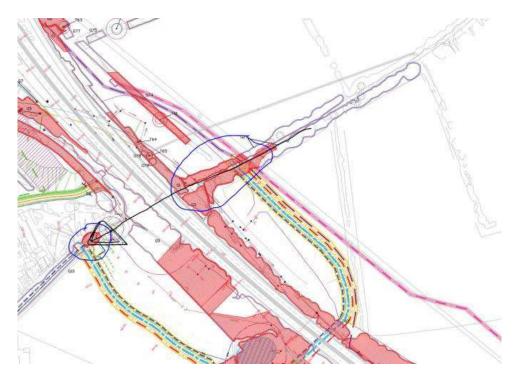
Para 8.4.15 refers to the DEFRA Biodiversity Metric 2.0. The calculations should be available for examination. Table 8-11 (page 51) 'Habitat types and areas to be remediated or enhanced' provides an indication but does the proposed development result in an overall biodiversity net gain of and if so, to what extent?

Areas where enhancements are to be secured are not shown on any of the plans. Land identified for mitigation and enhancements should consider future housing allocation sites eg the Greater Norwich Local Plan.

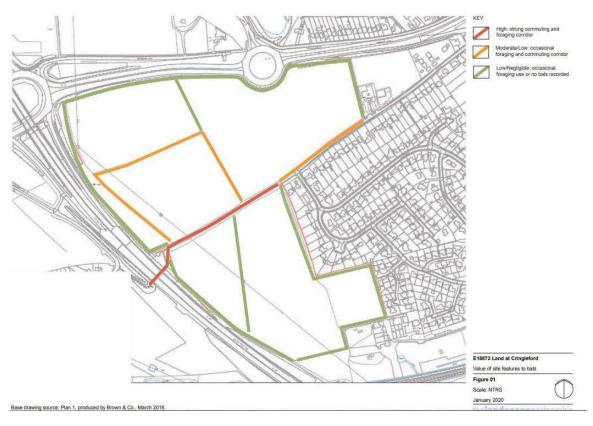
- Paragraph 8.4.20 notes that data has been shared by Norfolk County Council (NCC) regarding barbastelle bat roost locations associated with the Norwich Western Link (NWL) and Northern Distributor Road (Broadland Northway). Woods used by these barbastelle bats (eg the Ringland Hills, Hall Hills) are located within 6km CSZ of the proposed A47 Thickthorn Roundabout improvements. This should be a consideration of the cumulative impact assessment.
- It is recommended that NCC is contacted again at the end of the 2021 survey season as surveys associated with the NWL are ongoing (2020 surveys for the NDR will be available online in due course). Please also note that Dr Charlotte Packman has been undertaking radio tracking surveys of the barbastelles in the NWL area. She should also be contacted for data. It is believed that there is a nationally significant breeding barbastelle colony of over 150 bats in this area. While this colony is not afforded SSSI or SAC status it would otherwise qualify as such. The Planning Inspectorate a public body, has a duty under Part 3, Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard ...to the purpose of conserving biodiversity, to consider impacts of the road scheme on this colony.

- In section 8.7.8 Priority habitats identified under the Natural Environment and Rural Communities Act 2006 (NERC Act) are identified as national importance. No reference is given to Priority Species that are in the area.
- Para 8.7.53 states that all trees within 50m of the DCO boundary have had been subject to updated PRAs in 2020 but this contradicts para 5.3.7 of the Bat Roost and Crossing Point Survey Report which states that Preliminary Roost Assessment (PRA) surveys of a tree is required in 2021.
- Para 8.7.5 does not elaborate on how areas of 'high' bat activity was quantified.
- Table 8-9. (page 42) great crested newt. Notes that attenuation ponds are proposed as enhancement for great crested newts but it is not clear whether they will contain standing water, and for how long. Also, Table 8-12 (page 56) notes that the attenuation ponds are designed to reduce pollution entering nearby water courses, and as such would not provide suitable enhancement for great crested newts. There is no mention of enhancement of SuDS/attenuation ponds for great crested newt this in the Record of Environmental Actions and Commitments (REAC) in the Environmental Management Plan.
- Table 8-9 notes the translocation of 5m of important hedgerow but does not explain where this will be translocated to.
- Table 8-9 (page 39) notes that a UKPN cable is being installed within the CWS. It is not clear which CWS is referred to and this has not been previously mentioned in Chapter 8 or Chapter 15 – Cumulative Effects Assessment. Note: it is mentioned in B11 Table 3-1: Record of environmental actions and commitments
- Table 8-12 notes this will require a 6m wide trench but no mention is made to the area required for construction of this trench.
- Meadow Farm Meadows county wildlife site was not correctly mapped within the botanical surveys report.
- Table 8-9 (page 40) makes no mention of the potential ancient woodland within unit N. It is not clear if measures have been taken to avoid impacting this area.
- Table 8-9 Breeding birds no mention is made of the ten skylark plots to be created in surrounding fields to mitigate for the loss of habitat, as recommended within the Breeding Bird, Hobby and Barn Owl Report.
- Table 8-10 (page 42). Great crested newts (GCN). Surveys for GCN had
 not been completed at the time of submission but should now (May 2021)
 have been nearly completed. It is recommended that the ES is updated to
 include the results of the surveys. If surveys have not been completed it is
 not known if this species is present and affected by works, or if a licence
 will be required. The presence (or absence) of GCN is a material
 consideration.
- Table 8-10 (page 49). Within this table details of the bat mitigation measures are not provided in detail. Eg no mention is made of the proposed 3m high environmental barrier for bats mentioned in B5 of the

- REAC (note it is shown as 3.5 m on sheet 4 of 5 of the Environmental Masterplan, or clusters of trees to guide bats towards the bat highway crossing points (see Environmental Masterplan sheet 4 of 5.
- The assessment must detail all mitigation measures proposed. For example in Tables 8-9 and 8-10 there is no mention of post and wire mesh fence to 'facilitate a known bat flight path' (see para 2.4.26 of Chapter 2), (and Environmental Masterplan) and it notes that Cantley Stream will be re-aligned but does not provide details of how much of the stream will be re-aligned.
- Paragraph 4.5 of LD 118 notes that 'only mitigation measures that are
 effective and proven shall be included in the project design' and
 paragraph 4.6 notes that 'where innovative or unproven mitigation
 measures are proposed, evidence of the consideration of
 uncertainty...shall be submitted.
- No evidence supporting the efficacy of mitigation measures, for example, the 'environmental barrier' for bats has been provided.
- Please note that CEDR (2016) (Conference of European Directors of Roads) concluded that hop-overs are not recommended as effective mitigation measures for Daubenton's bats, soprano pipistrelles and other species with similar flight behaviour (during the experiment temporary barrier screens 20m long and 4m high were placed across the bat commuting route – it is not clear how long the proposed bat fence would be).
- The applicant should also define what effective means. For example, Berthinussen & Altringham (2015) note that a mitigation measure should only be characterised as effective if at least 90% of bats are using the structure to cross the road safely and the number of bats crossing the road transect has not declined substantially.
- Consideration should also be given to how soon mitigation measures
 would expect to be effective. A delay would perhaps be expected as
 vegetation matures. Please note that there may be annual variation in
 efficacy of mitigation. For example, in one year 50% f bats might cross at
 a safe height, and 95% another year.
- However, mitigation measure cannot be considered in isolation.
- The Arboricultural Impact Assessment notes that tree group G27, G1, G3, and an unlabelled tree group on the western side (see below) will be removed, equating to a loss of around 85m of linear hedge/feature (see below). The red areas circled in blue highlight the areas of vegetation to be removed along Cantley Lane.



 As alluded to within the bat report, Cantley Lane is an important commuting and foraging corridor for bats. Surveys undertaken in support of 2017/2120 9south Norfolk Council) show that it is of high value to bats (see below). See below: (taken from 2020/0499).



• The loss of substantial areas of vegetation on both sides of the A47, along the line of Cantley Lane, as well as that along the A47 to the south, shown on drawing no. 1050831-SWETHI-AIAP (in the Arboricultural

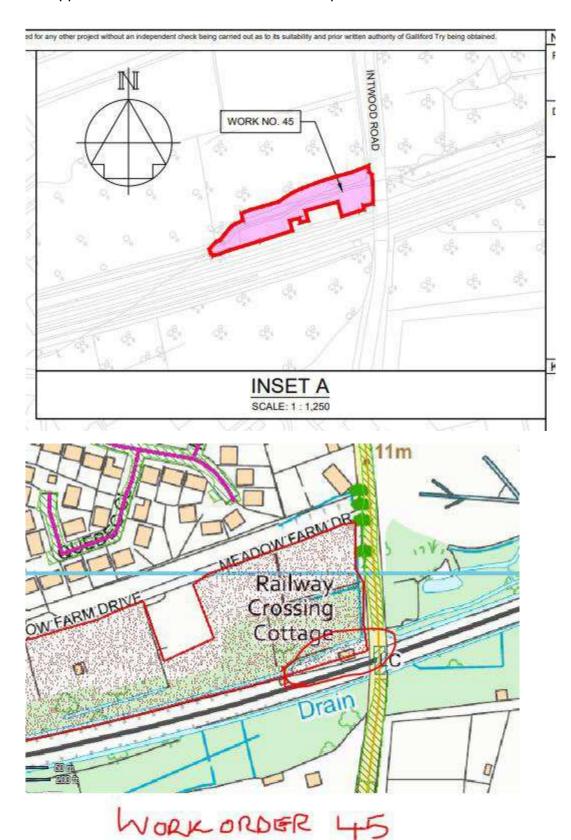
Impact Assessment), will likely result in the loss of this commuting route across the road (a circa 170m gap), and/or increased risk of collision (no evidence has been provided to suggest that the proposed mitigation will be effective. Vegetation also provides bats with shelter from wind and protection from predators. The vegetation also provides a buffer for road noise and head lights.

- Page 53: We agree that habitat loss can, in time, be mitigated for by additional tree planting. However, we disagree that severance can also be mitigated for in this way. Parallel planting along the road does not mitigate severance caused by road widening.
- It is noted that a bat licence required for loss of roosts.
- Table 8-10 Water vole (page 53). No details are provided regarding the:
 - Area required to mitigate for habitat losses,
 - Area of habitat to be created as enhancement,
- The Environmental masterplan shows where mitigation and enhancements for water voles will be located.
- It is noted that a water vole licence will be required.
- Details of species rich grassland is shown within the Environmental Masterplan but this is shown within proximity to the road. Where will barn owl habitat be created?
- Table 8-11 Details of losses or gains in aquatic habitats are not provided
- Table 8-12. Consideration should be given not using topsoil on the verges and in preference to a generic seed mix we would recommend that locally harvested wildflowers (e.g. from a local CWS) is used in the creation of species rich grassland.
- 8.11.4 notes that details for monitoring is provided within the Environmental Management Plan

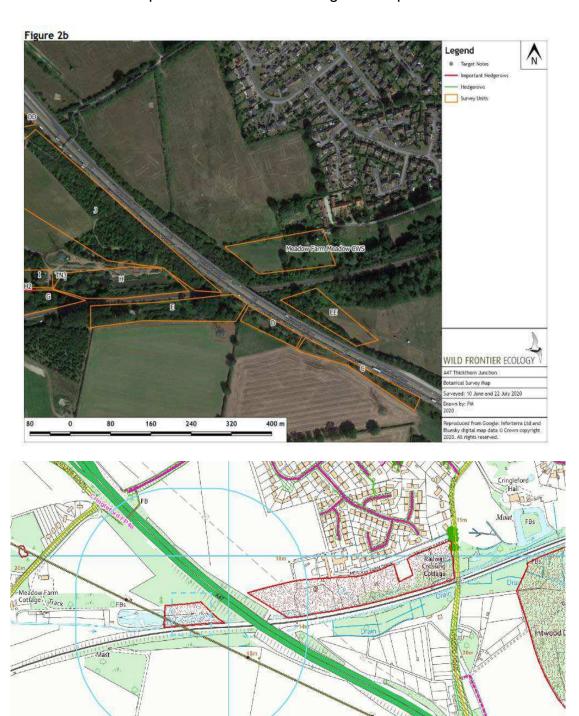
Environmental Statement - Appendix 8.1 Botanical Survey Report.pdf:

- The survey area (see figure 1a, page 9) differs from the current DCO redline site boundary (see General Arrangements Plan).
- It is noted that Areas 'G' and 'I' are of district value, as is Meadow Farm county wildlife site (CWS).
- Hedgerows H2, H3, and H6 likely to be of ecological importance under the Hedgerow Regulations 1997 although it is not clear which hedges these refer to, or which hedges were surveyed as no plan showing, for example, H1, H2, H3... etc. has been provided. The Volume 2 2.12 Hedgerow Plans document does not use the same system (H1...H2) to identify hedges.
- Para 7.6 notes that there will be a direct loss of an area of Meadow Farm CWS to facilitate construction of the slip road and drainage ditch however in Chapter 8 (Table 8-7) it notes that the impact is temporary. It is not clear what the impacts will be and if there will be a permanent loss of CWS

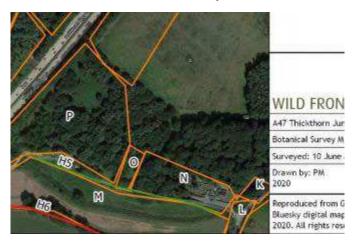
• Work No. 45 (environmental mitigation) is located within Meadow Farm CWS (see below) but this does not appear to have been identified by the applicant. It is not clear what works are planned in this area.



- Work Nos. 6 and 40 may also impact Meadow Farm CWS. Work No 49 abuts Meadow Farm CWS. Work No. 42 directly impacts Meadow Farm CWS and is associated within utilities diversion – it is not clear if this is associated with the UKPN cable route.
- Meadow Farm CWS is only shown to the right of the A47 (top, below).
 However, it extends to the left of the A47 as shown (bottom, below). This will affect the impact assessment and mitigation requirements.



- Para 7.6 also notes 'The southern edge of Area N, a priority habitat and potentially ancient woodland (present since at least 1840) will be impacted by a new road. This will be an intermediate impact on this feature. Mitigation is advised' the potential presence of ancient woodland is not mentioned elsewhere and Chapter 8 only refers to veteran trees on the ancient woodland inventory (para 8.7.14)
- It should be established if this woodland is ancient and the scheme redesigned to avoid this area as recommended in section 8 of the botanical report. It is noted that this is not reflected in para 6.1 which assigns area N as of local value only.



Environmental Statement Appendices Appendix 8.2 – Terrestrial Invertebrate Survey Report:

- Sampling points for the 2020 were chosen based on surveys undertaken in 2017. It is not clear how the 2017 surveys locations were identified. For example, the surveys area represents only part of the order limit boundary.
- Impacts from loss of veteran oak trees on species of conservation concern including nationally rare Quedius dilatatus and Aulonothroscus brevicollis. It is not clear how this will be mitigated.

Environmental Statement Appendices Appendix 8.3 – Aquatic Macroinvertebrate Survey Report:

 Surveys were undertaken in 2017 (AECOM) and in 2020. Sampling points in 2020 were as previously used in 2017. It is not clear how the sampling points were identified in 2017 or if they are representative.

Environmental Statement Appendices Appendix 8.4 Great Crested Newt Survey Report:

Please note that the Great Crested Newt Habitat Suitability Index Advice
Note from Amphibian and Reptile Groups of UK (ARG UK) states that the
Habitat Suitability Index (HSI) 'is not a substitute for newt surveys '. It is
not a predictor of the likely presence or absence of this species. This view
is also supported by the National Amphibian and Reptile Recording
Scheme (NARRS)

- Please also note that eDNA surveys only provides presence or absent data. It does not provide information on populations, required in order to apply for a Protected Species mitigation licence from Natural England. If the applicant proposed to apply to the DLL scheme the IPROC should be submitted to PINS.
- If great crested newts are present it would be expected that gullies are not used to prevent newts becoming trapped see here.

Environmental Statement Appendices Appendix 8.5 – Reptile Survey Report:

 No compensatory habitat is proposed for reptiles found to the north of the A11 but it is noted that a mitigation area is shown on the Environmental Masterplan sheet 4 of 5 to the south. Given that the reptiles were recorded to the north of the site, and the A11 will act as a potential barrier to movement the efficacy of this mitigation area is queried.

Environmental Statement Appendices Appendix 8.6 Breeding bird, hobby and barn owl survey report:

- It is not clear what the survey area was for the barn owl survey (para 5.22 only notes that sites identified by AECOM 2017 were surveyed). Chapter 15 -Cumulative Effects Assessment notes that this was 1.5 km of the proposed scheme. This should be clarified.
- It is noted that the barn owl report recommends compensatory rough grassland should be created alongside the proposed scheme (para 7.2.5) to compensate for foraging habitat that will be lost and that several nest boxes are placed near the proposed drainage basin (para 7.3.3)
- Paragraph 7.3.3 Please note that barn owl boxes must be placed no closer than 1.5km from the road (Shawyer, 2011: 3 (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))
- Consideration will need to be given to where compensatory habitat will be provided so as to avoid potential for collision

Environmental Statement Appendices Appendix 8.7 – Wintering Bird Survey Report:

• The Scottish Biodiversity List (2012) is not relevant to this scheme

Environmental Statement Appendices Appendix 8.8- Bat Roost and Crossing Point Survey Report:

 The 6.3 Environmental Statement Appendices Appendix 8.6 Breeding bird, hobby and barn owl survey report notes a brown long-eared bat feeding roost is present at Site 1 - Metal Shack (para 7.2.1). This should be mentioned in the bat report.

Environmental Statement Appendices Appendix 8.9 Otter and Water Vole Report:

Additional surveys of potential holt locations required.

 Habitat enhancement for water voles is shown on the Environmental Masterplan

Environmental Statement - Appendix 8.11 Confidential Badger Survey Report:

- Standing advice for badgers notes that when determining if setts are in use they should be monitored over an extended period of time e.g. up to 4 weeks. The surveys do not conform to standing advice.
- 4.1.1 and 4.1.2 notes that the sett is 'partly used' but in 5.1.1. it
 contradicts this by saying 'none of the setts...were found to be currently in
 use'.
- It is not clear if the sett is active.

Lighting design provided in Volume 6.8 Environmental Masterplan (TR010037/APP/6.8):

- Lighting design has considered the Institution of Lighting Professional's (ILP) GN08 – 18 – Bats and Artificial Lighting in the UK.
- It is proposed that lighting will be designed will backlight shields (see pages 52, 53, 54) and LED bulbs to reduce light spill. Please note that the luminaires proposed in the lighting proposal PHILIPS LUMA BGP 704 TYPE; LUMA BGP705 may not be suitable for shields. This should be checked with the manufacturer.
- It would be beneficial to include a plan showing what the lighting scheme will look like at night (with contours).

Chapter 15 Cumulative Effects Assessment:

See comments regarding CSZ for bats.

Environmental Statement Report to inform Habitats Regulations Assessment:

- Natural England have been involved with preparation of the HRA, and agreed with the conclusions of the Draft HRA, in November 2020.
- We broadly agree with the conclusions but would note that there is a
 nationally significant breeding barbastelle colony of over 150 bats in the
 area around ROAR Dinosaur Park extending into the Ringland Hills, Hall
 Hills woods and beyond. While this colony is not afforded SSSI or SAC
 status it would otherwise qualify as such.
- Para 3.3.2 notes that otter surveys were undertaken in 2016, 2018 and 2020. This differs from the survey information provided in Appendix 8.9 Otter and water vole report, which notes that a Phase 1 surveys was undertaken in 2016 (see para 2.1.2).
- Para 3.3.2 states botanical surveys were undertaken in 2016 although Appendix 8.1 – Botanical Survey Report notes that the botanical surveys were undertaken in 2017 (chapter 2), and 2020 (see para 4.3). It is not clear if the Phase 1 surveys undertaken in 2016 comprised full botanical and otter surveys.
- Chapter 3 considers in combination effects. The reader is directed to ES Chapter 15 (Cumulative effects assessment) (TR010037/APP/6.1). For

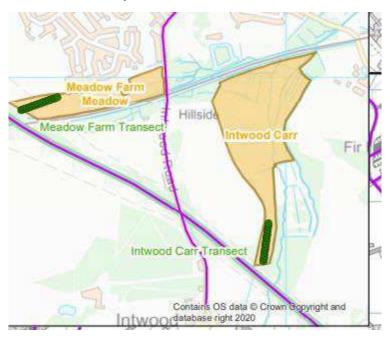
- the assessment of cumulative effects and the list of the proposed developments. This information should be provided within the HRA.
- The HRA is a multi-stage process which helps determine Likely Significant Effects (LSE) and (where appropriate) assess adverse effects on the integrity of an NSN: human and heritage receptors are not pertinent (see 3.4.4).
- Para 3.4.8 (below) It is not clear why reference has been made to Bechstein bats as this species is not present in Norfolk. We (the Natural Environment Team) were consulted in January 2021 with regards to the Long List. During this consultation we queried the use of a 2km CEA ZOI, suggesting the Core Sustenance Zones of bats is used. No mention was made to Bechstein bats.

Volume 3 3.1 Draft Development Consent Order:

 Schedule 8, part 2 refers to the removal of important hedgerows (H3 and H4). In Chapter 8 (Page 40) it states that 5m of a section of important hedge will be loss. It is not clear how many metres of important hedge will be lost (Norfolk County Council has been unable to locate a plan showing where these hedges are).

Volume 6 6.2 Environmental Statement Figures 5.5 – 5.8:

 It is not clear what the 'ecological transects' (see below) relate too – for example they do not represent transects undertaken for breeding bird, or bat surveys.



Environmental Management Plan (EMP) First Iteration and Record of Environmental Actions and Commitments (REAC):

 Should accurately reflect recommendations made within the ecology report, and chapter 8.

- The EMP does not mention design of attenuation ponds for great crested newts (only mentions SuDS on page 42) this is also not shown on the Environmental masterplan
- Notes a Landscape and ecology management plan (LEMP) will be prepared.
- Table xx B1 please can the reports be sent to neti@norfolk.gov.uk.
- B5 notes that trees will be retained at the end of Cantley Lane south this is contrary to details within the AIA.
- Table 4-1 should also mention that the need for a great crested newt licence needs to be confirmed following completion of surveys.
- Table 6.1.
 - B5 Monitoring of the effectiveness of the bat crossing point and wider road (to establish if bats cross elsewhere) should also be undertaken. Thermal imaging/infra-red cameras should be used.
 - B6/B7. Road casualty surveys design needs to be effective use of sniffer dogs is recommended and should cover the entirety of the road. Triggers should be identified for where additional mitigation is required.

The county council was not able to locate the Phase 1 habitat survey, or any of the original survey reports undertaken by AECOM, on PINS.

3.36. Geology and soils

The proposed scheme would result in a significant effect on agricultural land, causing permanent and temporary loss of agricultural land. The scheme proposes a Soil Management Plan be developed to preserve land quality. Provided mitigation measures are effective and temporary land takes are restored, the long-term effects on agricultural soils would be limited to the area of agricultural land which is permanently lost; the summary suggests this is a significant and moderate effect.

The summary identifies two potential sources of contaminated land which present a possible risk to human health resulting from ground gas production. These sites are Cantley Lane landfill and an infilled gravel pit. It is noted there are appropriate mitigation measures to ensure the potential sources are managed.

3.37. **Proposed representation**

It is not proposed that the council make any comment on this section.

3.38. Material Assets & Waste

The assessment concludes that taking into account the design, mitigation and enhancement measures to be implemented during construction, it is considered that these developments would generate low quantities of waste in relation to the baseline landfill capacities for the east of England region.

The comments set out below relate to Norfolk County Council in its capacity as the Minerals and Waste Planning Authority. Where they refer to paragraphs, this is in respect to the Environmental Statement Appendix 10.4 – Mineral Impact Assessment.

3.39. Proposed representation

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 paragraphs 10.3.16-10.3.18 (of the Mineral Impact Assessment. The MPA also agrees with the assessment of reuse suitability of site-won materials as outlined in paragraphs 10.5.8.-10.5.14.

The MPA notes that an estimate of 107,500m³ of site won material is likely to be extracted during the construction phase, as outlined in paragraph 10.5.13. 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 10.5.14 states that the scheme has a significant earthworks material deficit, and therefore 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. Norfolk County Council, in its capacity as the Mineral Planning Authority, considers that if the scheme is required to follow the strategy outlined in the Mineral Impact Assessment this will effectively address mineral safeguarding issues relating to resource sterilisation.

3.40. Noise and Vibration

The Environmental Statement Non-Technical Summary notes that mitigation measures will be provided to protect noise sensitive receptors which are foreseen to experience significant noise effects resulting from construction of the proposal. These are temporary noise barriers and real-time noise monitoring.

The assessment concludes there are no significant traffic noise effects predicted from the proposed schemes operations, and therefore no mitigation is suggested.

3.41 Proposed representation

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.

3.42. Population and Human Health

The Environmental Statement Non-Technical Summary notes the potential significant effects for population and human health as a result of the proposed scheme.

The assessment concludes that, during construction:

- Traffic management measures will disrupt access along the local road network for local residents and businesses, causing longer journey times and severance of communities and their facilities
- Impacts to health in terms of noise, dust and visual intrusion
- Disruption to farming operations within the DCO boundary

Permanent impacts would include:

- Residential properties and businesses on Cantley Lane South will likely experience longer journey times due to changes to access
- Loss of a proposed area of formal public open space at Cringleford Residential Development unless a suitable alternative can be agreed with the developer and local planning authority
- An increase in journey time for users of footpath FP4a due to diversion of the footpath for the new bridge for walking, cycling and horse riding
- Improved safety: a proposed 40mph speed limit on the B1172 Norwich Road and introducing traffic lights for those accessing community assets and Thickthorn services
- Reduced journey times for Round House Park residential area and residential properties and businesses on Station Lane.
- In relation to the footpath issue noted above, this connects via a footbridge across the A47 Cantley Lane South to Cantley Lane North. The bridge is being relocated further east, by 45m, to accommodate the revised slip road arrangements. The current Pegasus crossing (which accommodates foot, cycle and horse-riding movements) across the A47 slip roads to the west of Thickthorn junction will be revised so that horse crossing movements are accommodated by the new bridge connecting Cantley Lane north to south. However, no further improvement for cyclists or walkers is proposed across the slip roads, which form part of the new Norwich-Hethersett-Wymondham cycleway (ie it will remain as an at-grade signalised crossing of the slip roads).
- 3.44. Members should note that officers are currently in discussion with Highways England regarding construction about how the scheme might be constructed. The works have the potential to severely affect operation of the trunk road (and local networks) during construction. Two options might be worthy of consideration: the first to close the trunk road for a relatively short period whilst the major work (eg underpasses) are put in place; the second option might be to keep the trunk road open during construction, although this would result in impacts overall lengthy period of time.

3.45. **Proposed representation**

The provision of a new walking, cycling and horse-riding (WCH) bridge across the A47 connecting Cantley Lane South to Cantley Lane North is supported as current WCH provision here is not ideal so underused or misused, indicating revised facilities are needed. Consequently, the removal of the current Pegasus crossing (on the A47 slip roads west of the junction), and the necessity of diversion and/or extinguishment of existing Public Rights of Way, either to

accommodate construction or to link to the new bridge, is accepted and supported. However, in order for this bridge to fully accommodate all WCH use, a surface suitable for equestrian use must be incorporated into the design and should link into other new WCH facilities (see below). Should it not be possible to have the new route in place before extinguishing the old, the relevant temporary closures and/or diversion orders will be required to maintain continuity of WCH access where possible.

We note the additional WCH route along the new Cantley Lane link road with crossing facility connecting to the existing WCH provision on Norwich Rd providing additional links to the Wymondham to Sprowston Pedalways cycle route. However, given the recent investment by the county council through DfT's Transforming Cities and Cycle Ambition Grant to create a continuous walking/cycle link between the residential growth areas in Wymondham and Hethersett to the centre of Norwich, the lack of improvements to the existing WCH provision at the Thickthorn junction and no provision along Cantley Lane South from the new link road to the new WCH bridge represents a missed opportunity to build on the recent investment in the area and encourage growth in walking and cycling.

The construction of a new private means of access on Cantley Lane South may affect the alignment of a Public Right of Way, Hethersett Footpath 6 with the risk of creating a short length of highways maintainable inaccessible PRoW. Layout and design of this junction must take this into account and me adjusted accordingly.

3.46. The county council welcomes discussions with Highways England about options for construction. The works have the potential for significant impacts, not just to the operation of the trunk road, but also over a wider area of the local transport network. The council accepts that such works will cause some impacts and wishes to work with highways England on how these best be mitigated.

3.47. Road Drainage and the Water Environment

The non-technical summary lists the key surface water receptors within the study area as Cantley Stream, Intwood Stream and local ponds; the River Yare is identified as a potential receptor as it is downstream of Intwood Stream. The key groundwater receptors within the study area are aquifers, Cantley Stream and lowland fen priority habitats.

It states that the new carriageway will discharge surface water to Cantley Stream and runoff to oversized pipes and attenuation ponds, designed to attenuate a 1 in 100-year storm event (plus a 20% climate change allowance with a sensitivity check at 40% climate change) in line with guidance. The proposed scheme design incorporates treatment of road drainage prior to discharge to groundwater.

The summary shows mitigation is proposed for property level protection at a residential property upstream of Intwood Road to negate the risk of flooding. There are no other residential properties impacted by the proposed scheme.

Aside from the moderate significant impact of flood risk within the Cantley Stream floodplain, with mitigation it is not expected to cause additional significant effects, during construction or operational phases.

3.48. **Proposed representation**

The Lead Local Flood Authority (LLFA) team has been in on-going consultation with Highways England between September 2020 and March 2021. The LLFA acknowledge there are some remaining comments which require addressing, and some on-going activities relate to requests for clarification or further information comments from the LLFA during 2021.

Cantley Lane South Culvert

The LLFA acknowledge the 600mm freeboard requirements in the new Cantley Lane South Culvert were not possible due to the environmental and ecological considerations. This resulted in a reduction to the minimum freeboard through the culvert to 0.428m during the 100-year plus 65% climate change event.

Cantley Stream Floodplain

The LLFA acknowledge there will be significant improvements to the floodplain extents and the level of flood risk posed due to the new Cantley Lane South Culvert (Figure 8-4 in the Flood Risk Assessment (FRA)). However, the LLFA also observe some variation in the floodplain within agricultural land and water compatible areas (Figures 8-5 and 8-6 in the FRA). It appears from the information presented that the existing water level in these locations could increase by up to 15mm along with minor variation in the location marginally. This could be influenced by the sensitivity of the hydraulic model to the ground model used. Even so, it would be prudent for the developer to liaise with the affected landowners to confirm they are aware and accept this potential change to their properties.

The FRA should provide detail on the maintenance plan for the mitigation measures proposed by the scheme. No information is provided regarding the inspection frequency, monitoring measures or structure ownership and operational responsibility. The LLFA would expect this information to be included in the FRA. It is noted that the drainage strategy provides some high-level information about who will have maintenance responsibility for the drainage assets on the different sections of road.

Intwood Road Property

The potential impacts and the implications of the flood risk at the property on Intwood Road varies between the FRA and the ES. The FRA reports an 8mm increase while the ES chapter 13 reports 15mm. While the increase in water

level is small, both documents report that further survey at the property is required to fully determine the impact of this change in water level. The LLFA would expect to review the future survey results, the updated impact assessment for this property and any mitigation proposed, should it be necessary.

Groundwater Further Survey

There is the remaining supplementary groundwater investigation that is yet to be undertaken due to the unknown water levels in the chalk aquifer. The LLFA would expect to review these results and, if required, any further mitigation measures proposed to address any further groundwater flood risks identified by this study.

Drainage Strategy Summary

A summary of the proposed drainage catchments is provided in section 8.3 of the FRA. However, no information relating the pre and post development runoff rates, volume of attenuation required and information relating to infiltration testing is provided. The drainage strategy does not provide a summary of pre and post development runoff rates, a summary of the volume of attenuation required and proposed or information relating to infiltration testing. This should be provided in the FRA to ensure that the assessment is joined up with the drainage design presented in the drainage strategy.

Construction Phase Mitigation

The construction phase mitigation measures presented in the FRA are "high level generic" approaches and do not relate specifically to the phased construction of the junction improvements. There is no explanation of what the proposed temporary drainage works will include or where the different temporary features will be located. It is indicated in the FRA that elements of the scheme "must be constructed in a phased manner to avoid additional flood risk". However, there is no further information about the phasing of either the temporary or permanent drainage works or information about how this relates to the construction phasing of the proposed scheme. Further information is expected by the LLFA to demonstrate that flood risk will not be increased elsewhere in the relevant catchments during the construction phase.

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 the construction of this scheme. In relation to the drainage strategy, no information regarding the proposed drainage approach is provided for the construction stage. Therefore, the information presented in the ES chapter 13 is not substantiated by the current evidence base presented. The LLFA seeks assurances that further information will be provided regarding the construction drainage strategy to ensure there is no increase in flood risk during the

construction phase, prior to the permanent surface water drainage system becoming operational.

Drainage Strategy

The drainage strategy confirms that not all existing drainage assets (such as soakaways and commercial fishponds) have been identified and investigated. Further work is ongoing to identify and survey these and other assets. The LLFA seeks reassurance that this work will be undertaken, and the subsequent assessment reported and discussed with the LLFA.

The drainage strategy has been developed in accordance with the Design Manual for Roads and Bridges (DMRB) guidance. However, there appears to be no consideration or review of the LLFA's design expectations or the alignment of these with the DMRB guidance. The LLFA's design expectations that apply to all schemes are presented in the LLFA's developer guidance. The LLFA notes the drainage strategy does not refer to the LLFA's Developer Guidance. This is supported by the developer's reported use of the FSR approach rather than the more relevant and updated FEH approach within the MicroDrainage calculations to design the piped network. The FEH data includes more recent rainfall records and improved accuracy in the hydrological assessment. The LLFA seeks assurances that testing of the proposed drainage network using the FEH rainfall approach is undertaken to confirm that the network is appropriately sized.

In section 5.2.22 of the drainage strategy, an impermeable factor 26% is used for soft surfaces, inferring that the majority of surface water is able to infiltrate into the ground, while for hard surfaces a 100% impermeable factor is used. However, later in section 5.4.4 infiltration was dismissed as infiltration testing was unsuccessful. These two approaches oppose each other, based on the information provided. Further assessment is required to address this conflict. It is possible that the soft surface impermeable factor would need to be revised upwards and that a review of the implications is necessary to ensure that there is no increased risk of flooding.

There is no obvious discussion on the infiltration potential of the ground prior to reporting on the potential discharge options in section 5. Therefore, it is not possible to understand the context and evidence base that the selection of the discharge locations was founded upon.

The drainage strategy provides a summary of post development runoff rates and attenuation volumes for the post development scenario. However, the equivalent information is not available for the pre-development situation. Both sets of information should be provided for each discreet drainage catchment to enable a suitable comparison.

The drainage strategy does not provide information relating to infiltration testing that has been reported to have been undertaken. The LLFA would expect

relevant information and results to be reported in both the drainage strategy and FRA to support the proposed drainage design.

A ground investigation is mentioned within section 5. However, again, no information or evidence is provided to support the statements made. There is a limited mention of the groundwater levels, although no further information or evidence is provided. It would be reasonable for relevant information from the ground investigation to be provided in the drainage strategy to support the design decisions.

In the land to the west of the diverge of the A11 with the link road the use of a pipe and piped storage rather than a ditch is proposed. The LLFA requests that further evidence to justify the selection of a pipe and tanked storage through this woodland area is provided.

In relation to the residual risks associated with the proposed pumping station, further information is being sought by the developer to determine the normal operation design storm criteria and failure provision, which may include additional emergency storage provision to mitigate flooding on the carriageway. Once this is determined, it is likely to require the assessment of the potential exceedance flow paths due to asset failure or design exceedance. This would identify where the water would flow and the impacts on the highway infrastructure likely to occur. The LLFA note that the emergency storage for the pumping station is being considered. Should this be necessary, the LLFA would require further information that identifies the design capacity of this storage.

3.49. Climate

- 3.50. The construction, operation and use of the proposed scheme is predicted to increase carbon emissions. The Environmental Statement Non-Technical Summary states that guidance on gauging the significance of carbon emissions in Environmental Impact Assessment (EIA) is evolving, but that a definitive assessment of materiality is not possible.
- 3.51. The non-technical summary also sets out that the vulnerability of the proposal to projected changes in climate during operation has been assessed, and it has been deemed resilient. Therefore, no significant effects as a result of climate change are anticipated.

3.52. **Proposed representation**

The county council is pleased to see the Environmental Statement Chapter on Climate is comprehensive in discussing the relevant policy triggers.

The scheme follows Highway England's Carbon Tool to evaluate and identify impacts, including the supply chain. The sections referencing Publicly Available Specification 2080:2016, Carbon Management in Infrastructure (PAS 2080), most notably section 14.9.3 (of the Environmental Statement Chapter 14 – Climate), suggests alignment to this. The county council would like to see the scheme accredited to this standard, as it is the national carbon standard for

construction projects. Without accreditation, Norfolk County Council would seek justification for its exclusion.

The Effects on Climate section of the document (14.10.2) references the relatively small carbon impact of this scheme with regard to the UK's Carbon Budget Programme. However, the county council would suggest instead setting the impact against the cumulative impact of the projected programme of RIS2 and would like to see that a form of evaluation of this has taken place during the process, to align with the national commitment to RIS2.

The Environmental Impact Assessment (EIA) aligns with government policy and relates all significant road network schemes to their 'material impact' on meeting national carbon budget targets. The county council would suggest using the context of transport in isolation and provide analysis at a county level, using county-based transport data; the impact would then not be diluted into the UK's overall impact. There is a need to demonstrate how each scheme will meet the path to net zero by 2050 on a scheme by scheme basis.

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. There is the potential for biodiversity and landscape to provide mitigation factors, although these would need to be significant, above baseline net gain requirements.

3.53. Public Health

Proposed representation

The county council makes the following general comments in respect of its role as having public health responsibilities:

- Welcome reductions in driver stress for both general well-being and accident reduction potential
- Residents currently or likely to be affected by noise, vibration and potential increased pollution are screened for impact and potential mitigating action.

3.54. Discharge of Requirements

As part of the application process there will be a need for a series of planning requirements (akin to planning conditions) attached to the final consent (Development Consent Order) covering a range of detailed matters. In the event that the DCO is granted by the Secretary of State these requirements will ultimately need to be discharged as the development progresses. The discharge of conditions is normally undertaken by the determining authority (ie local planning authority) for non-NSIP schemes. For NSIP schemes there is the potential for the discharge of the requirements to be undertaken by either the district councils and/or the county council.

3.55. Proposed representation

There are ongoing discussions with the applicant and the district councils affected by this scheme as to how best the discharge of requirements should be undertaken. One option might be that there is a single "lead" Authority discharging the requirements. An alternative option would be that each local authority discharge those requirements within their respective area / statutory remit. It is understood that the applicant is prepared to fund the above "discharging" work given the significant resource implication.

4. Evidence and Reasons for Decision

4.1. Responding to the consultation as suggested will enable the county council's detailed points on Highways England's proposed junction scheme to be considered and taken into account during the Development Consent Order process prior to a final decision being made by the Secretary of State. This will help to bring forward the best scheme to improve this junction, a measure that the county council supports due to benefits for road users, businesses, residents and visitors.

5. Alternative Options

5.1. The council could choose not to respond, but this will not enable the county council's detailed points on Highways England's proposed junction scheme to be considered and taken into account.

6. Financial Implications

- 6.1. Staff have engaged with the applicant at the technical scoping stage; attending steering group and topic-based meetings and provided technical advice and information in respect of the county council's statutory responsibilities. The county council has charged for some of this advice and technical data provided.
- 6.2. There will be an ongoing future implication for the county council in respect of the transfer of assets to us as the local highways authority, see Section 3.18 to 3.20. Ensuring that we reach an agreement, 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, prior to any assets being transferred to us will minimise any financial risk for the authority.

7. Resource Implications

7 1 **Staff**:

Staff resources for dealing with this project are being met from existing resources.

7.2. **Property:**

No implications (other than the transfer of highways assets).

7.3. **IT:**

No implications

8. Other Implications

8.1. Legal Implications

N/A

8.2. Human Rights implications

N/A

8.3. Equality Impact Assessment (EqIA)

An Equality Impact Assessment has been undertaken by Highways England to inform development of the proposals. This concluded that it is not anticipated that the project would significantly impact people within the protected characteristic groups.

8.4. Health and Safety implications

N/A

8.5. Sustainability implications

These are considered in the main text of the report.

8.6. **Any other implications**

N/A

9. Risk Implications/Assessment

9.1. The county council is a statutory consultee on any Nationally Significant Infrastructure Project determined by the Secretary of State within Norfolk or on the borders with Norfolk. The county council will also be invited to submit a Local Impact Report (LIR), the content of which is a matter for the local authority and can include local transport issues and the local area characteristics.

Officers will continue to work with Highways England on resolving the key points prior to, and during, Examination prior to determination of the Development Consent Order application.

10. Select Committee comments

10.1. N/A

11. Recommendations

11.1. To support the principle of upgrading the existing A47/A11 Thickthorn Junction subject to:

- (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.

Agree the initial representation to the proposal, as set out in the relevant sections of the report.

12. Background Papers

12.1. The National Planning Policy Framework

https://www.gov.uk/government/publications/national-planning-policy-framework--2

The Planning Act (2008)

Planning Act 2008 (legislation.gov.uk)

A47/A11 Thickthorn Junction (2021): Planning Inspectorate website

A47/A11 Thickthorn Junction | National Infrastructure Planning (planninginspectorate.gov.uk)

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

Officer name: David Cumming Tel No.: 01603 224225

Email address: david.cumming@norfolk.go.uk



If you need this report in large print, audio, braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

Appendix A: Location Plan

NB: High resolution plans can be found here on the Planning Inspectorate website.

