



Norfolk County Council

Local Impact Report

East Pye Solar (EN0110014)

06 October 2026

Contents

Contents	2
1 About Norfolk County Council.....	3
2 Executive summary	3
3 Purpose and structure of this report.....	4
4 Strategic and cumulative impacts	5
5 Landscape and visual	7
6 Ecology and biodiversity	29
7 Archaeology	38
8 Traffic and transport	40
9 Hydrology, land drainage and flood risk.....	46
10 Socio-economics, employment and skills	51
11 Health and wellbeing	52
12 Minerals and waste.....	54
13 Fire and rescue	55

1 About Norfolk County Council

- 1.1 Norfolk County Council (the County Council) is the upper-tier local government organisation for the county of Norfolk. We have a wide range of statutory and non-statutory responsibilities to provide services and discharge regulatory functions including, among other things, as county planning authority, local highway authority, traffic authority, transport authority, street authority, lead local flood authority, fire and rescue authority, local authority with public health responsibilities, library authority, provider of archaeological services, and maintainer of Norfolk's historic environment record.
- 1.2 The County Council has considerable experience of nationally significant infrastructure projects, with eighteen projects at various stages in Norfolk. Two projects, including East Pye, are currently at examination, one is at the recommendation stage and eight more at pre-application stage, with the remaining schemes consented. In relation to East Pye Solar, the County Council is an interested party because land to which the application relates is located within Norfolk. This Local Impact Report is submitted to assist the Examining Authority by drawing upon the County Council's local knowledge, statutory functions, and topic-specific expertise.

2 Executive summary

- 2.1 The County Council has prepared this Local Impact Report to assist the Examining Authority's consideration of the likely impacts of the East Pye Solar project within Norfolk. The report draws upon the County Council's statutory roles as county planning authority, local highway authority, lead local flood authority, minerals and waste planning authority, fire and rescue authority, and custodian of Norfolk's historic environment record. It provides an initial assessment of the project's compliance with relevant national policy statements, local policy and technical standards, and identifies where impacts are acceptable, where further information is required, and where mitigation, requirements, obligations or other control mechanisms should be secured through the Development Consent Order or associated legal agreements.

- 2.2 The County Council's overall position remains one of objection. The objection is based on serious strategic concerns relating to the loss of high-quality agricultural land, the cumulative impact of the project alongside other large-scale solar and energy infrastructure projects in Norfolk, and the effects of the project on Norfolk's environment, local communities and businesses. The County Council will nevertheless continue to work constructively with the Applicant to minimise impacts and maximise benefits where possible.
- 2.3 Across several topic areas, most notably landscape and visual, ecology and biodiversity, arboriculture, traffic and transport, archaeology, and hydrology, land drainage and flood risk, the County Council identifies matters requiring further clarification, strengthened mitigation or more secure commitments. In flood risk terms, the County Council as lead local flood authority cannot presently be satisfied that the development would avoid increasing flood risk on-site or elsewhere. In transport terms, the County Council cannot support the current routing and access strategy due to unresolved highway constraints and insufficient mitigation. In landscape terms, the scale of the scheme means that recreational, experiential and locally valued landscape effects require careful scrutiny and may need additional mitigation and enhancement.
- 2.4 The County Council is content that certain other matters may be capable of resolution, or are acceptable in principle, subject to further details and suitable control mechanisms. The socio-economic proposals offer an opportunity to secure local employment, skills and supply-chain benefits. The minerals safeguarding assessment is broadly acceptable in principle, although the County Council disagrees with assumptions about future non-hazardous landfill capacity in Norfolk. Fire and rescue matters require continued engagement to secure compliance with relevant guidance for grid-scale energy storage and battery safety management.

3 Purpose and structure of this report

- 3.1 A local impact report is defined by section 60 of the Planning Act 2008 as a report in writing giving details of the likely impact of the proposed development on the authority's area, or any part of that area. National

infrastructure planning guidance explains that an LIR is a report submitted by an affected local authority and is based on the local authority's existing body of local knowledge and robust evidence of local issues, including an appraisal of the proposed development's compliance with local policy and guidance.

- 3.2 This LIR is submitted by the County Council in relation to the East Pye Solar proposed development. Unless otherwise stated, this LIR relies on the Applicant's description of the scheme in the application documents. Where the County Council disagrees with the Environmental Statement's findings, this report aims to be explicit as to the nature and extent of the disagreement.
- 3.3 This report is structured as follows. Sections 1 to 3 deal with introductory matters and provide an executive summary. Sections 4 to 13 provide a detailed description of local impacts organised by topic. In each topic section, the County Council provides relevant policy context where appropriate, a description of the impacts, and an explanation of any requirements, obligations or other measures considered necessary as a result of those impacts.

4 Strategic and cumulative impacts

Summary

- 4.1 The County Council strongly opposes the proposed East Pye Solar Farm because of strategic concerns relating to the loss of high-quality agricultural land and the cumulative impact of the project on Norfolk's environment, local communities and businesses when considered alongside other major infrastructure proposed in this part of Norfolk.

Policy context

- 4.2 The project is promoted as solar generation infrastructure and is therefore to be considered in the context of national energy policy, including EN-1 and EN-3. While national policy strongly supports renewable energy infrastructure, the mitigation hierarchy continues to apply, and the decision-maker must consider the likely impacts of the proposed development and the extent to which they can be avoided, reduced, mitigated or compensated.

Impacts

- 4.3 The proposed development would occupy approximately 1,212 hectares of agricultural land extending across South Norfolk from Great Moulton to Seething. The County Council's strategic concern is not simply the scale of East Pye Solar in isolation, but the cumulative loss and clustering of agricultural land and rural landscapes associated with East Pye Solar, The Drovers Solar Farm, High Grove Solar Farm, the neighbouring Tasway Energy Park. EcoPower Suffolk is another NSIP solar project which is outside of Norfolk but is part of the same pattern of development as East Pye and Tasway, following the A140 corridor due to the presence of a 400kV transmission line and the Norwich to Tilbury project.
- 4.4 In addition to solar development, there are a number of National Grid upgrade projects proposed for Norfolk including Norwich to Tilbury, Grimsby to Walpole and Eastern Green Link 3 and Eastern Green Link 4. Redmere onshore wind farm has recently been proposed in the west of the county and the County Council expects Norfolk to remain a popular location for energy generation projects as long as there is capacity available on the transmission grid.
- 4.5 The County Council is particularly concerned about the loss of best and most versatile agricultural land. The Planning Statement records that a substantial proportion of the East Pye Solar site would comprise BMV land (78.7%¹), and that a non-trivial area would be permanently lost as a result of the scheme. Although much of the agricultural land take is presented as temporary, the anticipated operational life of 60 years means that the effects would be experienced over a very long period for affected communities and farming businesses.
- 4.6 The County Council is also concerned that there is no clear strategic framework for the siting of multiple large-scale solar farms across Norfolk. The result is a pattern of cumulative and clustered impacts on particular landscapes, communities and businesses, rather than a managed strategic approach to energy infrastructure delivery.

¹ See: para 8.3.180 of [\[APP-209\]](#)

Requirements, obligations and other measures

- 4.7 Beyond testing the Applicant's cumulative assessment and site selection methodology rigorously, there are no mitigation measures available at this point in the process. The ExA and the secretary of state will have to consider the relationship between East Pye Solar and other solar, grid and energy infrastructure projects in Norfolk and decide what weight to give cumulative impacts.
- 4.8 The County Council notes that in the decision letter for Beacon Fen (an NSIP solar project in Lincolnshire), the secretary of state afforded great negative weight to the loss of BMV agricultural land, in part due to the cumulative impact of the proposed developments in Lincolnshire².

5 Landscape and visual

Summary

- 5.1 Norfolk County Council has reviewed the applicant's ES Chapter 7: Landscape and Visual³, together with the supporting methodology, baseline studies, assessment tables, visualisations and associated appendices. The Landscape and Visual Impact Assessment (LVIA) has been prepared using an established methodology based on GLVIA3 and is supported by a substantial evidence base. However, the County Council considers that a number of aspects of the assessment would benefit from further scrutiny and explanation.
- 5.2 The scheme would introduce large-scale solar infrastructure across approximately 1,000 hectares of predominantly rural agricultural landscape within South Norfolk, including solar arrays, project substations, a Battery Energy Storage System (BESS), cable infrastructure, security fencing, access tracks and associated development. The applicant's assessment concludes that significant adverse landscape and visual effects would occur during construction and operation, with significant residual effects remaining at Year 15 for a number of landscape and visual receptors.

² See: [Beacon Fen Energy Park - Secretary of State's Decision Letter](#) (accessed 06 October 2026)

³ See: [\[APP-043\]](#)

- 5.3 The affected landscape is not nationally designated. However, the baseline assessment identifies qualities including rural character, openness, tranquillity, recreational value, visual connectivity and locally distinctive landscape features. The County Council considers that these characteristics make an important contribution to the quality, experience and appreciation of the local countryside and should be given appropriate weight when assessing landscape value, sensitivity and significance of effects.
- 5.4 Norfolk County Council recognises the national need for renewable energy infrastructure and the strong policy support for solar energy generation contained within the National Policy Statements. However, the County Council also notes that national policy requires applicants to apply the mitigation hierarchy, minimise harm wherever reasonably practicable and secure appropriate mitigation and environmental enhancement.
- 5.5 While Norfolk County Council broadly agrees with much of the baseline evidence presented within the LVIA, the County Council has concerns regarding the extent to which landscape value, landscape sensitivity, recreational experience and perceptual qualities are reflected in the resulting assessment conclusions. In particular, the County Council considers that greater transparency would be beneficial regarding the exercise of professional judgement where substantial landscape and visual change is identified but significance conclusions are moderated. The relationship between baseline evidence, sensitivity judgements, mitigation assumptions and residual effects is not always clear.
- 5.6 Norfolk County Council is also concerned that many of the reductions in effects predicted between Year 1 and Year 15 rely heavily upon the successful establishment and long-term effectiveness of mitigation planting. While the proposed mitigation strategy is welcomed, the County Council considers that confidence in the predicted outcomes is intrinsically linked to the deliverability, monitoring, maintenance and long-term management of measures that are yet to be fully defined through the detailed Landscape and Ecology Management Plan (LEMP)⁴.

⁴See: [\[APP-199\]](#)

5.7 The County Council considers that particular attention should be given during examination to:

- The assessment of landscape value and landscape sensitivity;
- The treatment of tranquillity, rural character and other perceptual qualities;
- Effects on the setting of villages and rural settlements;
- Visual effects arising from substations, the BESS and other built infrastructure;
- Impacts on Public Rights of Way (PRoW), the Boudicca Way, Via Beata and other recreational receptors;
- Route-wide, sequential and cumulative recreational effects;
- The assessment of alternative panel technologies;
- The treatment of cumulative effects, including interactions with other major energy infrastructure proposals;
- The long-term effectiveness and deliverability of landscape mitigation; and
- The extent to which the scheme contributes towards wider environmental objectives, including those identified within the Norfolk Local Nature Recovery Strategy and the Greater Norwich Green Infrastructure Strategy SPD.

5.8 Overall, Norfolk County Council considers that the scheme would result in a substantial and long-term change to the character and experience of parts of the local countryside. While landscape and visual effects are not unexpected for infrastructure of this scale and are unlikely in themselves to outweigh the overall benefits of the scheme, the County Council considers that further scrutiny of the assessment, mitigation strategy and long-term management arrangements is necessary to ensure that local landscape, visual and recreational effects are fully understood and appropriately addressed.

Policy context

5.9 The principal policies governing the consideration of landscape and visual effects are contained within Section 5.10 (Landscape and Visual) of NPS EN-1 and Paragraphs 2.10.85 to 2.10.93 of NPS EN-3 for Renewable Energy Infrastructure. At a strategic level, the NPSs recognise that adverse landscape and visual effects are often unavoidable consequences of nationally significant energy infrastructure and should

not necessarily prevent development consent being granted. However, national policy is equally clear that applicants must apply the mitigation hierarchy and demonstrate that adverse effects have been avoided, reduced and mitigated wherever reasonably practicable.

- 5.10 Paragraph 5.10.6 of EN-1 requires projects to be carefully designed with the aim of minimising harm to landscape character and visual amenity and securing reasonable mitigation where appropriate. The emphasis of policy is therefore not solely on identifying effects, but on demonstrating that the design process has responded positively to landscape constraints and opportunities.
- 5.11 EN-1 also recognises that major infrastructure projects can deliver wider environmental gains in addition to mitigating adverse effects. Paragraph 4.6.13 identifies landscape enhancement, increased access to natural greenspace and the enhancement, expansion and provision of trees and woodlands as examples of wider environmental benefits that development may provide. For the County Council, this is particularly relevant given the size and scale of the scheme and the opportunity to secure meaningful landscape, biodiversity and recreational enhancements alongside mitigation measures.
- 5.12 Although the scheme is not located within a nationally designated landscape, Paragraph 5.10.12 of EN-1 recognises that landscapes may be highly valued for reasons beyond national designation. Norfolk County Council therefore considers that the absence of statutory designation should not diminish consideration of locally distinctive landscape character, tranquillity, recreational value, visual amenity and other experiential qualities identified within the baseline assessment. While such landscapes would not in themselves justify refusal of development consent, they should inform decisions regarding design, mitigation, enhancement and compensation.
- 5.13 Paragraph 5.10.14 of EN-1 requires the Secretary of State to consider whether visual effects on sensitive receptors outweigh the benefits of a proposal. Given the national need case for renewable energy infrastructure and the wider policy support for solar energy generation, it is unlikely that landscape and visual effects alone would outweigh the

benefits of the scheme. However, this does not provide an exemption from the mitigation hierarchy and does not lessen the importance of securing robust mitigation where significant residual effects remain.

- 5.14 The policy approach to assessment is further set out within paragraphs 5.10.16 to 5.10.25 of EN-1, which establish the key principles informing Landscape and Visual Impact Assessment (LVIA), including consideration of landscape character, landscape value, visual amenity, cumulative effects and mitigation. These principles form the basis of the applicant's assessment methodology and provide the framework against which the robustness of the LVIA should be considered.
- 5.15 Specific policy for solar development is contained within NPS EN-3. Paragraphs 2.10.85 to 2.10.93 require applicants to undertake an LVIA and, where appropriate, provide visualisations illustrating effects on landscape character, valued views, residential amenity and recreational receptors. EN-3 also recognises that large-scale solar farms can occupy extensive areas of open countryside and may exert a wider visual influence than some other forms of energy infrastructure. The NPS therefore highlights the importance of considering cumulative and sequential effects, a matter that Norfolk County Council considers particularly relevant in this case.
- 5.16 In addition to the NPSs, regard should be had to the National Planning Policy Framework (NPPF, August 2026). While the NPSs provide the primary basis for decision-making for NSIPs, the NPPF contains important principles relating to design quality, environmental enhancement and sustainable development. The NPPF identifies an environmental objective of sustainable development which includes protecting and enhancing the natural, built and historic environment, improving biodiversity and making prudent use of natural resources.
- 5.17 Particular relevance is attached to Chapter 14 (Achieving Well-Designed Places) and Chapter 19 (Conserving and Enhancing the Natural Environment), which together support development that responds positively to local context, reinforces local character and contributes to environmental enhancement.

- 5.18 The Planning Practice Guidance (PPG) on the Natural Environment similarly recognises that green infrastructure delivers multiple environmental, social and economic benefits. The PPG emphasises that green infrastructure should not be regarded solely as mitigation but should form an integral part of development proposals, delivering wider benefits including landscape enhancement, ecological connectivity, climate resilience and recreational access.
- 5.19 At the local level, relevant policies within the Greater Norwich Local Plan include Policy 3 (Environmental Protection)⁵ and Policy 4 (Enhancement and Strategic Infrastructure)⁶. Relevant policies within the South Norfolk Development Management Policies Document⁷ include Policies DM1.4, DM3.8, DM3.13, DM4.4, DM4.5, DM4.8, DM4.9 and DM4.10. While these policies do not form part of the primary decision-making framework for the application, they provide important evidence regarding locally valued landscape characteristics, environmental quality objectives and design expectations within the host authority area.
- 5.20 Norfolk County Council has also had regard to the Norfolk Local Nature Recovery Strategy (NLNRS)⁸, prepared under the Environment Act 2021. The LNRS identifies priorities for habitat creation, ecological connectivity, nature recovery and landscape-scale environmental enhancement across Norfolk. The County Council considers the LNRS to be a particularly important local evidence base when considering how landscape mitigation, biodiversity enhancement and green infrastructure proposals associated with the scheme could contribute to wider environmental objectives.
- 5.21 Similarly, the County Council has had regard to the Greater Norwich Green Infrastructure Strategy SPD (March 2026)⁹, which promotes the protection, enhancement and connectivity of multifunctional green infrastructure assets. The strategy highlights the importance of accessible

⁵ See: [5. The Strategy \(including policies\) | GNLP](#) (Accessed 06 October 2026)

⁶ See: [5. The Strategy \(including policies\) | GNLP](#) (Accessed 06 October 2026)

⁷ See: [Development Management Policies Document 0](#) (Accessed 06 October 2026)

⁸ See: [Local Nature Recovery Strategy](#) (Accessed 06 October 2026)

⁹ See: [Implementation of the Greater Norwich Green Infrastructure Strategy SPD March 2026](#) (Accessed 06 October 2026)

greenspace, biodiversity networks, recreational connectivity and landscape character, and provides a useful framework for evaluating opportunities for environmental enhancement beyond mitigation.

- 5.22 Taken together, the NPSs, NPPF, PPG, NLNRS, Greater Norwich Green Infrastructure Strategy and local planning policy framework establish a consistent expectation that nationally significant infrastructure should seek not only to minimise adverse landscape and visual effects, but also to secure wider environmental gains. In the County Council's view, this includes opportunities for landscape enhancement, nature recovery, strengthened green infrastructure networks, improved recreational provision, biodiversity gains and reinforcement of local landscape character wherever feasible.

Impacts

Landscape Context

- 5.23 The scheme is located within National Character Area 83: South Norfolk and High Suffolk Claylands and affects six district Landscape Character Areas (LCAs): LCA A1 Tas Rural River Valley, LCA B1 Tas Tributary Farmland, LCA B4 Waveney Tributary Farmland, LCA B5 Chet Tributary Farmland, LCA C2 Thurlton Tributary Farmland with Parkland and LCA E2 Great Moulton Plateau Farmland. The applicant assesses three of these LCAs as having high sensitivity and three as having medium sensitivity.
- 5.24 Although the scheme is not located within a nationally designated landscape, the baseline assessment identifies a countryside characterised by agricultural land, rural settlement patterns, tributary river valleys, extensive hedgerow networks, areas of tranquillity and an extensive Public Rights of Way network. Recreational routes including the Boudicca Way and Via Beata are identified as high-sensitivity receptors.
- 5.25 Norfolk County Council broadly agrees with the applicant's description of the receiving landscape. However, the County Council considers that the LVIA does not always explain how the qualities identified within the baseline evidence have informed the subsequent assessments of value, sensitivity and significance.

Landscape Value

- 5.26 Norfolk County Council notes that the assessment places considerable weight on the absence of national or local landscape designation when determining landscape value.
- 5.27 While designation remains an important consideration, the Landscape Institute Technical Guidance Note 02/21: Assessing Landscape Value Outside National Designations makes clear that landscape value may arise from a range of natural, cultural, perceptual and experiential qualities and is not dependent upon formal designation.
- 5.28 The applicant's own baseline assessment identifies a number of characteristics that commonly contribute to landscape value, including tranquillity, rural character, recreational use, visual connectivity, distinctive tributary valley landscapes, mature vegetation, local distinctiveness and sense of place. These qualities are recurring themes throughout the Landscape Baseline and are frequently identified as important characteristics of the receiving landscape.
- 5.29 The County Council is not persuaded that these qualities are consistently reflected in the subsequent landscape value assessments. In several instances, the narrative places considerable emphasis on the absence of statutory designation, whereas the influence of experiential, perceptual and recreational qualities appears less evident in the final conclusions.
- 5.30 The County Council's concern is not that undesignated landscapes should be treated as designated landscapes, but that landscapes may be locally valued for reasons that are not captured through formal designation. Where such qualities are important characteristics of the baseline landscape, Norfolk County Council considers that they should be clearly reflected in the assessment of value and susceptibility.
- 5.31 Where landscape value and susceptibility are understated, there is a consequential risk that overall sensitivity and, ultimately, significance of effect may also be understated.

Landscape Susceptibility

- 5.32 Norfolk County Council accepts that the assessment methodology is generally consistent with GLVIA3 and recognised professional practice. However, the County Council considers that there is a notable tension

between aspects of the baseline evidence and some of the resulting sensitivity conclusions.

- 5.33 The baseline repeatedly identifies characteristics commonly associated with increased susceptibility to large-scale solar development, including:
- open agricultural landscapes
 - expansive views
 - visual connectivity
 - perceived tranquillity
 - limited urban influence
 - recreational use and
 - distinctive rural character.
- 5.34 These characteristics are particularly evident within the Tas, Waveney and Chet tributary landscapes, together with the Great Moulton Plateau Farmland and Thurlton Tributary Farmland with Parkland LCAs.
- 5.35 Against that baseline, the County Council considers it is not always apparent how some receptors ultimately arrive at medium sensitivity conclusions. While professional judgement is an inherent component of LVIA practice, the relationship between the evidence presented and the final sensitivity conclusions is not always transparent.
- 5.36 Particular concern is had in regard to the extent to which the following factors have influenced sensitivity judgements:
- tranquillity and perceptual qualities;
 - openness and skyline characteristics;
 - recreational function;
 - landscape condition and intactness;
 - local distinctiveness;
 - community value; and
 - susceptibility to the introduction of large-scale energy infrastructure.
- 5.37 Norfolk County Council considers that some landscapes may exhibit a greater susceptibility to change than is reflected in parts of the assessment.
- Assessment of Magnitude and Significance
- 5.38 The County Council recognises that significance is not derived through a mechanical process but through informed professional judgement.

- 5.39 However, Landscape Institute TGN 20/01 emphasises that the exercise of professional judgement should be transparent and clearly evidenced. The County Council considers that there are several instances where substantial landscape change is identified, but the rationale for the resulting significance conclusions is not fully clear.
- 5.40 This is particularly relevant where reductions in effects rely heavily upon assumptions regarding future woodland, hedgerow and screening planting. In Norfolk County Council's view, sensitivity and significance should primarily reflect existing landscape conditions rather than anticipated future mitigation performance.

Landscape Effects

- 5.41 The applicant identifies significant adverse landscape effects during construction and acknowledges that the scheme would introduce substantial change into the receiving landscape during operation. Significant residual effects remain at Year 15 for a number of receptors, including:
- LCA B1 Tas Tributary Farmland;
 - LCA C2 Thurlton Tributary Farmland with Parkland;
 - LCA E2 Great Moulton Plateau Farmland;
 - Site 1;
 - Site 7;
 - Site 8; and
 - The BESS Site.
- 5.42 Norfolk County Council broadly agrees that these locations are likely to experience some of the most marked landscape effects.
- 5.43 The County Council also notes that the scheme would introduce extensive solar arrays, substations, security infrastructure, fencing and associated development into landscapes that are currently characterised by agricultural land use and dispersed rural settlement patterns. The resulting change is not simply visual in nature but represents a fundamental alteration in landscape character and landscape experience.
- 5.44 While mitigation planting may reduce visibility over time, Norfolk County Council does not consider that planting can fully recreate existing characteristics such as openness, expansive views, rurality and

tranquillity. These attributes are inherent aspects of the existing landscape resource and, once altered, may take many years to re-establish, if they can be recreated at all.

Effects on the Setting of Villages and Settlements

- 5.45 Norfolk County Council notes that the Order Limits are located in close proximity to a number of settlements, including (but not limited to) Hempnall, Brooke, Saxlingham Green, Saxlingham Nethergate, Tasburgh, Long Stratton, Fritton, Pulham Market and Shotesham. These settlements derive an important component of their rural setting and local identity from their relationship with the surrounding agricultural landscape, tributary valleys, hedgerow networks and open countryside.
- 5.46 Norfolk County Council considers that effects on settlement setting extend beyond views from individual properties. The introduction of extensive solar arrays, substations, security fencing, the BESS and associated infrastructure has the potential to alter the experience of approaching and leaving settlements, affect the relationship between settlements and the wider countryside, and influence perceptions of rurality, openness and local distinctiveness.
- 5.47 While the LVIA assesses visual effects on individual receptors, the County Council would welcome greater explanation regarding how changes to the wider landscape context and settlement setting have been considered, particularly where multiple development parcels occur in close proximity to villages or where settlement character is strongly influenced by the surrounding rural landscape.
- 5.48 Additionally, Norfolk County Council notes that it previously expressed a preference for the alternative southern location for the National Grid Substation during consultation. The adopted location at Site 1B places the National Grid Substation and associated overhead line diversion infrastructure in closer proximity to Great Moulton. The County Council remains concerned that the landscape and visual implications for the setting of the village, together with the cumulative influence of the substation, pylons and associated infrastructure, warrant careful consideration during examination.

Substations, Grid Infrastructure and Built Elements

- 5.49 While solar arrays occupy the greatest proportion of the order limits, Norfolk County Council considers that some of the most substantial landscape and visual effects may arise from the built elements of the scheme rather than the panels themselves.
- 5.50 This is particularly relevant in relation to:
- the BESS
 - project substations
 - National Grid infrastructure
 - security fencing
 - lighting
 - associated plant and equipment and
 - other operational development.
- 5.51 Unlike solar arrays, these elements introduce a distinctly engineered and industrial character into landscapes that are presently agricultural in nature.
- 5.52 Norfolk County Council notes that the LVIA frequently discusses the effects of the solar arrays collectively. However, the County Council considers that greater attention should be given to the extent to which built infrastructure contributes to overall landscape change and visual impact. Such structures may remain visually prominent despite the establishment of mitigation planting and may be less capable of integration within the receiving landscape.
- 5.53 The County Council would therefore welcome greater clarity regarding the respective contribution of solar infrastructure and built development to the significance conclusions presented within the LVIA.
- 5.54 Particular attention should also be given to the proposed National Grid Substation and associated overhead line diversion works near Great Moulton. Unlike the solar arrays themselves, these elements introduce substantial engineered structures whose visual influence may extend beyond that of the surrounding solar infrastructure and whose effects may be more difficult to mitigate through planting alone.

Alternative Panel Technologies

- 5.55 Norfolk County Council notes that the scheme parameters allow for alternative panel technologies, including fixed panel and tracker panel systems.
- 5.56 Given the differing height, movement characteristics, visibility profiles and operational appearance of these technologies, the County Council considers that confidence in the assessment conclusions depends upon demonstrating that the reasonable worst-case landscape and visual effects have been fully assessed.
- 5.57 In particular, further clarification would be beneficial regarding:
- the landscape implications of panel movement
 - visibility of tracker systems relative to fixed systems
 - differences in perceived scale and visual complexity
 - variations in long-distance visibility and
 - implications for visual receptors and recreational users.
- 5.58 Norfolk County Council considers that the LVIA should clearly demonstrate that the assessed scenario reflects the maximum realistic landscape and visual envelope permitted by the application.

Visual Effects

- 5.59 The applicant's visual assessment is supported by an extensive evidence base including the Visual Baseline, representative viewpoints, visualisations, the Residential Visual Amenity Assessment (RVAA)¹⁰ and the Public Rights of Way Visual Amenity Assessment (PRoW VAA)¹¹.
- 5.60 Norfolk County Council notes that the Boudicca Way and Via Beata are identified as high-sensitivity receptors and agrees that users of these routes have a heightened expectation of landscape enjoyment. The visual baseline also identifies a landscape characterised by agricultural land, mature hedgerows, woodland blocks, rural settlement patterns and areas of relative tranquillity.
- 5.61 Against this baseline, the introduction of extensive solar arrays, security infrastructure, substations and the BESS would result in substantial changes to the composition, character and experience of many views.

¹⁰ See: [\[APP-148\]](#)

¹¹ See: [\[APP-149\]](#)

- 5.62 Norfolk County Council acknowledges that the assessment identifies significant visual effects and that a number of these remain significant during operation. However, the County Council considers that the relationship between the magnitude of visual change identified within some viewpoints and the resulting significance conclusions is not always readily apparent.
- 5.63 In several locations, the visualisations demonstrate a marked transformation of views that are currently agricultural and rural in character. Where such substantial visual change is identified, Norfolk County Council considers that greater transparency would be beneficial regarding how significance conclusions have been reached and how professional judgement has been exercised.
- 5.64 The County Council is also concerned that many reductions in operational effects rely heavily upon the assumed future effectiveness of woodland, hedgerow and screening planting. While mitigation may reduce visual effects, the extent to which it is relied upon to moderate significance should be clearly articulated within the assessment.

Recreational Receptors

- 5.65 Norfolk County Council considers that the assessment of recreational effects represents one of the most important aspects of the LVIA.
- 5.66 Users of the Boudicca Way, Via Beata and wider PRoW network are not simply viewing the landscape from isolated locations. Rather, they experience the landscape sequentially and continuously, often over considerable distances.
- 5.67 The County Council therefore considers that effects on recreational receptors extend beyond representative viewpoints and include:
- the cumulative experience of travelling through an altered landscape
 - duration of exposure
 - changing landscape context
 - cumulative visibility of multiple development parcels
 - changes to perceptions of tranquillity and rurality and
 - the overall quality of the recreational experience.
- 5.68 While the PRoW VAA provides useful evidence, Norfolk County Council is not fully persuaded that the experiential effects of travelling through a

changing landscape are consistently reflected in the significance conclusions reported within the LVIA.

- 5.69 There is a particular concern regarding the distinction between reducing visibility and maintaining landscape experience. Mitigation planting may screen infrastructure, but it may also alter openness, restrict long-distance views and fundamentally change the character of route corridors. The County Council therefore remains concerned that route-wide and sequential effects may not be fully reflected within the significance conclusions reported.
- 5.70 Consequently, the County Council considers that mitigation should not automatically be assumed to represent an unqualified benefit. Its effects on recreational experience should be considered alongside its screening function.

Residential Visual Amenity

- 5.71 Norfolk County Council notes that the applicant has also undertaken a Residential Visual Amenity Assessment (RVAA)¹² in accordance with recognised Landscape Institute guidance.
- 5.72 The County Council accepts that significant visual effects do not necessarily equate to unacceptable impacts on residential amenity and that the Residential Visual Amenity Threshold represents a relatively high bar.
- 5.73 However, where residents experience extensive changes in outlook arising from solar arrays, substations, fencing, the BESS or associated infrastructure, transparency regarding the assessment process becomes particularly important.
- 5.74 Norfolk County Council therefore considers that particular scrutiny should be given to locations where:
- significant visual effects are identified
 - substantial change in outlook occurs
 - effects persist over the long term and
 - conclusions regarding acceptability rely heavily upon future mitigation establishment.

¹² See [\[APP-148\]](#)

Overall Commentary on Visual Effects

- 5.75 Overall, Norfolk County Council considers that the visual assessment has been undertaken using recognised methodology and is supported by a comprehensive suite of technical evidence and visual material.
- 5.76 However, consistent with the principles contained within Landscape Institute TGN 20/01: Reviewing Landscape and Visual Impact Assessments and Landscape Appraisals, the County Council considers that greater transparency is required regarding the exercise of professional judgement in several parts of the assessment.
- 5.77 In particular, further explanation would assist in understanding:
- how substantial visual change has informed significance conclusions
 - how assumptions regarding mitigation growth have influenced outcomes
 - how representative viewpoints reflect route-wide experience
 - how sequential recreational effects have been considered
 - how built infrastructure has contributed to visual effects and
 - how alternative panel technologies have been incorporated into the assessment.
- 5.78 Given the scale of the proposed development and the importance of rural, recreational and residential receptors throughout the study area, Norfolk County Council considers that these matters warrant careful scrutiny during examination.

Cumulative Effects

- 5.79 Norfolk County Council notes that cumulative assessment has been undertaken in accordance with recognised guidance. However, the County Council considers that cumulative effects should be considered as more than a question of visibility.
- 5.80 The wider Norfolk landscape is increasingly influenced by major energy infrastructure proposals, including solar energy developments, electricity transmission infrastructure and associated substations. In this context, cumulative assessment should consider how multiple developments interact to influence:
- landscape character
 - settlement setting
 - tranquillity

- visual amenity
 - recreational experience and
 - perceptions of rurality.
- 5.81 Particular consideration should be given to interactions with other large-scale energy infrastructure proposals, including the Norwich to Tilbury project, where relevant.
- 5.82 Norfolk County Council considers that the most significant cumulative effects may arise from the collective and progressive change introduced across rural landscapes, even where individual developments are considered acceptable in isolation.
- 5.83 The County Council would therefore welcome greater explanation regarding how cumulative effects on landscape character, settlement setting, recreational experience and perceptions of tranquillity have informed the overall conclusions of the cumulative assessment.

Requirements, obligations and other measures

Landscape and Ecology Management Plan

- 5.84 The applicant proposes to secure landscape mitigation, habitat creation and ecological enhancement through the Outline Landscape and Ecology Management Plan (OLEMP)¹³. The OLEMP establishes a framework for implementation, management and monitoring during both the construction and operational phases of the scheme and commits to the preparation of a detailed Landscape and Ecology Management Plan (LEMP), secured through a requirement of the draft DCO. The OLEMP also confirms a commitment to deliver at least 10% biodiversity net gain (BNG) for habitats, hedgerows and watercourses.
- 5.85 Norfolk County Council welcomes the preparation of the OLEMP and acknowledges that it provides the principal mechanism through which landscape mitigation and environmental enhancement would be secured. However, the County Council notes that the OLEMP remains an outline document and expressly states that it is based on a preliminary design, with details subject to future development and stakeholder engagement. Consequently, a number of the landscape and visual outcomes relied

¹³ See: [\[APP-199\]](#)

upon within the LVIA are dependent upon management measures that are not yet fully specified.

Reliance on Mitigation Planting

- 5.86 A recurring theme throughout the LVIA is the reduction of effects between Year 1 and Year 15 through the establishment of woodland, hedgerow and screening planting. The assessment repeatedly relies upon the assumption that mitigation planting will mature successfully and become effective in reducing landscape and visual effects over time.
- 5.87 Norfolk County Council has no objection in principle to this approach; however, the degree to which future mitigation underpins the assessment conclusions introduces an inherent uncertainty. The confidence which can be placed in the predicted Year 15 effects is directly related to the successful delivery, growth, management and maintenance of mitigation measures over a prolonged period.
- 5.88 This is particularly relevant where mitigation is relied upon to reduce effects upon:
- high sensitivity landscape character areas
 - areas of perceived tranquillity
 - the Boudicca Way and Via Beata
 - the wider public rights of way network
 - residential visual receptors
 - settlement settings and
 - receptors where significant residual effects remain identified.
- 5.89 Norfolk County Council therefore considers that the effectiveness, deliverability and long-term stewardship of mitigation planting becomes a matter of central importance rather than a secondary implementation issue.

Monitoring, Establishment and Adaptive Management

- 5.90 The OLEMP confirms that detailed monitoring arrangements will be prepared through the final LEMP and that monitoring provisions will be reviewed periodically. While this commitment is welcomed, Norfolk County Council considers that monitoring should extend beyond the simple establishment of vegetation and should instead test whether the

landscape and visual outcomes assumed within the LVIA are actually being achieved.

5.91 In Norfolk County Council's view, the detailed LEMP should include:

- measurable success criteria
- minimum survival rates for woodland, tree and hedgerow planting
- implementation milestones and trigger points
- replacement planting requirements
- fixed-point photographic monitoring
- periodic review of visual screening effectiveness
- reporting requirements
- adaptive management provisions and
- mandatory remedial measures where planting fails to achieve its intended objectives.

5.92 The County Council considers these measures to be particularly important because a substantial proportion of the reduction in effects identified within the LVIA is dependent upon successful mitigation establishment rather than changes to the scheme itself.

Recreational Routes and Public Rights of Way

5.93 The applicant has prepared an Outline Public Rights of Way and Permissive Paths Management Plan, which provides a framework for managing access and maintaining recreational routes throughout the lifetime of the scheme.

5.94 Norfolk County Council welcomes the preparation of the document. However, as identified elsewhere in this chapter, the County Council remains concerned that the experiential effects of the scheme upon recreational receptors may not be fully reflected within the LVIA.

5.95 The applicant's response to Norfolk County Council's previous consultation comments relies heavily upon the Green Infrastructure Strategy and landscape mitigation proposals contained within the OLEMP. However, it is not yet clear whether the proposed measures will adequately address:

- route-wide recreational effects
- sequential visual effects
- changes in landscape experience
- cumulative visibility of multiple development parcels

- changes in perceptions of tranquillity and rurality and
- effects on the recreational value of the landscape.

5.96 Norfolk County Council therefore considers that opportunities should be explored through the detailed LEMP and PRow Management Plan to secure route-specific enhancements, particularly along the Boudicca Way, Via Beata and other recreational corridors experiencing significant residual effects.

Landscape Mitigation and Character Change

5.97 The OLEMP proposes substantial areas of broadleaf woodland, hedgerows, hedgerows with trees, scrub, grassland and tree belt planting. These measures clearly have the potential to reduce visibility and strengthen landscape structure.

5.98 However, Norfolk County Council considers that the relationship between mitigation and landscape character warrants closer examination.

5.99 The LVIA generally treats woodland and screening planting as mitigation. While this can be appropriate, many of the baseline qualities identified within the assessment include openness, visual connectivity, expansive views and perceived tranquillity. In some locations, extensive woodland belts or screening vegetation may themselves introduce noticeable changes to landscape character.

5.100 Consequently, Norfolk County Council considers that mitigation planting should not automatically be assumed to constitute an unqualified benefit. The assessment should acknowledge that planting may both mitigate effects and create new landscape character effects of its own, particularly along recreational routes and within open agricultural landscapes.

Long-Term Management and Decommissioning

5.101 The OLEMP states that long-term management requirements will be secured through the detailed LEMP. However, it also notes that following decommissioning, future land use and management would ultimately be determined by landowners and that some mitigation and habitat features may remain in situ.

5.102 Norfolk County Council considers that this introduces a degree of uncertainty regarding the long-term landscape outcome assumed within the LVIA.

- 5.103 Given that decommissioning effects and recovery assumptions form part of the overall assessment, it would be beneficial for the applicant to clarify the extent to which the post-decommissioning landscape described in the Environmental Statement represents a secured outcome as opposed to a potential future scenario.

Green Infrastructure, Nature Recovery and Environmental Gain

- 5.104 Norfolk County Council welcomes the applicant's commitment to deliver BNG and notes that national policy encourages developments to secure wider environmental gains in addition to biodiversity improvements.
- 5.105 The County Council has also had regard to the Norfolk Local Nature Recovery Strategy and the Greater Norwich Green Infrastructure Strategy SPD. These documents provide an important local evidence base regarding habitat connectivity, green infrastructure networks, landscape resilience, recreational access and opportunities for landscape-scale environmental enhancement.
- 5.106 Norfolk County Council considers that the detailed LEMP should clearly demonstrate how the proposed mitigation and enhancement measures contribute towards these wider strategic objectives.
- 5.107 In particular, greater clarity would be welcomed regarding:
- habitat connectivity beyond the order limits
 - contributions to wider ecological networks
 - multifunctional green infrastructure delivery
 - enhancement of recreational connectivity
 - strengthening of landscape resilience
 - woodland and hedgerow network enhancement and
- 5.108 opportunities for landscape-scale nature recovery.
- 5.109 Given the scale of the scheme and the significant residual landscape and visual effects identified within the LVIA, Norfolk County Council considers that the mitigation strategy should strive not merely to offset harm but to deliver a demonstrable improvement in environmental quality, landscape structure and green infrastructure connectivity.

Additional Requirements and Amendments

- 5.110 In light of the concerns identified throughout this section, Norfolk County Council considers that additional certainty should be secured through the detailed LEMP and associated DCO requirements.
- 5.111 In particular, the detailed documents should demonstrate:
- how mitigation responds to identified landscape sensitivities
 - how proposals support settlement setting and local distinctiveness
 - how mitigation contributes to the objectives of the Norfolk Local Nature Recovery Strategy
 - how proposals align with the Greater Norwich Green Infrastructure Strategy
 - how habitat connectivity beyond the Order Limits has been considered
 - how visual screening effectiveness will be monitored
 - how failed mitigation will be replaced or remediated
 - how recreational routes will be enhanced where significant effects remain
 - how landscape enhancement objectives will be monitored and reviewed and
 - how long-term management commitments will be secured throughout the operational life of the scheme.
- 5.112 The County Council also considers that fixed-point monitoring locations should be linked to the principal visual and recreational receptors identified within the LVIA in order to provide evidence of whether the predicted landscape and visual outcomes are being achieved in practice.
- 5.113 Conclusion
- 5.114 Norfolk County Council acknowledges the mitigation and enhancement measures proposed through the OLEMP and associated management plans and welcomes the intention to secure these through the DCO.
- 5.115 However, the County Council's review of the LVIA indicates that a significant proportion of the reduction in landscape and visual effects between Year 1 and Year 15 is dependent upon mitigation planting that has yet to be fully designed, implemented or tested.
- 5.116 For this reason, Norfolk County Council considers that the effectiveness, monitoring and long-term management of mitigation should be afforded considerable weight during examination. Robust requirements, adaptive management provisions, replacement planting obligations and long-term

stewardship commitments will be necessary to provide confidence that the landscape and visual outcomes assumed within the Environmental Statement are both achievable and maintainable throughout the lifetime of the scheme.

- 5.117 In Norfolk County Council's view, mitigation should not simply be secured; it should be demonstrably capable of delivering the landscape, visual, recreational and environmental outcomes upon which the applicant's assessment depends.

6 Ecology and biodiversity

Summary

- 6.1 National policy in EN-1 requires application of the mitigation hierarchy, protection of designated sites, protected species, priority and irreplaceable habitats, and delivery of wider environmental gains, including biodiversity net gain. EN 5 is also relevant to the linking infrastructure, highlighting opportunities for electricity networks to reconnect fragmented habitats, create green corridors and reinstate appropriate hedgerows.
- 6.2 Within this policy context, the Environmental Statement identifies a highly sensitive ecological baseline across and around the Order Limits, including internationally and nationally designated sites, County Wildlife Sites, Roadside Nature Reserves, ancient woodland, lowland fen, priority habitats, hedgerows, ponds, rivers and nationally important barbastelle bat populations. The ES concludes that no significant adverse residual ecological effects are anticipated, with effects generally assessed as negligible or beneficial following embedded mitigation, habitat creation, long-term management and biodiversity enhancement.
- 6.3 However, the County Council considers that this conclusion is dependent on the robustness, timing and enforceability of the proposed mitigation and management measures. Particular scrutiny should be applied to the direct crossing of Fritton Grange Meadows CWS and Lower Spring Wood CWS, potential impacts on Roadside Nature Reserves, reliance on 30m buffers to ancient woodland and lowland fen, and the assumptions that

temporary habitat disturbance and severance can be fully addressed through future reinstatement and enhancement.

- 6.4 Hedgerows form a principal ecological network across the site and are important for bats, dormice, birds and wider landscape-scale connectivity. Although the Council acknowledges the proposed retention of woodland and trees, it notes the potential loss or severance of hedgerows, including hedgerows identified as Important under the Hedgerows Regulations 1997, particularly associated with the linking infrastructure. The Council would therefore expect up-to-date hedgerow assessment, clearer justification of removals, certainty on reinstatement timescales, and robust commitments to replacement, enhancement and long-term management.
- 6.5 Barbastelle bats are a key issue given the ES identifies a bat resource of national importance, records barbastelle activity at every survey location, and confirms that the Order Limits fall within multiple 6km Core Sustenance Zones associated with known maternity colonies. The County Council considers that the evidence base should fully address commuting routes, roosting potential, woodland-edge use, habitat connectivity and the potential for direct and indirect impacts from habitat removal or severance. Following any additional survey work, the Council would expect the adequacy of mitigation, including ancient woodland buffers and habitat connectivity measures, to be reviewed.
- 6.6 The County Council also notes the need for clarity in relation to species and habitats associated with ponds and watercourses, including great crested newts, lowland fen, Hempnall Beck and white-clawed crayfish. In particular, plausible evidence of a remnant white-clawed crayfish population in the River Pye has not been adequately addressed, despite the habitat being described as sub-optimal. The Council would expect species-specific investigation and impact assessment, informed by engagement with Norfolk Rivers Trust, the Zoological Society of East Anglia and other relevant local record holders, with any necessary avoidance, mitigation, licensing and monitoring measures secured. More generally, where species have been scoped out or impacts assessed as unlikely, the applicant should demonstrate sufficient certainty in the

baseline and explain how alternative construction methods or changed working assumptions would be managed if required.

- 6.7 The County Council considers that there is insufficient information available to provide a definitive response on arboricultural impacts. The principal concern is that highway visibility splays, abnormal indivisible loads and other highway works may require tree and hedge works that have not been adequately assessed or quantified.

Policy context

- 6.8 This provides a non-exhaustive survey of policy which is relevant to the impacts and proposed mitigation measures presented in this section of the LIR.

Overarching national policy statement for energy (EN-1)

- 6.9 Although the national need case is strong, EN-1 is clear that ecology impacts must first be addressed through the mitigation hierarchy. Paragraphs 4.2.23-4.2.25 require applicants to:

- apply the mitigation hierarchy
- demonstrate avoidance where possible
- reduce and mitigate impacts
- provide compensation for residual effects
- monitor mitigation effectiveness.

- 6.10 Paragraph 4.6.1 states that projects should not only avoid, mitigate and compensate harms but also seek opportunities for enhancement; and Paragraph 4.6.2 states biodiversity net gain is an essential component of environmental net gain. Paragraphs 4.6.6-4.6.12 are particularly important because they require NSIP proposals to:

- seek opportunities to contribute to and enhance the natural environment
- present biodiversity metric calculations
- discuss outcomes with Natural England during pre-application
- consider habitat connectivity
- align with Local Nature Recovery Strategies where relevant.

- 6.11 For East Pye, this provides policy support for seeking:

- species-rich grassland enhancement
- hedgerow enhancement

- habitat creation
 - woodland buffers
 - landscape-scale ecological connectivity
 - long-term management commitments.
- 6.12 Section 5.4 Biodiversity and Geological Conservation contains the key ecological decision-making policies. Paragraph 5.4.4 confirms the highest level of protection applies to European sites, including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
- 6.13 For East Pye, where barbastelle populations and protected habitats may connect with designated sites, the adequacy of Habitats Regulations Assessment will be paramount.
- 6.14 Paragraph 5.4.18 is particularly important since it requires applicants to clearly set out effects on:
- designated ecological sites
 - protected species
 - priority habitats
 - priority species
 - irreplaceable habitats.
- National policy statement for electricity networks infrastructure (EN-5)*
- 6.15 The National Policy Statement for Electricity Networks Infrastructure (EN-5) is also relevant. Paragraph 2.5.1 explains that the linear nature of electricity networks infrastructure may provide opportunities to reconnect important habitats by creating green corridors, developing biodiversity stepping zones, and reinstating appropriate hedgerows. It also notes that such infrastructure can provide opportunities to improve public access to the environment, for example by enabling footpaths and cycleways to be delivered alongside associated environmental enhancements.

Impacts

- 6.16 The Environmental Statement identifies a highly sensitive ecological baseline, including:
- Internationally designated sites within 10km including Norfolk Valley Fens SAC and The Broads SAC. (Table 8.8; paragraphs 8.9.2-8.9.17).

- Ten SSSIs within 5km, including Shotesham-Woodton Hornbeam Woods SSSI, Hedenham Wood SSSI and Pulham Market Big Wood SSSI. (paragraph 8.9.18).
 - County Wildlife Sites including Fritton Grange Meadows CWS and Lower Spring Wood CWS, through which the cable route passes. (paragraphs 8.9.47-8.9.48).
 - Nineteen Roadside Nature Reserves within the study area. (paragraph 8.9.91).
 - Irreplaceable habitats including 31 ancient woodland parcels, lowland fen habitat and ancient/veteran trees. (paragraphs 8.9.133-8.9.160).
 - Extensive priority habitats including hedgerows, ponds, rivers, lowland deciduous woodland, floodplain grazing marsh and reedbed. (paragraphs 8.9.179 onwards).
 - Nationally important bat populations, particularly barbastelle bats. The ES records that the Order Limits fall within the 6km Core Sustenance Zones (CSZs) of nine known barbastelle maternity colonies and that barbastelle activity was recorded at every survey location. The ES correctly attributes national importance to the bat resource. (Table 8.13 and baseline assessment).
- 6.17 The ES concludes that construction, operational and decommissioning effects are either negligible and not significant or beneficial as a result of habitat creation and Biodiversity Net Gain. The ES states that no significant adverse residual ecological effects are anticipated following implementation of mitigation measures. (paragraphs 8.5.13-8.5.14; Section 8.11 Residual Effects).
- County Wildlife Sites
- 6.18 A key consideration for East Pye is the direct crossing of Fritton Grange Meadows CWS and Lower Spring Wood CWS via the cable route. (paragraph 8.9.48). The applicant states that:
- HDD construction techniques will be used
 - a minimum 30m buffer will be applied
 - pollution prevention measures will be secured through the CEMP
 - construction effects will therefore be negligible and not significant. (paragraphs 8.9.53-8.9.56).
- 6.19 For operation, the ES relies on buried fluid-free cables, continued 30m buffer zones and cessation of agricultural activities. It therefore concludes negligible effects and no residual impacts. (paragraphs 8.9.59-8.9.63).

While the ES concludes negligible effects, the CWSs are directly crossed by the scheme and therefore reliance is placed heavily on mitigation assumptions and long-term management commitments.

Ancient Woodland

6.20 Ancient woodland is treated as an irreplaceable habitat and 31 ancient woodland parcels were identified within 2km of the Order Limits. Six parcels are directly adjacent to the development area. (paragraphs 8.9.133-8.9.137). The applicant states:

- no direct impacts will occur;
- a minimum 30m buffer will be maintained;
- works will comply with BS5837;
- planting will improve connectivity between woodland blocks. (paragraphs 8.9.137-8.9.141).

6.21 The resulting construction, operational and decommissioning effects are all assessed as negligible and not significant. (paragraphs 8.9.142, 8.9.151 and 8.9.158). The ES assumes that 30m buffers are sufficient to avoid indirect impacts and that enhanced landscape planting will offset ecological severance effects. These assumptions should be tested, particularly in relation to ancient woodland function and associated species.

Hedgerows

6.22 Hedgerows form the principal ecological network across the site. The ES acknowledges that temporary hedgerow losses will occur in places but states that:

- HDD will avoid removals in 17 locations;
- new hedgerows will be created;
- existing hedgerows will be enhanced. (paragraphs 8.9.208-8.9.209).

6.23 Construction effects are assessed as negligible. (paragraph 8.9.210). Operationally, the applicant predicts a net gain in hedgerows and trees with habitat management producing a moderate beneficial effect that is significant at a local scale. (paragraphs 8.9.214-8.9.216). Hedgerow severance is a key issue for bats, dormice, birds and landscape connectivity. The ES assumes temporary losses can be fully offset through future creation and enhancement.

- 6.24 The ES Non-Technical Summary identifies additional small areas of land associated with highway visibility splays and land required to accommodate abnormal indivisible loads, which could involve highway works, temporary removal of street furniture and vegetation removal. The County Council is concerned that the Preliminary Arboricultural Impact Assessment does not appear to consider these matters in sufficient detail.
- 6.25 The absence of a quantified schedule of tree works for visibility, abnormal loads and highway improvements makes it difficult to understand the scale and acceptability of arboricultural impact. The impacts of tree works and removal on narrow rural roads could be significant and unacceptable. Where works are proposed to trees and hedges not under the control of the project, the Applicant should provide assurance that the relevant owners can accommodate such works and that adequate mitigation is in place.

Barbastelle Bats

- 6.26 This is arguably the most important ecological receptor, particularly around maintenance of connectivity and adequate buffers. The baseline identifies that:
- the entire order limits area falls within multiple barbastelle maternity colony CSZs
 - known maternity colonies occur at Tyrells Wood, Little Wood, Brooke Wood, Spring Wood and Saxlingham Grove
 - barbastelle activity was recorded at every survey location
 - barbastelle was one of the most frequently recorded bat species across the site.
- 6.27 The ES therefore recognises a resource of national importance. Given the national importance attributed to barbastelle populations and the recorded activity levels, the uncertainty around roosting, commuting routes, habitat connectivity, woodland-edge use and core sustenance zones are highly important unresolved issues.

Lowland Fen

- 6.28 The ES identifies lowland fen as irreplaceable habitat linked to Hempnall Beck and Fritton Grange Meadows. (paragraphs 8.9.110-8.9.111). Mitigation relies on:

- 30m buffers
- pollution prevention
- HDD beneath sensitive areas
- water environment controls. (paragraphs 8.9.116-8.9.117).

6.29 The applicant concludes there will be no significant adverse effects during construction, operation or decommissioning. (paragraphs 8.9.117-8.9.128; 8.9.131-8.9.132). In paragraph 8.9.117 the applicant places reliance on the outline surface water drainage strategy (oSWDS). The County Council considers the drainage strategy is inadequate for several reasons, including a lack of design detail for the development platforms, access tracks and construction compounds. The drainage strategy cannot be relied on to mitigate the impacts of sediment mobilization or pollution events during construction.

Watercourses and Hempnall Beck

6.30 The proposed cable route crosses watercourses including Hempnall Beck. (paragraph 8.9.247). The ES states:

- HDD will be used
- cable depth will be at least 5m below riverbed level
- 10m and 30m ecological buffers will be employed
- construction effects are negligible. (paragraphs 8.9.247-8.9.251).

6.31 The applicant predicts operational ecological benefits due to enhanced riparian corridors and cessation of intensive agriculture. (paragraphs 8.9.258-8.9.259). However, this fails to grapple with the insufficiency of construction-phase drainage arrangements in the oSWDS.

White-clawed Crayfish

6.32 The Council notes that evidence concerning white-clawed crayfish has been provided to the applicant by interested parties but does not appear to have been taken into account in the application. Although the habitat has been described by the applicant as sub-optimal, the submitted information includes plausible evidence of a remnant population of white-clawed crayfish in the River Pye. The River Pye has not been subject to species-specific survey or impact assessment and, as a result, the baseline and potential effects on this protected species remain uncertain.

- 6.33 The Council would therefore expect the applicant to undertake appropriate further investigation and to engage with relevant local organisations, including Norfolk Rivers Trust and the Zoological Society of East Anglia, to establish whether their projects or local records provide information on crayfish locations in the area. The findings should inform an updated assessment of potential construction, operational and decommissioning effects and any necessary avoidance, mitigation, licensing and monitoring measures.

Biodiversity Net Gain

- 6.34 A recurring theme throughout the chapter is reliance on habitat creation, grassland establishment, woodland planting, pond creation, hedgerow enhancement and landscape connectivity improvements secured through the Outline LEMP and BNG Strategy.
- 6.35 The ES predicts significant local beneficial effects for:
- hedgerows (paragraph 8.9.216)
 - ponds (paragraph 8.9.239)
 - rivers and riparian habitat (paragraph 8.9.259)
 - woodland habitat (paragraph 8.9.281)
 - scrub habitat (paragraph 8.9.332)
 - neutral grassland (paragraph 8.9.352)
 - ditch habitat (paragraph 8.9.377).

Requirements, obligations and other measures

- 6.36 Ecological mapping and assessment should be updated to account for Roadside Nature Reserves and relevant adjacent trees and hedges, and mitigation should be assessed and secured for species-rich green lanes and other non-designated ecological assets.
- 6.37 Robust biosecurity, pollution prevention and sediment management controls should be secured for white-clawed crayfish and downstream habitats. Protected species mitigation must be robust, deliverable and secured through appropriate control documents
- 6.38 The published Norfolk and Suffolk Local Nature Recovery Strategy should be used when determining post-development gains.
- 6.39 The Applicant should also provide a schedule of tree and hedge works required for visibility splays, abnormal indivisible loads and other highway

works; clarify whether works are required to trees and hedges outside its control and how landowner agreement and mitigation would be secured; and improve the Tree Constraints Plan and Tree Impact Plan through clearer overview mapping and more readily navigable base mapping.

7 Archaeology

Summary

- 7.1 The County Council considers that further archaeological assessment and mitigation are required. The key issues are uncertainty regarding the cumulative impacts of piling and cabling on below-ground archaeological remains, and the need for trial trenching across areas of the scheme not previously tested.

Policy context

- 7.2 EN-1 requires applicants to assess likely significant effects on the historic environment, including below-ground and cumulative effects, and to provide sufficient information for those effects to be adequately understood: see paragraphs 5.9.11 to 5.9.14. Where there is a high probability of as-yet-undiscovered archaeological assets, paragraph 5.9.22 provides for requirements securing appropriate procedures for their identification and treatment; paragraph 5.9.20 addresses written schemes of investigation. Non-designated archaeological assets demonstrably of equivalent significance to Scheduled Monuments or Protected Wreck Sites are subject to the policies for designated heritage assets under paragraphs 5.9.7 and 5.9.8. Solar-specific policy on below-ground effects, desk-based assessment, field evaluation and investigative work is contained in EN-3 paragraphs 2.10.99 to 2.10.107, with micro-siting addressed in paragraphs 2.10.129 and 2.10.130.

Impacts

- 7.3 The County Council has previously raised concerns about the lack of detail regarding cabling associated with the PV arrays means that the cumulative impacts of piling and cabling are not known. Any assessment of impacts on below-ground archaeology is therefore uncertain and

provisional. In its response to relevant representations¹⁴, the applicant claims that “relatively low levels of below-ground disturbance are expected, depending on the exact layout and construction methods that are to be utilized (typically in the region of 5%-7% of site area)”. But the impacts from cabling are spread out very widely within each solar array area, so the 5%-7% figure underplays the spread of impacts and therefore the likelihood that archaeological remains will be damaged.

- 7.4 The trial trenching undertaken appears to have focused on areas of archaeological potential identified from geophysical survey. The County Council considers that there has been an insufficient level of trenching in areas where the geophysical survey did not identify anomalies of potential archaeological origin. The results of non-invasive surveys are not definitive evidence of absence of below-ground archaeological remains. Archaeological investigation is an iterative process. The results of non-invasive surveys need to be robustly tested with trial trenching.
- 7.5 The County Council is in broad agreement with the Archaeological Mitigation Strategy, but significant differences remain regarding the cumulative impact of piling and cabling for the solar arrays and the need to test areas not previously trenched. The removal of piles may itself have a destructive effect on archaeological remains and should be mitigated at pre-construction stage.
- 7.6 At row Norfolk County Council-042 of the applicant’s response to relevant representations, the applicant claims that the impact of piling “would not compromise the integrity of the archaeological features, nor the ability to understand the ‘archaeological site’ should future archaeological investigation take place. The County Council submits that this rather misses the point that some archaeological remains are more sensitive than others. For example, it is never appropriate to allow human skeletal remains or pottery kilns to be impacted by piling without mitigation.

¹⁴ See: [\[PDA-008\]](#)

Requirements, obligations and other measures

- 7.7 The Applicant should provide further detail of the cabling associated with the PV arrays so that its cumulative impacts with piling can be assessed. Trial trenching should be undertaken or secured for areas not previously tested, including those where geophysical survey did not identify anomalies.
- 7.8 The approach to mitigating the effects of pile removal and other decommissioning activities on below-ground archaeological remains should be clarified. The County Council is in direct contact with the applicant and considers that agreement can likely be reached on post-consent archaeological mitigation, provided that pre-consent issues relating to the impact of cabling and piling can be resolved.

8 Traffic and transport

Summary

- 8.1 The County Council considers that the current transport strategy does not adequately address significant highway constraints for site accesses and routes and does not provide sufficient mitigation. As a result, the current strategy cannot be supported in that respect.

Policy context

- 8.2 EN-1 and EN-3 provide the principal national policy framework for assessing the traffic and transport effects of the scheme. Section 5.14 of EN-1 applies to all energy infrastructure, while paragraphs 2.10.27 to 2.10.37, 2.10.112 to 2.10.118 and 2.10.131 to 2.10.136 of EN-3 address accessibility, public rights of way and construction traffic for solar photovoltaic development. The policies must be read together and alongside the general assessment principles in EN-1.
- 8.3 EN-1 recognises that the movement of materials, goods and personnel during construction, operation and decommissioning can have economic, social and environmental effects, including congestion, noise, air pollution and greenhouse gas emissions. Where a project is likely to have significant transport implications, the Environmental Statement should include a vision for transport and an assessment of potential effects,

- prepared in consultation with the relevant highway authorities (EN-1 paragraphs 5.14.5). The assessment should address disruption to transport services and infrastructure and be based on appropriate, up-to-date evidence and reasonable future scenarios (EN-1 paragraph 5.14.7).
- 8.4 The mitigation hierarchy applies. EN-1 requires demand-management measures to be considered before new transport infrastructure where feasible and operationally reasonable, including consolidating, retiming and rerouting trips (EN-1 paragraph 5.14.12). Where substantial HGV traffic is expected, the Secretary of State may control vehicle numbers and routes, require suitable parking and driver facilities, and secure arrangements for reasonably foreseeable abnormal disruption (EN-1 paragraphs 5.14.13 to 5.14.15). Applicants should also have regard to Government guidance on abnormal indivisible loads. Development should only be refused on highway grounds where there would be an unacceptable impact on highway safety, severe residual cumulative impacts on the road network, or inadequate consideration of active, public or shared transport access.
- 8.5 EN-3 identifies construction access as a significant siting consideration for solar farms because sites are often located in rural areas served by minor roads. Applications should include the full extent of access routes and assess their effects. Applicants should assess the available delivery routes, use a reasonable worst case where the source of materials is unknown, and demonstrate that every relevant road and bridge can accommodate the weight, volume and width of proposed vehicles (EN-3 paragraphs 2.10.27 to 2.10.31 and 2.10.112 to 2.10.117). Where modifications are required, these should be identified and assessed. Cumulative effects associated with shared routes through towns and villages should be addressed through a vision-led transport assessment prepared in consultation with the local highway authority (EN-3 paragraph 2.10.118).
- 8.6 EN-3 also expects public rights of way to remain open during construction so far as practicable and safe, with users protected where routes border or cross the site. The layout should support continued recreational use and maximise opportunities for enhancement, supported by an outline

Public Rights of Way Management Plan (EN-3 paragraphs 2.10.29 to 2.10.37).

- 8.7 The local highway authority may seek controls over construction vehicle numbers and routing, coordination of abnormal loads and deliveries, restoration of roads and verges, and liaison before construction. These provisions support the County Council's preference for a limited number of suitable accesses, maximum use of internal haul routes and cable route corridors, and enforceable controls over HGV and abnormal load movements.

Impacts

Site accesses

- 8.8 In general, sites should be served from the nearest suitable B road, with cable route corridors and internal haul routes used to reduce the number and length of HGV movements on minor rural roads. Crossing (rather than traversing the length of) minor rural roads minimizes conflict with local traffic and vulnerable road users.
- 8.9 For sites 1A to 1D and the BESS, there should be one principal construction access from the B1134 Station Road, with CRC1 and CRC2 used internally. Access A03 should not be used for construction traffic, although it may be retained as a BESS emergency access; A04 is acceptable in principle subject to visibility, verge maintenance and traffic management; A05 should be limited to haul crossing and maintenance use; and A06 should be removed, with movements routed internally via CRC2 and A05.
- 8.10 For sites 2A and 2B, the County Council does not support new or enhanced accesses from the A140. The temporary HDD compound at A09 should be accessed via A11 on Wood Lane. Site 2B should be served internally via CRC2 and A05. Site 2A should be accessed via CRC3 and Site 2C should be accessed via CRC shown on land west of the A140.
- 8.11 Site 3 should utilise CRC6 but A34 acceptable given the limited forecast traffic. A crossing of Lundy Green can be supported, but no vehicular use along Lundy Green would be supported.

- 8.12 For sites 5A and 5B, there should be only one access point and either A23 or A24 should serve both abnormal loads and construction traffic from the B1527. A25 should be relocated opposite A26 to provide a haul-route crossing, with maintenance access also taken from A23 or A24. The two bridges on this route, structures TM29302 and TM29303, require the applicant to conduct a structural assessment before use by abnormal loads or HGVs can be accepted.
- 8.13 The access strategy for site 6 is broadly acceptable, but A35 to A38 should be consolidated into as few access points as practicable.
- 8.14 The County Council cannot support the present strategy for sites 7 to 9. The Krons is unacceptable for HGV movements, and Fairstead Lane west of its junction with the A140 remains within the Order Limits despite the previous understanding that it would not be used for general construction access. The applicant should make greater use of CRC8, CRC9, CRC10 and CRC13. Construction sequencing is not accepted as justification for routing traffic onto unsuitable roads; the programme should be adjusted so that the relevant haul routes and sites can be developed in a coordinated manner.
- 8.15 For sites 10A to 10D, access should be consolidated to either A61 or A62. A60 and any additional B1332 access to site 10C are not supported. A64 should be removed, with CRC14 and A65 used for site 10E.

Public rights of way

- 8.16 There is expected to be substantial interaction with public rights of way and bridleways across the whole sites but especially in and around sites 1A to 1C, the BESS, CRC1 and sites 5A and 5B. The applicant has not yet provided sufficient detail of measures to manage conflicts between construction traffic and these routes or agreed the approach in principle with the County Council. Controlled crossings, banksmen, advance warning signs and defined crossing points may be appropriate but must be specified and secured for particular locations rather than left as general commitments.

Traffic monitoring and compliance

- 8.17 The applicant should confirm that its baseline traffic data represent current conditions and are not figures which reflect traffic patterns before

the introduction of the Long Stratton bypass. Approved HGV routes for each site should be fixed in the final construction traffic management plan, supported by monthly traffic data, contractor route monitoring and, where proportionate, GPS-based compliance measures. The undertaker should remain responsible for compliance by all contractors and third-party drivers, with an effective community reporting and investigation process to handle breaches.

- 8.18 Further clarification should be provided on whether water for construction use (including welfare and dust suppression) would be delivered by HGV to any site, and whether these deliveries have been included in assessment figures.

Abnormal indivisible loads (AILs)

- 8.19 The applicant should confirm the number of transformer and cable-drum deliveries for each delivery point. AIL tracking drawings shown at attachment 6 of appendix D of the Transport Assessment¹⁵ use an Ordnance Survey base; a topographical survey is required to demonstrate that routes are physically viable for the proposed vehicles. This is a particular concern for The Street and Church Hill in Saxlingham Nethergate including at the moat edge of the Old Hall¹⁶ and post-and-rail fencing opposite the school, and the historic boundary wall of the Old Rectory¹⁷ which abuts Church Hill.
- 8.20 Drawing number 24-1221.SPA08 showing the AIL swept path assessment for Saxlingham Nethergate seems to indicate that trimming and pruning may be required. Norfolk County Council officers observed during a site visit that the original boundary wall is within the hedge immediately abutting Church Hill. Loss of the fabric of the wall would result in substantial harm to a listed building, which is beyond the impact assessed in the ES.

¹⁵ See: [\[APP-176\]](#)

¹⁶ See: [Historic England list entry for Old Hall, Saxlingham Nethergate](#) (accessed 05 October 2026)

¹⁷ See: [Historic England list entry for The Old Rectory, Saxlingham Nethergate](#) (accessed 05 October 2026)

- 8.21 The ES and outline CTMP currently have no information about AIL delivery timing, the duration and frequency of parking restrictions, and whether movements would occur during the day, overnight or on Sundays. The applicant should provide this information to allow a clearer picture of amenity impacts for those living near proposed AIL routes. Timings are a concern because on the delivery route there is a pedestrian crossing in Saxlingham Nethergate immediately outside a school. The applicant should commit to scheduling AIL deliveries to avoid the most sensitive times for traffic safety including school drop-off or pickup times.

Traffic vibration effects on historic buildings

- 8.22 Where construction routes pass closely by historic buildings including listed buildings, the applicant should ensure that any potential vibration impacts are remediated. The applicant should commit to undertaking condition surveys, including a noise and vibration assessment, for houses and listed buildings on construction routes. Similar provision has been made for other DCOs, including Sizewell C, in which requirement 35¹⁸ provides that the applicant must submit a scheme identifying properties along the B1122 (a construction route for that project) where a pre-construction survey will be necessary. In that case the requirement was added at the request of the ExA.

Requirements, obligations and other measures

- 8.23 The outline construction traffic management plan should be amended to secure the site-by-site access changes identified above, including the removal or restriction of unsupported accesses. HGV use of The Krons and general construction access from the A140 end of Fairstead Lane should not be permitted, and construction sequencing should be revised where necessary to enable use of CRC8, CRC9, CRC10 and CRC13.
- 8.24 Before routes can be approved, the Applicant should provide structural assessments for structures TM29302 and TM29303 and any other bridge proposed for HGV or abnormal-load use. An updated topographical survey and vehicle-tracking assessment should be provided for The

¹⁸ See: [Requirement 35 \(Highway works\) of The Sizewell C \(Nuclear Generating Station\) Order 2022](#) (accessed 05 October 2026)

Street and Church Hill in Saxlingham Nethergate, covering carriageway widths, the moat edge, fencing, highway boundaries and any temporary highway works or parking restrictions. The Applicant should confirm all abnormal load, transformer, cable-drum and water-delivery numbers, dimensions, routes, vehicle types and timings, and coordinate abnormal loads to minimise disruption.

- 8.25 It should also provide current and representative baseline traffic data and assess the reasonable worst-case and cumulative effects on shared routes through villages. Enforceable construction traffic management controls should cover approved routes, vehicle numbers, delivery hours, contractor compliance, monthly monitoring data, investigation of breaches, community liaison, highway condition surveys and reinstatement of roads and verges.
- 8.26 Detailed measures should be agreed with the County Council's public rights of way officer for every crossing or shared section, including safe management, banksmen, warning signs, temporary restrictions, diversions and route reinstatement.
- 8.27 Noise and vibration at properties and listed buildings should be assessed and, where justified by project effects, mitigated. Pre- and post-construction surveys would provide the evidence to determine whether any damage is caused to the fabric of historic buildings by traffic-related vibration and therefore whether remediation is required.
- 8.28 The DCO should contain protective provisions for the benefit of the local highway authority. If there are no protective agreements, or a highways agreement in place before consent is granted, the powers in articles 8, 10 and 14 would represent an intolerable imposition of risk onto the County Council.

9 Hydrology, land drainage and flood risk

Summary

- 9.1 The application is currently considered to be incomplete due to inconsistencies and limited information provided to support the application. The submitted Flood Risk Assessment (FRA) (ES Appendix

- 9.1: Flood Risk Assessment)¹⁹ is not adequate at this time. The application lacks information that demonstrates commitment to ensuring there is no increase in flood risk on site or elsewhere. In addition, there are a number of instances where the information provided is unclear and clarification is required to understand what is being proposed.
- 9.2 The County Council is continuing to work with the applicant's flood risk consultant to address the issues set out in our detailed response. However, Norfolk County Council considers that the applicant will need to gather more site specific information and further information will be required.
- 9.3 Norfolk County Council has reviewed the relevant ES chapters and supporting appendices. The County Council observes there are frequent inconsistencies in the information provided within the documents and chapters that leaves the County Council unclear about what is proposed to be built and how the associated flood risk will be mitigated.
- 9.4 The County Council notes that no substantive amendments in relation to flooding issues appear in the section 51 responses dated 28 April 2026 or 01 July 2026 from the applicant. This means the LLFA's previous comments²⁰ in relation to Environmental Statement Chapters 1, 2, 3, 4, 9 and 9 remain unchanged along with those relating to the OLEMP, OCEMP, OEMP, ODEMP and the Design Principles, Parameters and Commitments.
- 9.5 While there are amendments to Appendix 9.1 - Flood Risk Assessment, on review of the updated FRA track changes (Rev 2, April 2026) report the LLFA notes the inclusion of Figure 9.8 in Appendix A which is the EA Historic Flood Mapping along with some textual editing on the cover sheet to Appendix A. No further changes in the FRA Rev 2 were observed. Therefore, all of the LLFA's comments relating to the FRA provided in April 2026 remain relevant.

¹⁹ See: [\[AS-018\]](#)

²⁰ See: Appendix to [\[RR-1451\]](#)

Policy context

- 9.6 The principal national policy is contained in EN-1 section 5.8. EN-1 paragraphs 5.8.6, 5.8.14 and 5.8.15 require flood risk from all sources to be considered.
- 9.7 Paragraphs 5.8.7, 5.8.11 and 5.8.12 require development to be safe for its lifetime without increasing flood risk elsewhere. The sequential approach is addressed in paragraphs 5.8.21 to 5.8.23, while surface-water management and sustainable drainage systems are addressed in paragraphs 5.8.24 to 5.8.39, particularly paragraph 5.8.36.
- 9.8 Paragraph 5.8.37 makes clear that approval for the project's drainage system, including during the construction period, will form part of the development consent issued by the SoS. The SoS will therefore need to be satisfied that the proposed drainage system complies with any national standards published by Ministers under paragraph 5(1) of schedule 3 to the Flood and Water Management Act 2010.
- 9.9 Solar-specific drainage and watercourse policies are contained in EN-3 paragraphs 2.10.76 to 2.10.80 and 2.10.146 to 2.10.149.
- 9.10 If a flood risk management authority (such as the LLFA) maintains an objection, EN-1 paragraph 5.8.40 requires the Secretary of State to be satisfied that all reasonable steps have been taken by the applicant and the authority to resolve the concerns.

Impacts

- 9.11 The County Council's detailed LLFA comments²¹ identify extensive concerns across the ES, FRA, drainage strategy, control documents, design principles and plans. In short, the submitted Flood Risk Assessment (FRA) is not adequate. The application lacks information that demonstrates commitment to ensuring there is no increase in flood risk on site or elsewhere. In addition, NCC advised that there are a number of instances where the information provided is unclear and clarification is required to understand what is being proposed.

²¹ See: Appendix to [\[RR-1451\]](#)

- 9.12 The information in the FRA and the ES is not adequately supported with appropriate technical information, the proposed design does not contain enough information for a drainage strategy to be suitable and the information in the FRA and ES has many inconsistencies, contradictions and gaps.
- 9.13 There are inconsistencies and contradictions between both the FRA and the various relevant chapters in the ES. All this can be resolved but at the moment both the FRA and the relevant ES chapters need further work to be undertaken including some more consideration of the proposed development design and site-specific data.
- 9.14 Key points would include the lack of design detail relating to the impermeability of the proposed development platforms, access tracks and construction compounds.
- 9.15 The information supporting the FRA and the drainage is incomplete. At the moment there is no preliminary site-specific infiltration testing in areas of interest.
- 9.16 The drainage strategy is not able to confirm where the surface water drainage would discharge too and is unable evidence whether this would be to the ground or whether discharge to a watercourse is viable.
- 9.17 There are inconsistencies and gaps in the ES assessment method for considering flood risk from surface water and ordinary watercourses.
- 9.18 The County Council is particularly concerned that surface water flood risk is not treated equally with fluvial flood risk. EN-1 and national planning policy require all sources of flooding to be considered. The Environment Agency surface water mapping is relevant to ordinary watercourses and flow paths and should be considered alongside the flood map for rivers and the sea.
- 9.19 The application contains repeated uncertainty about whether tracks, haul roads, compounds, laydown areas, substations, BESS platforms, access improvements, drainage features and grid infrastructure are temporary or permanent. The County Council considers many of these features to create impermeable or functionally impermeable surfaces and therefore require clear surface water management, attenuation, viable discharge locations and maintenance commitments.

- 9.20 The County Council also requires clarification regarding the management of fire suppression water, foul water from substations, potential impacts on groundwater recharge, maintenance during construction and decommissioning phases, watercourse crossings, ordinary watercourse consents, HDD breakout risks, and the consistency of the Works Plans with the ES and Design Principles, Parameters and Commitments document.

Requirements, obligations and other measures

- 9.21 The Applicant should provide a complete and consistent scheme description identifying all temporary and permanent works relevant to flood risk and drainage. Surface water flood risk should be treated as a source of flooding equal in importance to fluvial flood risk, including in the sequential test and constraints assessment.
- 9.22 Site-specific drainage strategies should be provided for substations, the BESS, access tracks, haul roads, compounds, laydown areas and other impermeable or functionally impermeable features.
- 9.23 Infiltration testing and site-specific ground investigation should be undertaken where infiltration is either relied upon or dismissed, and viable discharge locations, attenuation volumes, treatment trains and maintenance responsibilities should be identified for each drainage catchment.
- 9.24 The Applicant should clarify whether the National Grid substation, grid connection infrastructure, access tracks, culverts and other features would remain after decommissioning and should design retained features as permanent infrastructure.
- 9.25 A construction surface water drainage strategy, or equivalent control document, should be secured through the DCO. The indicative masterplan should be augmented with plans which can be interpreted without ambiguity and show relevant environmental constraints, flood extents and watercourses.

10 Socio-economics, employment and skills

Summary

- 10.1 The County Council notes that the Applicant has prepared an outline Employment, Skills and Supply Chain Strategy (oESSCS) and that a detailed Skills Supply Chain and Employment Plan (SSCES) is proposed to be prepared before construction. The County Council will continue to work with the Applicant to develop this plan and secure local benefits.

Policy context

- 10.2 EN-1 paragraph 5.13.12 provides that the Secretary of State may include a requirement specifying local-authority approval of an employment and skills plan detailing arrangements to promote local employment and skills-development opportunities, including apprenticeships, education, engagement with local schools and colleges, and training programmes. The broader assessment of employment, training and supply-chain effects is addressed in paragraphs 5.13.3 to 5.13.7, while paragraph 5.13.11 addresses positive provisions and legacy benefits.

Impacts

- 10.3 The ES indicates that construction is anticipated to commence in 2028 and last approximately 24 months. The assessment identifies an average workforce and a peak workforce and estimates net direct jobs after displacement. The County Council considers that these potential economic benefits should be treated as benefits only to the extent that they are secured through clear, measurable and enforceable commitments.
- 10.4 The oESSCS is intended to promote competition, innovation and skills within communities surrounding the scheme, South Norfolk and the wider county of Norfolk. It describes the anticipated workforce profile, skills, equipment and services required to deliver the scheme and requires engagement with relevant stakeholders.
- 10.5 Requirements, obligations and other measures
- 10.6 A detailed Skills Supply Chain and Employment Plan is secured by DCO requirement 19. The plan should contain clear, measurable commitments

to local employment, apprenticeships, skills development, engagement with education providers and supply-chain opportunities. It should also provide for the County Council to be appropriately involved in the plan's development and discharge.

- 10.7 The County Council therefore requests that Norfolk County Council (or "the county planning authority") be named as a consultee for the approval of the SSCEP under requirement 19.

11 Health and wellbeing

Summary

- 11.1 The County Council notes the Applicant's expanded human health assessment and the inclusion of a more detailed assessment of mental health and wellbeing within the Equality Impact Assessment. However, the County Council considers that residual effects on local populations are likely to remain and should be addressed through clearer, more proactive mitigation and communication.

Policy context

- 11.2 EN-1 recognises that energy infrastructure may have direct and indirect effects on health and wellbeing: see paragraphs 4.4.1 to 4.4.3. Paragraph 4.4.4 requires the Environmental Statement to assess effects on people and identify measures to avoid, reduce or compensate for adverse health impacts. Paragraph 4.4.5 requires cumulative health impacts to be considered where appropriate, while paragraph 4.4.6 addresses mitigation of indirect impacts, including effects on vulnerable groups and people with protected characteristics.

Impacts

- 11.3 The Equality Impact Assessment²² recognises concern regarding long-term potential mental health impacts, particularly for elderly and more vulnerable populations. Potential pathways include access to nature, visual amenity and attachment to place, concerns regarding fire risk and

²² See: [\[APP-214\]](#)

community safety, cumulative impacts of concurrent schemes, and concerns about housing and business values.

- 11.4 The County Council notes the Applicant's commitment to continued engagement and monitoring of community impacts during construction. However, the County Council considers that the proposed approach should be more proactive and outreach-based, rather than relying primarily on passive channels such as email, registration or phone lines.
- 11.5 The County Council also notes predicted operational noise effects at of residential receptors during early morning periods before mitigation. Mitigation for affected receptors should be clearly defined and secured. The County Council further notes that changes to landscape character and visual amenity are identified as the principal pathway through which operational health effects may occur.
- 11.6 No public rights of way are proposed to require long-term closure, but temporary restrictions, sometimes lasting longer than one month, are proposed. These should only be implemented where strictly necessary, with suitable alternative routes and clear communication to affected users. Separately from closures, there is a risk that development can result in the degradation of amenity to public rights of way receptors through the introduction of built elements or inappropriate mitigation planting which creates a sense of enclosure in a previously open route. These concerns are being addressed through design and landscape engagement.

Requirements, obligations and other measures

- 11.7 Community-engagement mitigation should be amended to include proactive outreach to affected groups rather than relying only on passive communication channels.
- 11.8 Mitigation should be defined and secured for all residential receptors affected by operational noise exceedances. Landscape mitigation and management commitments should be sufficient to address health and wellbeing pathways associated with visual amenity, access to nature, sense of place and perceived environmental quality. Restrictions on public rights of way should be implemented only where strictly necessary, with suitable alternatives and clear communication provided.

12 Minerals and waste

Summary

- 12.1 The County Council is the minerals and waste planning authority for Norfolk. The County Council considers that the ES has appropriately assessed the potential for the scheme to sterilise safeguarded mineral resources, and that embedded mitigation and post-consent work should enable the scheme to avoid needless sterilisation. However, the County Council does not accept the assumption that new non-hazardous landfill capacity would necessarily be approved in Norfolk if existing capacity were exhausted.

Policy context

- 12.2 EN-1 paragraph 5.11.19 requires applicants to safeguard mineral resources on the proposed site as far as possible, taking account of the long-term potential of the land following decommissioning. Paragraph 5.11.28 requires appropriate mitigation where development affects a Mineral Safeguarding Area. EN-1 paragraphs 5.15.1 to 5.15.3 set out the waste hierarchy, while paragraphs 5.15.6 to 5.15.9 address circular-economy objectives, sustainable waste management, reuse and recycling, and the effect of development waste on local waste-management capacity.
- 12.3 The Norfolk Minerals and Waste Local Plan²³ also safeguards mineral resources and mineral infrastructure, and requires appropriate assessment where development is proposed within mineral safeguarding areas.

Impacts

- 12.4 The Mineral Resource Assessment identifies mineral resources within the sub-sites and cable route corridors and estimates the potential resource within each area. Mineral resources beneath panel areas would be sterilised for the duration of the scheme, but this sterilisation is temporary and would cease following decommissioning. The BESS, National Grid

²³ See: [Norfolk Minerals and Waste Local Plan](#) (accessed 05 October 2026)

substation and point of connection are not underlain by safeguarded mineral resources.

- 12.5 The County Council considers that mineral resource safeguarding has been correctly addressed. There would be limited impact from sterilisation and removal of material along parts of the cable route corridors. Ground investigations can take place post-consent and feed into the construction environmental management process regarding the potential reuse of materials arising during construction.
- 12.6 In relation to waste and materials, the County Council welcomes the inclusion of information on landfill capacity in Norfolk and the commitment to prioritise waste prevention, reuse, recycling and recovery in accordance with the waste hierarchy. However, the County Council disagrees with any assumption that new non-hazardous landfill capacity would necessarily be approved in Norfolk if capacity reached zero. Norfolk's geology makes much of the county unsuitable for hazardous or non-hazardous landfill.

Requirements, obligations and other measures

- 12.7 Appropriate ground investigations and material-reuse measures should be secured through the CEMP, SWMP, soils management plan or equivalent control documents. The waste assessment should be amended so that it does not assume that new landfill capacity would necessarily be approved in Norfolk. The waste hierarchy should also be embedded in the construction and decommissioning control documents.

13 Fire and rescue

Summary

- 13.1 The County Council is the fire and rescue authority for Norfolk and oversees the operation of Norfolk Fire and Rescue Service (NFRS). The County Council expects compliance with the National Fire Chiefs Council (NFCC) guidance for grid-scale energy storage systems and relevant

parts of NFPA 855²⁴ in relation to battery safety management and suitable control measures.

Impacts

- 13.2 The BESS and associated electrical infrastructure create fire safety considerations which require robust design, operational control, emergency response planning and engagement with Norfolk Fire and Rescue Service. The County Council also notes that two directions of access are accepted in principle, but detailed access and firefighting arrangements will need to be reviewed as the scheme design develops.

Requirements, obligations and other measures

- 13.3 The Applicant should demonstrate compliance with National Fire Chiefs Council guidance for grid-scale energy storage systems and the relevant parts of NFPA 855 and should prepare and secure a robust battery safety management plan. It should engage with Norfolk Fire and Rescue Service on access, water supply, emergency response, isolation, containment and firefighting water management. Fire safety and fire water management should also be integrated with the flood risk and drainage proposals.
- 13.4 NFRS additionally expects compliance with the following requirements which should be reflected in the Design Principles Parameters and Commitments document²⁵ and the outline Battery Safety Management Plan²⁶.
- 13.5 To ensure any blast is directed upwards away from adjacent enclosures or personnel. Enclosure exhaust systems should be designed to maintain the internal environment below an average 25% of the lower flammability limit. All BESS sites should be designed to be open air with discrete purpose designed non-combustible modular container style enclosures. These should be accessed from the outside for maintenance and servicing. The maximum enclosure size must not exceed 16.2m long, 2.6m wide, 2.9m high, as per NFPA 855. Enclosures must not contain any

²⁴ National Fire Protection Association 855 Standard for the Installation of Stationary Energy Storage Systems

²⁵ See: [\[APP-213\]](#)

²⁶ See: [\[APP-200\]](#)

HVAC or other equipment that is not directly connected to battery management, monitoring or fire/explosion suppression.

- 13.6 Purpose designed BESS enclosure spacing should be no less than 0.914 metres between blank faces (no access openings). Large Scale Fire Testing must provide evidence that there is no propagation of fire, between enclosures, at this distance. Should test evidence support lesser distances then this may be considered on review of the evidence. If BESS enclosures are not purpose designed or evidence as above is not available, then spacing should be no less than 3 metres on all faces, minimum requirements of NFPA 855 (current edition), whichever is the greater. Ancillary equipment, such as transformers or switchgear, should be situated at a safe distance to prevent fire propagation to, or from, any BESS enclosure. This should be evidenced by fire and explosion testing data for the relevant equipment, or a minimum of 3 metres from any BESS enclosure.
- 13.7 BESS enclosures must not be stacked vertically due to the increased level of risk of vertical spread of fire and difficulty of access for firefighting.
- 13.8 Access routes between BESS enclosures should be a minimum of 3 metres. All site buildings, structures, storage or exposure hazards not connected with electrical grid infrastructure shall be no less than 3 metres from BESS enclosures. There should be 3 metre clearance between BESS enclosures and the outer perimeter of the compound, this should be kept clear of any combustible vegetation or any other fire risk to prevent the risk of fire spread. In rural locations, where vegetation may promote fires in the open, additional clearance distances may be required to reduce the risk of fire spread to BESS enclosures or increase of ambient temperature beyond safe operating conditions.
- 13.9 The minimum distance between any BESS enclosure and occupied buildings, outside the perimeter of the compound, must be no less than 30 metres. This may be reduced if blast walls are installed and evidenced to ensure equivalent safety levels.
- 13.10 All Battery Management Systems (BMS) should be configured to monitor potential failure conditions, such as abnormal cell and/or rack voltage,

- temperature and current, which could lead to thermal runaway. The BMS shall initiate safety actions on any potential failure conditions.
- 13.11 All BESS enclosures shall have smoke, flammable gas and heat detection systems that comply with relevant design standards which shall be interfaced to the BMS to ensure suitable safety actions are triggered in the event of activation.
- 13.12 If fitted, suppression systems must be appropriate to the battery technology contained within the enclosure and designed to ensure efficient operation. Generally, suppression systems will be intended to prevent fires in ancillary equipment spreading to battery modules and should be designed accordingly. They must be interfaced to the BMS and any other safety monitoring systems to ensure suitable safety actions are triggered in the event of suppression system activation.
- 13.13 The BMS, and other safety systems, must be able to raise the alarm to a continuously staffed monitoring station for immediate attention. It must place in a safe state and isolate, affected battery cells, racks or full enclosures from the electricity grid, or other power supply. This action must occur autonomously, but also be able to be remotely triggered, where any safety conditions are detected or identified by the BMS, or concern is raised at the monitoring station. There should also be visual and audible indicators linked to the BMS and addressable identification and control equipment on site to assist operational fire crews identify any enclosure which may be posing a risk and what the risk is.
- 13.14 All safety systems, including the BMS, must be subject to routine testing in accordance with any industry guidance or manufacturers specification.
- 13.15 All BESS enclosures are required to have purpose designed and installed deflagration protection, or deflagration venting, as appropriate to the hazard and battery technology contained therein. This should be designed in accordance with British or NFPA Standards. Where venting is provided this should be mounted in the top panels of the enclosure to allow the safe release of any gas mixture to mitigate the risk of deflagration.
- 13.16 The site design should include safe access routes for fire appliances to manoeuvre within the site (including turning circles where necessary). An alternative approach route and access point, preferably opposite the main

approach route and access point, should be provided where practicable to enable fire appliances to approach from an up-wind direction. 'Loop' access around the curtilage of the BESS compound will only be considered if it is not practicable to provide a suitable alternative approach route and access point. If a single access route into the compound is agreed then the route will generally be required to approach and enter from the South of the compound, to account for prevailing wind conditions, but this must be agreed with NFRS. The NFCC guidance document provides information on access routes and refers to Building Regulations Approved Document Volume 2 for further information.

- 13.17 The applicant should consult NFRS at the earliest opportunity to discuss response times to ensure that emergency plans are adequately developed. All site management procedures should be regularly reviewed and any changes to the emergency response plan communicated to NFRS as soon as possible. This consultation should include training and tours of the facility for NFRS operational staff on an ongoing basis, at an agreed schedule period, to ensure effective firefighting response is maintained.
- 13.18 Sufficient water supply, for effective operational firefighting, is to be provided on BESS sites even where enclosure manufacturers indicate that a full burn out strategy should be adopted. This will ensure adequate water for boundary cooling the vicinity of the affected enclosure to reduce the potential of fire spread to adjacent enclosures or beyond the BESS compound. A fire hydrant should be a minimum of 10 metres from BESS containers but be situated in close proximity to the compound. The water flow rate from any hydrant fed by a potable water main, or on-site pumped supply, should be a minimum of 25l/sec for at least 2 hours. If fire fighting water provision is to be achieved using static stored water on site then the storage should be no less than 180,000 litres. If necessary, due to the compound size, further hydrants should be strategically located across the compound. If stored water supplies are to be the only provision then advice and agreement on their location and access should be discussed with NFRS. All water supplies and infrastructure shall be tested and regularly serviced by the operator in accordance with BS9990 and all

hydrant, outlets or hard suction points must be physically protected from mechanical damage.

- 13.19 Specification of BESS enclosures detailing Ingress Protection (IP) rating should be provided to NFRS to ensure that any firefighting activities do not introduce further risk to adjacent containers. A minimum rating of IP55 is required for all enclosures.
- 13.20 Fire water run off should be contained using drainage systems, interceptors and bunded tanks or lagoons, to ensure it can be tested and disposed of safely, without contaminating the ground on which the BESS compound is located. This should be considered and documented within the environmental risk assessment and plan in accordance with any guidance issued by the Environment Agency.
- 13.21 Site location plans, having a compass rose showing north and the prevailing wind condition, should identify sensitive receptors, which could be affected by a fire, within a 1km radius of the BESS compound. Please refer to the NFCC guidance which contains details of sensitive receptors. These plans should support discussion with planners and other stakeholders regarding site suitability and emergency planning. Assessment of potential risk should consider battery technology, expected fire and rescue response (as detailed in the fire strategy for the site) and proximity of transport infrastructure and public buildings. A gas plume model may also be used to evidence level of risk to nearby sensitive receptors.