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East Pye Solar Development Consent Order Examination

Supporting Written Representation

Planning reference: EN0110014

Interested Party unique reference number: [REDACTED]

Introduction

Great Moulton Parish Council wishes to formally record its objection to the proposed East Pye Solar development and asks that this representation is read alongside the Great Moulton village submission and the consolidated Written Representation prepared by BEPS.

The Parish Council supports renewable energy and the transition to cleaner forms of electricity generation. Our objection is not to solar energy in principle. Our concern is the scale, location and cumulative impact of this particular development and whether the application has demonstrated that a scheme of this size can be accommodated in this part of rural South Norfolk without unacceptable harm.

Great Moulton and the scale of the development

Great Moulton is a small rural community with a population of approximately 757 residents. The entire civil parish covers approximately 566 hectares.

The scale of the development proposed around Great Moulton is substantial. The Applicant's documentation identifies approximately 196.4 hectares associated with Sites 1, 2 and the BESS area around Great Moulton. This equates to approximately 485 acres and is equivalent to around 35% of the entire geographical area of Great Moulton parish.

The proposed development around our community is not limited to solar panels. The wider scheme includes battery energy storage, major project substations, grid connection infrastructure and a new National Grid substation together with associated highways, access, drainage, fencing and other works.

This is therefore not a minor development on the edge of the village. It represents a substantial and long term change to the landscape and environment in which our residents live.

The effect upon neighbouring communities

The effects of East Pye Solar cannot reasonably be considered by reference to Great Moulton alone. Our neighbouring rural communities, Tivetshall, Wacton and Tibenham Airfield are submitting their own objections. Other surrounding villages including Aslacton and Tibenham will experience impacts associated with the development and its infrastructure.

These villages are closely connected communities. We share local roads, facilities, countryside and public rights of way. Residents travel between these communities regularly and the effects of construction traffic, highway works,

landscape change, noise, drainage, loss of agricultural character and major energy infrastructure do not stop at parish boundaries.

Great Moulton Parish Council therefore asks the Examining Authority to consider the effects upon these communities collectively as well as individually. What may appear to be a limited effect when considered against one individual settlement can become considerably more significant when the development is viewed as a whole and across the rural communities which surround it.

Wider environmental and community concerns

The BEPS Written Representation raises a wide range of matters which the Parish Council considers require careful examination. These include the need for and design of the scheme, landscape and visual effects, ecology and biodiversity, water and drainage, heritage, agricultural land and soils, traffic and highway impacts, noise, air quality, effects upon local communities and businesses, and the cumulative effects of this and other major infrastructure proposals.

The Parish Council is particularly concerned that the rural character, landscape, tranquillity, local roads, public rights of way, environment and residential amenity of Great Moulton and the surrounding countryside are considered as a whole rather than as a series of isolated impacts.

This is major infrastructure which, if consented, would alter the environment surrounding Great Moulton for decades. The Parish Council considers that the long-term consequences for the village and neighbouring communities must therefore be given appropriate weight when balanced against the claimed benefits of the scheme.

Reliance upon future mitigation

The Parish Council is concerned about the extent to which the acceptability of the development relies upon mitigation, later design decisions and controls which would be developed after consent. Where significant impacts cannot be avoided, they should be properly understood and assessed before development consent is granted rather than relying upon future mitigation to resolve important issues at a later stage.

The BEPS representation also raises questions regarding the extent of compulsory acquisition powers being sought while elements of the final scheme, land requirements, grid connection and mitigation remain uncertain. Given the scale and permanence of some of the infrastructure proposed around Great Moulton, these matters warrant particularly careful examination.

Agricultural land and national food security

The Parish Council considers that the effect upon agricultural land must also be examined in the wider context of national food security. This has particular relevance in Norfolk, one of the country's most important agricultural counties.

Published agricultural evidence shows the importance of Norfolk to domestic food production. Norfolk produces almost 20% of the nation's peas and beans, approximately 13% of its potatoes, more than 30% of England's sugar beet and over 6% of England's cereals. This means that the agricultural land affected by major development in Norfolk performs a food production function extending considerably beyond the communities in which that land is located.

Statements made to Parliament concerning food security and solar development

The importance of balancing renewable energy development against domestic food production has been expressly recognised in Parliament.

During Prime Minister's Questions on 11 September 2024, Rishi Sunak raised the importance of British farming in the context of increasing global volatility and its importance to food security and national security. The Prime Minister stated that food security was 'really important' and that the Government took food security 'very seriously'.

The exchange then turned specifically to productive agricultural land and solar development, with the Prime Minister stating that the Government would work with farmers and rural communities and seek to 'get the balance right'.

On 26 November 2024, the Parliamentary Under-Secretary of State at the Department for Environment, Food and Rural Affairs stated in the House of Lords that 'The Government recognise that food security is national security.' The Government also confirmed its commitment to maintaining strong protections for agricultural land so that clean power would not come at the cost of food production or food security.

On 10 December 2024, the Government reiterated that planning guidance directs developers towards brownfield or industrial sites wherever possible and, where agricultural land is necessary, towards lower quality land rather than the best and most versatile agricultural land.

There is also continuity across successive Governments. In a Written Ministerial Statement on 15 May 2024 entitled 'Solar Energy and Food Security: Land Use', the then Government stated that food security is an essential part of national security and addressed the need to protect the best agricultural land while recognising the importance of solar energy.

Applying those principles to East Pye

Great Moulton Parish Council does not suggest that renewable energy generation and food production are mutually exclusive, nor that Government policy prohibits the use of agricultural land for solar development. However, the Parliamentary statements demonstrate that the relationship between energy security, agricultural land and food security is an important matter of public policy.

The question should not simply be whether additional renewable electricity generation is desirable nationally. The Examination should also consider whether committing substantial areas of agricultural land to a development of this scale, in this particular location and for the proposed duration, represents an appropriate balance between energy security, environmental protection and food security.

The Parish Council asks the Examining Authority to give appropriate weight to the agricultural quality and productive value of the land affected, the duration for which it would be removed or restricted from conventional agricultural production, the cumulative amount of agricultural land being committed to major infrastructure across Norfolk and the wider region, and whether reasonable alternatives involving previously developed land, rooftops, brownfield land or lower quality agricultural land have been adequately considered.

Cumulative development and further energy infrastructure

The Parish Council is particularly concerned that East Pye Solar should not be considered as though it will exist in isolation. There are already other substantial energy infrastructure proposals in the immediate Great Moulton area.

One clear example is FIELD Long Stratton, a separate proposal for a Battery Energy Storage System on land north of Carr Lane, Great Moulton. The proposal is for a BESS capable of providing up to 400 MW of electricity and is the subject of South Norfolk planning application 2025/1689.

This demonstrates that concerns about further major energy infrastructure around Great Moulton are not simply hypothetical. A separate large scale battery storage development is already proposed in the immediate area.

East Pye itself proposes substantial new electricity infrastructure around Great Moulton, including battery storage and a new National Grid substation. The Applicant has indicated that while elements of the solar development would ultimately be decommissioned, the new National Grid substation would remain as part of the transmission network.

If East Pye is consented and major new grid infrastructure becomes permanently established around Great Moulton, the Examining Authority should consider whether that infrastructure could facilitate, encourage or make this area more attractive for further energy infrastructure proposals.

The Parish Council is not suggesting that every future project can presently be identified or that approval of East Pye would automatically result in further development. However, FIELD Long Stratton demonstrates that Great Moulton and Tasway is already experiencing pressure from more than one substantial energy proposal. Our

concern is that East Pye could represent part of a much wider and continuing transformation of the area rather than a single isolated development.

The countryside surrounding Great Moulton, Wacton, Aslacton and neighbouring communities is not simply undeveloped space available for energy infrastructure. It is productive agricultural land and the environment in which people live, walk, cycle, farm, work and spend their leisure time.

Successive large-scale developments have the potential to progressively affect landscape character, tranquillity, agricultural land, public rights of way, local roads, wildlife, residential amenity and people's enjoyment of the countryside.

The Parish Council is particularly concerned about an incremental effect whereby each subsequent proposal is considered individually and partly justified by infrastructure or development which has already been established. Taken individually, the effects of each development may be presented as capable of mitigation. Taken collectively over many years, however, the result could be a fundamental transformation of the rural character of this part of South Norfolk.

Great Moulton Parish Council therefore asks the Examining Authority to give substantial consideration to existing and reasonably foreseeable energy infrastructure proposals surrounding Great Moulton, including FIELD Long Stratton, when assessing the cumulative effects of East Pye Solar.

Cumulative impact and proportionality

Our concern ultimately comes down to scale, proportionality, and location. Great Moulton and its neighbouring villages are small rural communities surrounded predominantly by agricultural land and open countryside.

The development area identified around Great Moulton alone is approximately 196.4 hectares, equivalent to around 35% of the geographical area of the entire Great Moulton parish. It forms part of a much larger East Pye scheme comprising approximately 1,213 hectares of land across South Norfolk.

Individual solar fields, substations, battery infrastructure, pylons, cable routes, highway works and other elements should not be viewed in isolation where their combined effect is the transformation of a substantial area of rural landscape. Similarly, impacts upon Great Moulton, Tivetshall, Wacton, Aslacton and other neighbouring communities should not simply be separated by parish boundaries where those communities use the same roads, experience the same landscape and form part of the same rural environment.

Conclusion

Great Moulton Parish Council recognises the national importance of increasing renewable energy generation and supports the transition towards cleaner energy. However, achieving that transition does not remove the need to demonstrate that individual developments are appropriately located, proportionate, environmentally acceptable and properly balanced against other national and local priorities, including domestic food production.

For a small rural community such as Great Moulton, East Pye Solar represents a development of exceptional scale. The infrastructure proposed around our village alone covers an area equivalent to approximately one third of the entire parish and forms part of a scheme extending across approximately 1,213 hectares of South Norfolk.

The Parish Council therefore asks the Examining Authority to consider not simply each individual component of the development, but the overall and cumulative effect upon the landscape, agricultural land, environment, infrastructure and communities of this part of South Norfolk.

Great Moulton Parish Council endorses the concerns contained within the accompanying Great Moulton submission and the BEPS Written Representation and asks the Examining Authority to give those representations full consideration during the Examination.

On the information presently available, Great Moulton Parish Council does not consider that the case has been made for granting development consent for East Pye Solar in its current form.

References and supporting evidence

- [Hansard - Prime Minister's Questions, 11 September 2024](#)
 - <https://hansard.parliament.uk/Commons/2024-09-11/debates/E10579AA-EA48-4100-B4F9-00508857FD07/PrimeMinister> - [Print Version](#)
- [Hansard - Solar Farms and Food Production, 26 November 2024](#)
 - <https://hansard.parliament.uk/Lords/2024-11-26/debates/D306AB77-6650-4B7C-B9DC-090411F81EA2/SolarFarmsAndFoodProduction> - [Print Version](#)
- [Hansard - Westminster Hall debate, 10 December 2024](#)
 - <https://hansard.parliament.uk/commons/2024-12-10/debates/35a1d8f9-8117-4cba-a0bd-3bc7f1666dd5/WestminsterHall> - [Print Version](#)
- [Hansard - Solar Energy and Food Security: Land Use, 15 May 2024](#)
 - <https://hansard.parliament.uk/commons/2024-05-15/debates/24051543000007/SolarEnergyAndFoodSecurityLandUse> - [Print Version](#)
- [FIELD Long Stratton - proposed development](#)
 - <https://www.fieldlongstratton.co.uk/> - [print version](#)

Submitted on behalf of Great Moulton Parish Council



SIGNED FOR AND ON BEHALF OF GREAT MOULTON PARISH COUNCIL

Signature: _____

Name: _____

Clerk to the Council / Proper Officer

Date: ____4 October 2026_____

WRITTEN SUMMARY OF OBJECTION – LAND PARCEL 1, GREAT MOULTON

PINS Reference: EN0110014

Submitted on behalf of BEPS – Great Moulton

DRAFT FOR REVIEW - Written Summary of Representation (not more than 1,500 words)

Purpose of this summary

This summary distils the principal Land Parcel 1 and Grid Infrastructure objections, focusing on site selection and the roles of environmental factors, engineering, grid constraints, land availability and landowner willingness.

1. The central issue: Site 1 is the Scheme's western infrastructure hub

Land Parcel 1 is not simply a group of solar fields. At and around Site 1, particularly Sub-Site 1B, the Scheme concentrates the National Grid Substation, 400 kV Project Substation, Grid Connection Infrastructure, overhead-line and pylon works, cabling, access, compounds, drainage, security, lighting, mitigation and the BESS interface. Sites 1A–1D will therefore be experienced locally as one connected infrastructure cluster.

Great Moulton does not contend that East Pye has undertaken no assessment. The concern is whether the Applicant has transparently justified this concentration of infrastructure and demonstrated that its combined effects remain acceptable. That case should be made by East Pye, not reconstructed by residents from dispersed documents.

2. Site selection and alternatives require a clearer audit trail

APP/7.20 shows that Great Moulton was not the original starting point. The initial Point of Connection at Norwich Main was discounted following NGET advice, after which the connection strategy shifted to the Bramford–Norwich 400 kV line. The Scheme then evolved through National Grid Substation Options 1–3 and later Great Moulton Options 4A and 4B, with 4B within Sub-Site 1B ultimately selected.

The Applicant should explain, on a common dated basis, how each option was identified, assessed and selected or discounted; what evidence was available at each decision point; and the weight given to connection efficiency, access, environmental constraints, land availability, commercial deliverability and landowner willingness.

Technical feasibility, commercial deliverability and environmental preference are not the same thing. APP/7.20 records that land availability and willing landowners influenced the process and that some land was not progressed where a willing landowner was not forthcoming. East Pye should distinguish options rejected as environmentally or technically unsuitable from options not pursued because land was unavailable, and demonstrate that Options 4A and 4B received sufficiently comparable scrutiny to the earlier alternatives.

3. Horlock Rules require a demonstrable siting and design audit

The Horlock principles are directly engaged by the permanent National Grid Substation. As set out in the representation, NPS EN-5 requires environmental considerations to be addressed from the earliest stage and technical/cost requirements to be balanced against environmental effects so adverse effects are kept to a reasonably practicable minimum. Relevant considerations include local amenity, landscape and screening, residential proximity, noise, habitats, land use, groundwater, access and substation form.

For Site 1B, reliance on later planting and mitigation does not itself demonstrate compliance. East Pye and NGET should provide a Horlock Compliance Schedule showing how siting and design responded to

the open plateau landscape, nearby homes, PRoW, Grade 2 BMV land, groundwater/private water supplies and the cumulative BESS/Project Substation cluster; what lower-impact alternatives were considered; and why the final location and design keep adverse effects to a reasonably practicable minimum. [APP/7.20; APP/7.14]

4. Permanent infrastructure changes the planning balance

The National Grid Substation and associated Grid Connection Infrastructure are materially different from temporary solar arrays. East Pye's own material indicates that solar generation equipment, the BESS and some project infrastructures are intended to be removed after the approximately 60-year operational period, while the National Grid Substation and Grid Connection Infrastructure would remain, including the purpose and permanence of the RB19 crossing;

The ExA should therefore distinguish temporary generation from retained transmission infrastructure. East Pye should identify what is removed, what remains, who owns and maintains retained assets and mitigation, and the post-decommissioning Site 1 landscape, including access, pylons, cables, drainage, fencing and planting. Permanent or potentially indefinite effects cannot be treated as reversible merely because other Scheme components have an approximately 60-year life. [APP/6.1.4; APP/7.3]

5. The combined environmental effects must be tested as a place-based whole

The same residents, roads, PRoW, farms, water receptors and rural landscape will experience the combined Site 1/BESS effects: noise, lighting, security, traffic and abnormal loads, cable and pylon works, landscape change, groundwater risk, agricultural land loss, ecological disturbance, emergency access and long-term operational presence.

East Pye should provide a place-based Great Moulton cumulative assessment covering construction, operation, foreseeable replacement, decommissioning and retained National Grid infrastructure, rather than relying only on separate topic assessments.

Specific matters requiring clear resolution include:

- Noise: the final or maximum combined plant assumptions for the National Grid Substation, Project Substation, BESS, transformers, inverters, switchgear and cooling equipment should be assessed for representative quiet night-time conditions, including tonal, low-frequency and otherwise distinctive characteristics. Post-installation verification and corrective mitigation should be secured. [APP/6.1.12; APP/7.2]
- Grade 2 BMV land and soils: detailed ALC evidence identifies Grade 2 land within the Site 1 infrastructure area. East Pye should distinguish temporary disturbance, long-term occupation and permanent loss, and explain whether the later identification of Grade 2 BMV land caused the earlier site-selection conclusions to be reconsidered and, if not, why not. [APP/6.1.15; APP/6.3.15.1]
- Groundwater and private water supplies: provide a consolidated source–pathway–receptor assessment covering identified supplies, relevant baseline conditions, piling/deep foundations, trenches and trenchless works, oils, contaminated runoff, drainage, monitoring, trigger levels and alternative supply. Deferred GI and Foundation Works Risk Assessment should refine an already acceptable design, not determine post-consent whether one is achievable. [APP/6.1.9; APP/6.1.16; APP/7.1]
- Ecology: the final layout should demonstrably remain within the assumptions of the ecological assessment, including bats and dark corridors, hedgerows, trees, ponds, ditches, breeding birds, great crested newts and any licensing dependencies. Access, drainage, lighting, fencing and final infrastructure positions must not undermine the mitigation relied upon. [APP/6.1.8 and supporting ecology appendices]
- Access, PRoW and safety: reconcile Station Road, Frith Way, Lodge Road, Hundred Lane/RB19 and relevant accesses for construction, abnormal-load, operational and emergency use; confirm the purpose and permanence of the RB19 crossing; and provide a coordinated emergency-response statement for the BESS interface, substations and electrical incidents, including firefighting access, water supply, contaminated-water containment and operator responsibilities. [APP/6.1.11; APP/6.3.11.1; APP/7.6; APP/7.8; APP/7.5]

- Landscape, heritage and residential amenity: Great Moulton is an open rural plateau with historic lanes, PRow, dark skies and long views. The combined substation, pylon, fencing, access, lighting and mitigation proposals should be assessed together from the most affected residential and recreational receptors using verified and reproducible visual information.

6. Rochdale Envelope flexibility must be matched by binding controls

Material elements of the grid infrastructure remain subject to detailed design. Flexibility is not objectionable in itself, but the ExA must be able to identify the assessed worst case and the DCO control that prevents later design, construction or operation from producing greater effects.

East Pye should link every environmentally material flexible parameter to the ES worst case, certified document, DCO Requirement, approving body, objective standard, monitoring and corrective action. [APP/6.1.4; APP/7.18; APP/7.26] Any Examination-stage design change should identify consequential document updates and demonstrate that surveys, assessments and mitigation remain valid.

7. Requested outcome

Before significant weight is placed on the Applicant's conclusions, BEPS respectfully asks the ExA to require East Pye, with NGET where relevant, to provide:

- a definitive Site 1 Grid Infrastructure Reconciliation Plan and Schedule;
- a dated, side-by-side alternatives audit for Options 1–4B responding fully to ExQ1 Q1.3.1–Q1.3.2, including the influence of land availability and willing landowners;
- a Horlock Compliance Schedule for Site 1B, with NGET input where appropriate, demonstrating how the siting and design principles were applied and why lower-impact alternatives or layouts were not preferred; [APP/7.20; APP/7.14]
- confirmation of the final or presently assumed grid-connection solution, delivery responsibilities and consequences of any remaining NGET design flexibility;
- a clear permanence/decommissioning and whole-life replacement schedule;
- a place-based cumulative effects assessment for the Site 1/BESS cluster; and
- one consolidated Grid Infrastructure Compliance Schedule showing how every material mitigation and design commitment is secured, approved, monitored and enforced.

The burden remains on East Pye and NGET to demonstrate that the proposition for which consent and land powers are sought is sufficiently defined, justified, assessed and secured. If the final design or connection solution could materially alter land requirements or assessed effects, that should be resolved before those powers are granted rather than left to post-consent processes.

Principal references: APP/7.20; APP/7.12; APP/7.14; APP/6.1.4; APP/6.1.7–6.1.9; APP/6.1.11–6.1.12; APP/6.1.15–6.1.16; APP/7.1–7.3; APP/7.5–7.8; APP/7.18; APP/7.26.

Consolidated Summary of BEPS's Written Representations

Chapters 1–20: Principal Evidence, Unresolved Constraints and Consequences for Development Consent

BEPS objects to East Pye Solar as a whole. The objection is not to solar generation in principle. It is that the Application has not demonstrated that this particular 500 MW-scale transmission-connected development, dispersed across approximately 1,212 hectares of South Norfolk, is necessary in this location, environmentally acceptable, physically deliverable and sufficiently defined and controlled to justify either development consent or the extensive compulsory powers sought.

The case against consent develops cumulatively through BEPS's Written Representation. Chapter 1 challenges the claimed project-specific need and establishes the correct good-design test. Chapters 2 and 3 demonstrate that the EIA methodology and description of the receiving environment fragment an interconnected landscape and leave material baseline uncertainty. Chapters 4 and 5 show that the Scheme remains materially uncertain and that its present location and scale resulted from a site-selection process strongly conditioned by a pre-existing land package. Chapters 6 and 7 question the weight that can safely be attributed to the principal climate benefit while establishing substantial admitted landscape harm. Chapters 8 to 18 then identify specific ecological, hydrological, heritage, transport, agricultural, ground-condition, noise, EMF and major-infrastructure constraints. Chapter 19 demonstrates why those effects cannot properly be assessed in isolation. Chapter 20 shows that the Applicant's residual-effects summary does not reconcile the evidence which precedes it.

Preliminary Chapter: DCO and Compulsory Acquisition

The preliminary objection concerns the statutory powers sought for a Scheme whose final implementation remains materially uncertain. The Order Limits extend to approximately 1,212.3 ha. The draft DCO seeks power under Article 21 to acquire interests in land, including freehold, together with permanent rights, restrictions and temporary-possession powers. Compulsory freehold powers extend to parts of Work No. 1, the solar generating station itself, as well as the BESS, substations and other Works. Yet the Applicant's Statement of Reasons confirms that Option Agreements

have already been entered into for the Solar PV Sites, BESS and substations and expressly refers to the possibility of a landowner failing to grant the Applicant the lease contemplated by an Option Agreement. The Applicant therefore appears to contemplate leasehold occupation voluntarily while seeking a statutory power capable of permanently acquiring the freehold compulsorily.

That distinction engages the separate statutory test in section 122 of the Planning Act 2008. A need to control land for 60 years does not, without further justification, establish a need to own the freehold permanently. Nor does compensation answer that prior question of necessity. The Applicant must demonstrate why the particular interest sought is required and why a lesser interest – leasehold, permanent rights, restrictions or temporary possession – would not suffice.

The problem is intensified by uncertainty over the development for which those powers are sought. The Solar generation element has Gate 2 Phase 2 prioritisation, whereas the BESS remains at Gate 1 with no confirmed indicative connection date. The DCO may permit solar without BESS, delayed or reduced BESS, partial build-out and unused cable or substation infrastructure. Compulsory powers should not continue over land required only for an optional or ultimately omitted Work.

The National Grid position is more fundamental. NGET states that the replacement connection agreement is not expected to require East Pye to secure the land or consent for the proposed National Grid Substation; that DCO consent would not oblige NGET to use that substation; and that the final point-of-connection solution cannot yet be confirmed. The land requirement therefore remains contingent upon an unresolved transmission solution. Permanent compulsory acquisition cannot properly be justified merely to preserve one possible future connection option.

The preliminary chapter consequently establishes a legal-control problem which persists throughout the WR: the Applicant seeks broad statutory powers before the Scheme, land requirement, connection solution and mitigation package have been resolved with corresponding precision.

Chapter 1: Need, Good Design and the Public-Interest Case

Chapter 1 distinguishes the undisputed national need for renewable electricity from the claimed need for East Pye Solar itself. That distinction is central to the planning balance.

BEPS's evidence records approximately 4,015 MW of renewable generation already within the T7 long-term planning pipeline by January 2026, around 96% of it solar, against the 3,300 MW CP2035 T7 Tx+Dx solar modelling envelope. BEPS does not contend that 3,300 MW is a statutory cap. The material point is that NESO's FOI response records that its Gate 2 'at/over CP2035' assessment used only operational

capacity—552.84 MW at the Gate 2 window close—rather than the wider consented and in-planning pipeline. Gate 2 allocation therefore does not, without more, establish an unmet T7 need which East Pye Solar is required to satisfy.

The connection case is also less certain than a simple statement of Gate 2 status suggests. The WR records that formal revised transmission offers are subject to further engineering review, while the associated BESS remains Gate 1. The Scheme therefore cannot derive firm project-specific balancing, congestion or flexibility benefits from a storage component whose equivalent connection position has not been demonstrated.

The significance of East Pye’s Gate 2 status must be understood in the context of the material change made to the regional solar targets immediately before Ofgem approved connections reform. NESO’s original Clean Power 2030 ‘independent’ advice did not envisage a system dominated by transmission-connected solar. Its pathways assumed that approximately 90% of solar capacity would be connected to the distribution network, expressly noting that the connections queue already contained more solar capacity than was required. The December 2024 Connections Reform framework reflected that approach by applying separate transmission and distribution regional allocations. In T7 East Anglia the original transmission-solar allocation was only 100 MW for 2030 and approximately 900 MW for 2031–35. NESO’s own December 2024 assessment showed a transmission-solar queue in T7 many times larger than that 2035 allocation.

The subsequent change by DESNZ to the regional solar targets was not prompted by a finding that the overall national solar requirement had increased. It arose because the volume of large transmission-connected projects already being promoted did not fit the transmission allocations. On 7 April 2025 DESNZ stated expressly that there was a ‘misalignment’ because the increased transmission solar pipeline had not been reflected in the modelling underlying the original Clean Power 2030 advice. Following what DESNZ described as ‘extensive’ engagement with Ofgem, NESO and stakeholders, it decided to amalgamate the transmission and distribution solar allocations for 2031–35. The total national solar allocation was not increased; the distinction between the two network levels was removed, enabling the most advanced projects to compete for one combined regional allowance. For T7, the resulting 2035 Tx+Dx solar capacity became 3,300 MW.

That policy change occurred against documented engagement with transmission-scale solar developers. BEPS’s documentary record obtained through EIR and FOI includes the 3 December 2024 letter from Island Green Power and other solar developers seeking changes to the regional connections methodology. More significantly, NESO’s subsequent EIR disclosure confirms a January 2025 email thread and meeting involving Macquarie, DESNZ and NESO. Macquarie proposed a ‘deep dive’ into ‘6-7’ case studies which were ‘assets of Island Green Power’, and sought to ‘sense-check’ NESO/DESNZ thinking. The disclosed list of projects to be walked through expressly included the 500 MW ‘Long Stratton PV & Bess Station (East Pye)’ in T7. The disclosed slides reveal that T7 was the first of the project-specific case studies discussed at the 27 January 2025 meeting between DESNZ Macquarie at the latter’s London offices. The FOI documents

demonstrate that East Pye Solar itself was expressly before DESNZ as part of Macquarie/IGP's project-specific discussion of the consequences of connections reform. East Pye Solar Ltd is a subsidiary of Island Green Power, which is wholly owned by Macquarie Asset Management. DESNZ is in a quasi-judicial capacity as decision-maker on granting development consent to this project.

The Ofgem evidence makes the consequence of that change to combine distribution and transmission targets particularly important. Its 15 April 2025 TM04+ Impact Assessment records a T7 combined 2035 solar allowance of 3.3 GW. Against that allowance, Ofgem identified 660 MW already built, 122 MW under construction, 380 MW with planning consent and 3,418 MW with planning submitted. Thus, projects already built or at least in the planning system totalled approximately **4.58 GW**, around **1.28 GW above the new 3.3 GW T7 regional allowance**, before adding a further 2,180 MW recorded as having land rights and 4,531 MW whose land-rights status was unknown. Ofgem's own Gate 2 modelling went further: its medium scenario filled the entire 3,300 MW T7 allowance with 660 MW built, 122 MW under construction, 380 MW consented and 2,139 MW of planning-submitted projects, with **no capacity required from the land-rights-only category**. Ofgem itself described the wider queue as showing 'significant over-supply' of solar and batteries.

That chronology materially limits what can properly be inferred from East Pye subsequently obtaining Gate 2 status. It does not establish that the project itself is required to meet an unmet regional generation requirement. Indeed, Ofgem expressly recognised that amalgamating Tx and Dx allocations made substantially more well-advanced solar projects eligible for Gate 2 and increased the solar capacity expected to receive Gate 2 terms from approximately 39 GW to 65 GW nationally. In T7, Ofgem's April 2025 evidence showed that the revised regional allowance could already be filled by projects at planning-submitted stage or beyond. Gate 2 status should therefore not be treated as independent proof that East Pye Solar is necessary: it is an outcome of a methodology which was itself changed because the transmission-project pipeline exceeded the assumptions on which the original Tx/Dx allocations had been based.

This does not require the ExA to find impropriety in the Government's engagement with industry. The narrower and stronger planning point is evidential. The original system analysis anticipated overwhelmingly distribution-connected solar; transmission developers then pressed for changes to a methodology under which large parts of their pipeline risked falling outside the relevant capacity allocations; Government amalgamated the Tx and Dx allocations without increasing the overall national solar requirement; and Ofgem's contemporaneous analysis showed that East Anglia already had more advanced solar capacity in the pipeline than the enlarged combined regional allowance. In those circumstances, **East Pye's Gate 2 status cannot reasonably carry significant weight as evidence of project-specific or locational necessity**. The environmental harms identified throughout this Written Representation must therefore be weighed against the demonstrated benefits of East Pye Solar itself, not against an assumption that Gate 2 proves that this particular 500 MW development is required in South Norfolk.

The consumer-benefit case is similarly unproven. The Applicant asserts that East Pye Solar will not cause grid constraints or experience excessive curtailment, but BEPS identifies no disclosed Scheme-specific modelling showing generation profile, competing Gate 2 generation, relevant network constraints, reinforcement dates, BESS operating strategy or expected annual curtailment. Those are material omissions where the Scheme seeks positive weight for affordability and efficient system operation under EN-1.

Chapter 1 then applies those weaknesses to good design. The Scheme repeatedly deals with environmental constraints after the development envelope has been established: planting is used to screen landscape harm; habitat creation to address ecological disruption; later drainage to manage hydrological risk; revised haul routes to address highway objections; and later equipment selection or barriers to resolve noise. Those responses are not necessarily mutually compatible. A woodland screen may itself harm openness, heritage setting or ground-nesting-bird habitat; an internal haul route may avoid a highway problem while creating new ecological, soil, drainage or PRow effects.

The chapter therefore establishes the governing question for the whole Examination: whether the Applicant has demonstrated one environmentally coherent and deliverable scheme designed for this particular place, rather than a predetermined 500 MW project whose separate environmental conflicts are expected to be reconciled later. The subsequent chapters demonstrate why that question has not yet been answered satisfactorily.

Chapter 2: EIA Methodology

Chapter 2 identifies a structural weakness in the Environmental Statement: environmental systems are divided into technical chapters before their interactions are adequately assessed.

The receiving environment does not operate in those compartments. Hedgerows are simultaneously landscape structure, ecological corridors, historic boundaries and elements affected by highway works. Heavy clay soil controls agricultural productivity, runoff, drainage and groundwater recharge. Piling is simultaneously a construction, noise, archaeological, groundwater and contamination issue. Lighting affects landscape, residential amenity, tranquillity, aviation and light-sensitive species. Those pathways require receptor-led reconciliation.

The baseline also remains incomplete in matters capable of affecting design. Chapter 2 identifies unresolved or late evidence concerning white-clawed crayfish, the functional extent of barbastelle maternity-colony habitat, botany and aquatic ecology. Generic significance matrices and professional judgment cannot cure an incompletely defined receptor.

The same problem arises from deferred mitigation. Protected-species surveys, licences, detailed lighting, drainage, foundation risk assessments, construction

arrangements and other controls are repeatedly left to post-consent stages. Later information is legitimate where it refines an already demonstrated acceptable solution. It is materially different where the later work will determine whether an acceptable solution exists at all.

The consequence is that Chapters 6–18 cannot safely be treated as independent conclusions where they rely on inconsistent assumptions or unresolved inputs. Chapter 19 cannot repair an interaction which was omitted or understated in the chapter from which it should have originated.

Chapter 3: The Order Limits and the True Receiving Environment

Chapter 3 demonstrates that East Pye Solar is not proposed across generic agricultural land. The Order Limits encompass ten dispersed principal Sites, major electrical compounds, highway works and approximately 24 km of cable corridor within a landscape containing historic settlements, medieval churches, Listed farmsteads, PRowS, ancient woodland, veteran trees, hedges, ponds, chalk-stream tributaries, private water supplies and productive agricultural land.

The ecological evidence is particularly important. The Applicant's own bat evidence later establishes a nationally important assemblage. Ancient woodland, County Wildlife Sites, Roadside Nature Reserves and hydrologically sensitive habitats occur throughout or immediately beside the development area. Norfolk Wildlife Trust's evidence characterises the area as 'dense with nature'. These characteristics are not conveyed adequately by describing receptors principally by distance from separate numbered Sites.

The same is true of water. Ditches, field drains, tributaries, Principal Aquifers and private water supplies form connected source–pathway–receptor systems which cross the artificial boundaries between Sites and ES chapters. Historic landscape character is similarly carried by the relationship between fields, lanes, churches, farmsteads, greens and settlements rather than by designation polygons alone.

The significance of Chapter 3 is therefore one of site selection. The density of constraints is itself evidence. A scheme requiring repeated buffers, route changes, habitat corridors, crossing methodologies, later licences, additional surveys and mitigation across its full extent is not development inserted into an environmentally simple location. Those constraints should have influenced the fundamental scale and location of the Scheme – requiring avoidance – before mitigation became necessary.

Chapter 4: Scheme Definition and Deliverability

Chapter 4 demonstrates that material uncertainty remains over what will actually be constructed. The DCO envelope permits up to three 132 kV Project Substations and three 400 kV Project Substations, a BESS, a new National Grid Substation, extensive 33–400 kV cabling and overhead-line works. At Site 1B, the Project Substation evolved from the approximately 7 m-high 132 kV installation presented during consultation, to a 400 kV installation initially described at approximately 13 m, and finally to an application envelope permitting a compound of up to 1.1 ha and structures reaching 15 m. The grid works may include up to four new pylons reaching approximately 61 m.

Those are material physical changes, not minor equipment refinements. They affect landscape, heritage, aviation, noise, drainage, groundwater, construction and abnormal-load requirements. Yet several associated maximum parameters remain unresolved or insufficiently reconciled across the ES.

The BESS is also not fixed by an equivalent confirmed connection status, capacity-duration relationship or long-term technology. The DCO must therefore be tested against solar-only operation, delayed BESS, reduced BESS and future replacement technologies rather than only against the promoted integrated case.

Most importantly, the Site 1B National Grid solution is not confirmed by NGET. The final size, design and location remain affected by wider connection reform and potentially by other projects. NGET does not expect the revised connection agreement to require East Pye Solar to secure the land or consent and expressly states that consent would not oblige it to use the proposed substation. The emergence of North Anglia Node A on the proposed Norwich–Tilbury transmission reinforcement further strengthens the need to test whether separate permanent transmission infrastructure at Great Moulton remains strategically justified.

Whole-life uncertainty is substantial. The Scheme permits complete panel replacement over a period of up to 24 months, up to five BESS replacement cycles, major transformer and electrical replacement, and a 60-year operating period. Some infrastructure, including the National Grid Substation and grid connection works, is intended or capable of remaining beyond solar decommissioning.

The Applicant's recent Examination material also changes the decommissioning position. It now states that private landowner agreements contain decommissioning securities intended to protect against default or insolvency and capable of periodic revaluation or top-up. The unresolved issue is whether a series of private, landowner-specific securities can secure the coordinated decommissioning and restoration of East Pye as one NSIP. It remains unclear who would organise Scheme-wide removal and restoration if the undertaker failed; whether every landholding benefits from equivalent protection; whether the securities cover soil, drainage and contamination remediation as well as equipment removal; whether they remain adequate where restoration costs materially exceed present estimates; and whether the public

authority enforcing the DCO can access them. The Applicant should also clarify reported development-uplift or overage provisions in land agreements. Such provisions would not determine future planning use, but if they contemplate a non-agricultural future for the land, they must be reconciled with the DCO and ES case that the Scheme is temporary and that land not required permanently will be restored to agricultural use. The present arrangements therefore do not yet demonstrate a coherent, insolvency-resilient and enforceable whole-Scheme restoration mechanism.

The Rochdale Envelope cannot cure uncertainty over the essential identity of the project. It can accommodate detailed-design flexibility only within a defined and environmentally assessed maximum case. The ExA requires certainty that every realistically permitted implementation scenario remains within that case. Chapter 4 demonstrates that this has not yet been achieved.

Chapter 5: Reasonable Alternatives and Site Selection

Chapter 5 explains why so many constraints occur within the selected development area. The Applicant originally identified Norwich Main as the prospective point of connection, adopted a 20 km search radius around it and sought sufficient willing landowners to assemble the required land. Only afterwards did NGET advise that Norwich Main lacked both the existing capacity and the ability to expand sufficiently for the proposed 500 MW project.

That should have caused the strategic basis of the land search to be revisited. Instead, the Applicant retained the assembled Sites and moved south along the transmission line in search of another connection. Great Moulton was selected in part because the previously identified Sites also lay within approximately 20 km and because willing landowners had already been secured. The WR records that potentially reasonable alternative connection areas, including Siting Zone 3, were treated as less preferable partly because they were further from that existing land package.

The process is therefore circular. Land was assembled around Norwich Main before Norwich Main was known to be viable. When it failed, the connection search was constrained by the desire to preserve that land. Proximity to the resulting connection was then relied upon to justify the original Sites.

The 500 MW scale was treated similarly. The Applicant defined the project objective by reference to the 500 MW connection and then discounted smaller schemes and the ‘do nothing’ case because they would not deliver the predetermined capacity. That does not demonstrate that 500 MW represents the environmentally appropriate scale for this landscape.

Nor was site selection ecologically led. The design history records repeated later adjustments for Spring Wood, ancient woodland buffers, Fritton Grange Meadows,

habitat corridors and other constraints. Those are legitimate mitigation measures, but they demonstrate that ecology operated principally to modify development after the land package had been assembled, rather than to identify the least constrained landscape in the first place.

Chapter 5 therefore goes directly to proportionality. Where the specific regional necessity of East Pye is not demonstrated and the selected landscape generates extensive harm, a smaller scheme, materially different land configuration, alternative location or non-development scenario cannot be excluded simply because it fails to reproduce the Applicant's original commercial project.

Chapter 6: Climate Change – the Headline Climate Benefit Is Not Reliably Calculated

The principal claimed benefit of East Pye is climate mitigation. That benefit must therefore be capable of independent verification. On the figures reproduced and tested in BEPS Chapter 6, it is not. The Applicant's headline greenhouse-gas calculations are internally inconsistent, contain material arithmetic or unit discrepancies, omit relevant emissions and rely upon a lifetime counterfactual which assumes that the electricity displaced by East Pye Solar retains the carbon intensity of the 2031 grid for the following 60 years.

The first problem is basic reconciliation. The Applicant gives construction emissions of **347,673 tCO₂e**, operational emissions of **1,104,918 tCO₂e** and decommissioning emissions of **6,390 tCO₂e**. Those figures total **1,458,981 tCO₂e**. Against the Applicant's stated lifetime generation of **36.33 TWh**, that equates to approximately **40.16 gCO₂e/kWh**. The Applicant, however, reports a lifecycle intensity of **39.67 gCO₂e/kWh**. The operational emissions alone equate to approximately **30.41 gCO₂e/kWh**, not the **29.74 gCO₂e/kWh** reported. The principal intensity figures therefore cannot be reproduced from the Applicant's own stated emissions and generation totals.

The discrepancy becomes more serious in the claimed lifetime carbon saving. The Applicant applies a comparator of **65 gCO₂e/kWh** to **36.33 TWh** of lifetime generation. On those inputs, gross avoided emissions are: **36.33 billion kWh × 65 gCO₂e/kWh = 2,361,450 tCO₂e**.

Deducting the Applicant's stated whole-life emissions of **1,458,981 tCO₂e** leaves a net saving of only **902,469 tCO₂e**. The Applicant nevertheless reports a lifetime saving of **1,294,630 tCO₂e**. The difference is approximately **392,000 tCO₂e**. Even if only the stated operational emissions of **1,104,918 tCO₂e** were deducted—which would itself be an incomplete whole-life calculation—the result would be **1,256,532 tCO₂e**, still approximately **38,000 tCO₂e below** the Applicant's reported figure. BEPS has therefore been unable to identify a reproducible route from the Applicant's own headline inputs to its claimed principal climate benefit.

The underlying component calculations contain further discrepancies. The Applicant records **26,393 tonnes of glass** with an emissions factor of **1.4028 kgCO₂e/kg**, but reports only **1,371 tCO₂e**. Direct multiplication gives approximately **37,024 tCO₂e**. It records **9,973 mounting structures**, each weighing **800 kg**, with an emissions factor of **2.71 kgCO₂e/kg**, but reports **37,845 tCO₂e**; direct multiplication gives approximately **21,621 tCO₂e**. BEPS also identifies an apparent transposition in construction-worker journey distances, giving approximately **2,479 tCO₂e** when recalculated rather than the reported **2,192 tCO₂e**.

Other inputs are internally implausible or insufficiently explained. Chapter 6 records approximately **5,632 km of electrical cable** with a combined mass of only **569 tonnes**, while elsewhere giving principal cable material weights of **21 kg/m for copper and 10.7 kg/m for aluminium**. Those figures cannot all describe the same cable inventory without further explanation. The BESS calculation also refers to '80% degradation per year', which, read literally, is not credible and appears to confuse annual degradation with retained capacity. These are not immaterial typographical issues where they occur within the calculation used to establish the Scheme's principal environmental benefit.

There is then a separate methodological problem. The Applicant acknowledges that grid carbon intensity is expected to fall rapidly but applies the **2031 factor of 65 gCO₂e/kWh across the entire 60-year generation period**. Electricity generated in 2050, 2070 or 2090 is therefore treated as though it displaces electricity with the carbon intensity of the 2031 grid. BEPS's sensitivity testing, using the methodology relied on by campaigners at the Great North Road NSIP examination, demonstrates how decisive that assumption is: using the Applicant's stated generation and emissions but allowing the grid factor to decline to 20 gCO₂e/kWh by 2050 produces an illustrative net adverse balance of approximately **447,000 tCO₂e**; a decline to 10 gCO₂e/kWh produces an illustrative adverse balance of approximately **747,000 tCO₂e**. Those sensitivity results are not advanced as the only correct forecasts. Their significance is that the Applicant's claimed beneficial outcome is highly dependent upon freezing the grid counterfactual at the opening-year value.

The assessment is incomplete in other material respects. The BESS dominates the stated lifecycle emissions and is assumed to undergo repeated replacement, yet its future chemistry, charging source, cycling regime and parasitic cooling demand are not fixed. Full panel replacement, up to five BESS replacements and transformer replacement are included without a transparent activity and logistics schedule for each replacement cycle. Land-use change and soil carbon are not properly quantified despite EN-1 requiring whole-life GHG assessment to include land-use effects. Extensive ancillary infrastructure and operational loads are omitted on assumptions of individual immateriality without demonstrating that the aggregate exclusions remain below the stated threshold. The water assessment identifies **16,871 m³ of construction water and 309,196 m³ of operational water**, but the climate calculation does not include the foreseeable transport emissions if an off-site tankered supply is required.

These defects are material because climate benefit is one of the principal matters relied upon to outweigh East Pye Solar's admitted environmental harms. The Examination should not assign substantial positive weight to a carbon saving which cannot be reproduced from the Applicant's own figures. At minimum, the Applicant must disclose the complete calculation workbook, formulas, source data and quality-assurance record; reconcile every headline total; correct the identified arithmetic and unit discrepancies; undertake year-by-year declining-grid sensitivity analysis; and recalculate whole-life emissions including land-use change, replacement, parasitic demand, excluded infrastructure, water supply and realistic curtailment.

Until that exercise is completed, the Applicant has not established the magnitude– or even the robustness of the direction – of the whole-life climate benefit relied upon in the planning balance. Where the principal claimed benefit cannot be reconciled mathematically from the Applicant's own stated inputs, it cannot safely be treated as a counterweight to the substantial and demonstrable harms identified elsewhere in the Environmental Statement and in this Written Representation.

Chapter 7: Landscape and Visual Effects

Landscape harm is not hypothetical; it is admitted by the Applicant. The LVIA identifies Major Significant construction effects at, among other receptors, Site 1, the BESS, Site 7, Site 8 and important Landscape Character Areas. At Site 1 the Applicant identifies Major Significant effects during construction, at Year 1 and still at Year 15. It expressly describes a 'total change' to key landscape characteristics. The BESS remains Moderate Significant at Year 15; Sites 7 and 8 and B1 Tas Tributary Farmland and E2 Great Moulton Plateau Farmland also retain significant effects.

Individual receptors confirm the severity. Views south-east of Great Moulton remain Major to Substantial and Significant at Year 1. Significant effects remain from Great Moulton and surrounding PRowWs at Year 15 because the National Grid and Project Substations continue to influence the view. At 22 Hillcrest Court, upper-floor effects are Major to Substantial Adverse and Significant at Year 1 and remain Moderate Adverse and Significant at Year 15. Oakdene Cottage experiences a Major Adverse and Significant first-floor effect at Year 1.

The development consists of moving tracker arrays up to 4.5 m high, together with substations, BESS, fencing, CCTV, tracks and transmission infrastructure. Chapter 7 itself acknowledges the transformation from agricultural land to an 'energy production landscape'.

The mitigation case does not remove that conflict. In the Great Moulton Plateau, openness and expansive sky are defining landscape characteristics. New woodland may conceal industrial infrastructure, but it does so by removing the openness which defines the landscape. At several receptors the Applicant itself identifies continuing

effects because mitigation planting changes the character of open views. Screening and preservation are therefore not equivalent.

The night-time assessment is also incomplete. The Lighting Strategy confirms operational lighting at major compounds and column-mounted lighting around the BESS, yet Chapter 7 contains no substantive assessment of the significance of night-time landscape effects despite the Inspectorate having required consideration of intermittent and motion-activated lighting.

The photomontage evidence requires similar caution where summer foliage provides maximum screening. That is particularly important around Grade I St Catherine's Church at Fritton. The existence of a separate winter baseline photograph does not show how the development itself appears in leaf-off conditions.

Independent professional LVIAs commissioned on behalf of the South Norfolk community will be submitted by Hempnall Parish Council and Shotesham Parish Council and together cover the complete Scheme. BEPS supports their conclusions. They are deliberately not duplicated within this Written Representation.

The Chapter 7 evidence therefore establishes a substantial and enduring adverse effect which exists even before the wider methodological objections are applied.

Chapter 8: Ecology and Biodiversity

The ecological case is materially more serious than a conventional solar-farm habitat assessment. The Applicant's own Bat Activity Survey scores the bat assemblage at 22 out of a possible regional 28, or 78%, above its 70% threshold for national importance. Eleven bat species were recorded. Barbastelle was recorded at every static detector and was the third most frequently recorded species, with 11,699 passes and a reported mean activity index of 23.12 passes per hour. The Order Limits therefore form part of a landscape used extensively by a nationally important bat assemblage rather than merely containing isolated hedgerow flight lines.

The maternity-colony evidence is particularly important. Multiple barbastelle Core Sustenance Zones overlap the entire Scheme. Independent 2025 work by the Barbastelle Study Group at Little Wood confirmed a maternity colony through licensed radiotracking, with an emergence count of approximately 36 bats pre-parturition and an estimated larger post-parturition colony. Further colonies are predicted or unresolved at additional woods. The Norfolk Barbastelle Study Group calls for further radiotracking and woodland survey because acoustic data alone cannot establish the full commuting, foraging and alternative-roost network.

The woodland and tree resource compounds the sensitivity. Six ancient woodlands directly adjoin the Scheme, several of them SSSIs. The South Norfolk Tree Warden evidence identifies approximately 621 trees with potential roost features. Repeated access openings, hedgerow gaps, lighting, fencing, traffic, root disturbance and

construction therefore affect a functional network, not simply the area of habitat physically removed.

The ecological baseline remains incomplete elsewhere. There has been no full-season botanical survey even though specialist evidence from a level 6 Botanist familiar with the area identified the need for one due to vanishingly rare assemblages of important botany within and surrounding the order limits. The least-surveyed habitats – roadside verges, historic lanes, hedgebanks, margins and ditch edges – are precisely those exposed to proposed access and highway works. The aquatic appraisal was habitat-led and affected by unusually dry conditions.

The white-clawed crayfish evidence illustrates the consequence of that baseline weakness. The Applicant's desk study did not identify records within its selected search area, yet the evidence before the Examination includes an Environment Agency record from 2020, two juveniles recorded by Norfolk Rivers Trust in October 2020, three animals recorded by hand survey/eDNA work in 2021 and further confirmation in 2022 at Saxlingham Thorpe, within 2km of the order limits. That is evidence of an extant breeding River Tas population in a hydrologically connected system.

BNG cannot resolve those issues. Habitat units do not determine whether a European Protected Species licence can satisfy the 'no satisfactory alternative' and favourable-conservation-status tests; they do not reproduce ancient woodland; and they do not establish that a maternity-colony network, crayfish population or rare botanical assemblage remains functional.

The ecological objection is therefore an avoidance case. The Applicant has established national ecological importance while leaving material uncertainty about the functional use of the very landscape it proposes to industrialise. That uncertainty cannot rationally be used to support a lesser finding of harm.

Chapter 9: Water Environment

The water case is one of the most important unresolved technical constraints. The Scheme crosses the River Tas/Hempnall Beck system, Starston Brook, Broome Beck and an extensive network of ordinary watercourses, field drains and groundwater pathways. These are not isolated surface-water features. They are hydrologically and hydrogeologically connected to the River Tas and River Waveney chalk-stream systems and to the underlying Principal Aquifer, while the Applicant's own scoping material records groundwater as being in broad continuity with watercourse levels. The relevant receptor is therefore a single interconnected surface-water and groundwater system in which disturbance, sediment, pollution, dewatering or the creation of preferential pathways at one location may be transmitted beyond the immediate development parcel to downstream chalk-stream receptors, groundwater-dependent habitats and private or public abstractions. The assessment cannot safely treat individual ditches, crossings, Sites or aquifer receptors as discrete systems where the evidence demonstrates direct connectivity between them.

At scoping, the Environment Agency identified 35 private water supplies within 250 m for which accurate locations and/or abstraction strata were unavailable. It required impacts to be assessed according to actual influencing distance rather than an arbitrary buffer and subsequently required a wider search because of Principal Aquifer conditions. Six licensed groundwater abstractions occur within 1 km, including a public-water-supply borehole whose Source Protection Zone extends into the Scheme area.

The independent H Fraser Consulting review ('HFCL') identifies 15 numbered technical deficiencies concerning the conceptual hydrogeological model, WFD assessment, water resources, private supplies, GWDTEs, firewater, foundations and other pathways. Its conclusion is a 'significant lack of confidence' that impacts upon the water environment are properly understood or capable of mitigation. That conclusion directly challenges Chapter 9's repeated negligible/minor residual findings.

The WFD assessment is also contested. HFCL concludes that screening out three surface-water bodies and one groundwater body is not appropriate where development occurs within their catchments and connecting ditches and water features provide pathways. Broome Beck illustrates the problem: Sites and CRCs lie within its WFD catchment and field drains connect towards it, but the waterbody is screened out principally on the assumption that trenchless crossing avoids direct physical disturbance. That does not address sediment, construction runoff, drainage alteration, dewatering, fuel or oil release and other catchment pathways.

Site 1 and Site 5 concentrate the risk. Site 1 combines BESS, 400 kV infrastructure, hardstanding, transformers, drainage, firewater and sensitive groundwater within the Starston Brook catchment. Site 5 lies within and is directly connected by ditches and a culvert to the River Tas-connected system, with private water supplies, major electrical infrastructure and the ecological sensitivity evidenced by white-clawed crayfish.

HFCL's findings make this a gateway issue for consent, not a matter capable of being left to routine post-consent drainage design. Its review does not identify a handful of minor omissions; it identifies 15 substantive deficiencies affecting the conceptual hydrogeological model, identification of receptors and pathways, private water supplies, groundwater-dependent terrestrial ecosystems, WFD screening, foundations and piling, firewater, water resources and the interaction between surface water and groundwater. Those matters determine whether the Applicant has correctly identified what may be affected, how an effect could be transmitted and whether the proposed mitigation could actually prevent it. HFCL's conclusion of a 'significant lack of confidence' that impacts on the water environment are properly understood or capable of mitigation therefore strikes at the foundation of Chapter 9's repeated Negligible or Minor residual-effect conclusions. Where the underlying hydrogeological model, the drinking-water receptors and the WFD pathways remain materially uncertain, those conclusions are not evidentially secure and cannot simply be converted into certainty through later CEMPs, drainage details, foundation risk assessments or construction method statements. Before any positive recommendation could properly be made, the Applicant would need to demonstrate, on a revised and technically coherent evidence

base, the full surface-water-groundwater connectivity, the complete private-water-supply receptor network, compliant WFD screening and assessment, and the acceptability of piling, foundations, dewatering, firewater and other pollutant pathways. Unless those matters are resolved during Examination, the ExA cannot safely conclude that significant effects on the water environment have been identified and can be prevented, or that WFD deterioration and risks to public and private water supplies have been excluded. On the present evidence, the water-environment case is not merely incomplete: it is insufficiently reliable to support development consent.

Chapter 10 — Cultural Heritage

The divergence between the Applicant and independent heritage evidence is substantial and quantifiable. The Applicant's own Heritage Statement carries forward one Scheduled Monument, two Grade I listed buildings, two Grade II* listed buildings, 42 Grade II listed buildings and four Conservation Areas. It ultimately identifies heritage harm to only two designated assets - Moulton Farmhouse and Barn Cottages - both at the lower end of less-than-substantial harm.

David Edleston's independent Heritage Impact Assessment identifies less-than-substantial harm to 36 designated assets: 32 listed buildings and four Conservation Areas. The disagreement is not confined to minor assets. It includes moderate harm to Grade I St Michael's Church, Grade II* Old Rectory and Oaks Farmhouse, and moderate-to-high less-than-substantial harm to Grade I St Catherine's Church at Fritton.

The reason for the difference is methodologically important. The Applicant relies heavily on distance, absence of direct intervisibility, retained foreground fields and eventual screening. The independent assessment places greater weight on the contribution made by open agricultural setting, isolation, approaches, historic land relationships, group value and the experience of buildings within an agricultural landscape.

Barn Cottages provides a clear example. The Applicant accepts lower-end harm but says that it falls away when woodland screening matures; its own estimate is that adequate screening may take approximately 30 years. The independent assessment identifies moderate harm because the BESS and substation introduce industrial development into the open rural setting and the screening itself changes that setting.

Archaeological uncertainty remains as well. The Cable Route Corridor was not fully subject to geophysical survey and trial trenching because the route was not finalised. Historic England confirms that parts of the Order Limits remain incompletely evaluated and that previously unidentified remains potentially equivalent in significance to designated assets may still be found. It also identifies cumulative interaction with Tasway Energy Park as an examination issue and accepts that residual policy harm will remain.

The Applicant's conclusion of essentially no residual heritage effect is therefore not supported by the full body of evidence before the Examination.

Chapter 11: Transport, Access and Constructability

Chapter 11 presents another gateway issue: East Pye Solar cannot be built unless a physically available, environmentally assessed and highway-authority-acceptable access system exists.

Norfolk County Council's June 2026 Relevant Representation states expressly that the submitted strategy for Sites 7–10 does not adequately address the highway constraints, does not provide sufficient mitigation and 'cannot be supported'. For Sites 7–9 it requires access through CRC8 west of Hempnall and internal haul roads or cable-corridor connections. For Sites 10A–10D it requires a common Harvey Lane access with internal connections, and Site 10E through CRC14. That is materially different from the public-road strategy assessed by the Applicant.

The history demonstrates that this is not a minor CTMP matter. NCC rejected construction traffic on Hall Lane and regarded Fairstead Lane as inappropriate, yet Hall Lane remains within later routeing and AIL proposals. Fairstead Lane, The Krons and other routes have repeatedly changed. If the NCC solution requires new internal routes, land, watercourse crossings, PRow crossings, tree loss or drainage works, those consequences themselves require assessment.

The Applicant identifies 65 construction access and crossing points. Many relevant roads are single-track, constrained by vegetation, bridges, limited passing places, residential frontage or schools. The Transport Assessment records construction traffic increases of 116% on Fairstead Lane, 58% on Shotesham Road, 45% on Bussey's Loke and 48% on Market Lane. Low existing flows do not establish low sensitivity where the roads are physically narrow and used by pedestrians, cyclists and equestrians.

The mitigation package itself demonstrates the constraint: holding areas, call-forward systems, one-HGV-at-a-time release, marshals, signals, passing places, speed restrictions and compressed delivery windows. Those measures may manage a workable route; they do not prove that the route is physically or programmatically capable of delivering the Scheme.

Abnormal indivisible loads remain independently unresolved. There is no final port of entry, final SRN route or final local route for all major equipment. National Highways maintains a formal objection, requiring further work on the A47/A140 junction, cumulative construction traffic, worker travel, traffic caps, AIL routing and Requirement 15, and states that it cannot remove its objection unless the matters are resolved before recommendation.

Transport is therefore not merely an adverse effect capable of later management. The Applicant has not yet demonstrated an end-to-end construction system which both highway authorities accept and which has been environmentally assessed.

Chapter 12: Noise and Vibration

The Applicant's own modelling identifies serious effects which are subsequently downgraded largely by reference to duration or future mitigation. For HDD, 15 night-time receptors are predicted above SOAEL, with effects extending to Major Adverse. Dwellings at Lundy Green, Market Lane Farm, Thetford Farm House, Dawsons Farm and Wash Lane are among those identified. Chapter 12 nevertheless concludes that the effects are not significant because HDD at each location is expected to be short-lived. That confuses EIA duration with the separate policy significance of an effect which the Applicant itself characterises as 'present and disruptive' and capable of sleep disturbance.

The rural acoustic baseline is exceptionally low: night and early-morning levels are frequently in the high teens or low 20s dB LA90. Seven operational receptors are initially predicted at approximately +6 to +8 dB above background in the early-morning period. Those effects are removed in the later modelling by applying additional inverter mitigation rather than by demonstrating that the submitted design is inherently quiet.

Mitigation is extensive and fundamental to the Applicant's case. It includes 4 m acoustic barriers around the BESS, reduced fan duty, quieter equipment selection, plant orientation, attenuators and acoustic enclosures. Those measures are not precautionary refinements to an inherently acceptable design: they are required because the unmitigated development produces materially worse effects in an exceptionally quiet rural environment. The Applicant's own scoping work acknowledged that final equipment selection would not occur until after the DCO decision and that operational assessment would therefore initially rely on comparable library plant. The environmental acceptability of the BESS and associated electrical infrastructure is consequently dependent upon a future combination of equipment specification, operational restriction and substantial physical screening which has not yet been demonstrated for the final plant.

That dependence on mitigation is itself relevant to siting. A BESS or substation which requires 4 m acoustic barriers, restricted cooling operation, careful orientation, quieter plant, attenuators and enclosures in order to approach acceptable noise conditions is not infrastructure which the receiving acoustic environment readily accommodates. The baseline here is not an urban or industrial soundscape in which additional plant noise can be readily masked; night and early-morning background levels are frequently only in the high teens or low 20s dB LA90. In that context, the scale of intervention required to suppress operational sound is evidence of an inherent conflict between major continuously operating electrical infrastructure and its chosen rural location. Good design should first avoid creating the conflict; it should not depend upon progressively enclosing and attenuating an intrinsically noisy installation after the location has been selected.

The construction case is still more serious because mitigation does not remove the admitted effect. Fifteen night-time receptors are predicted above SOAEL during HDD,

with effects extending to Major Adverse and including identified dwellings at Lundy Green, Market Lane Farm, Thetford Farm House, Dawsons Farm and Wash Lane. The Applicant does not demonstrate that those noise levels are rendered acceptable by mitigation; instead, it relies principally upon the anticipated duration of HDD at each location to conclude that the resulting EIA effect is not significant. The physical noise exposure therefore remains: the assessment simply changes its significance classification because it is expected to occur for a limited period. Where the Applicant itself identifies night-time noise above SOAEL—an effect characterised as ‘present and disruptive’ and capable of causing sleep disturbance—the fact that residents may experience it for a shorter period does not demonstrate that the location or construction methodology is environmentally acceptable.

There is also unresolved uncertainty even in the mitigated operational case. South Norfolk Council’s independent acoustic review questions source geometry, frequency-dependent modelling, point-source assumptions, barrier performance and whether the complete National Grid plant inventory has been included. The Applicant has not disclosed the source spectra necessary to verify the low-frequency assessment and applies no BS 4142 acoustic-character correction for tonality or distinctiveness. In a rural soundscape of this quietness, those omissions are material because transformer hum, inverter tones and fan noise may be considerably more perceptible than an equivalent level of non-distinctive sound.

The proper conclusion is therefore stronger than that the Applicant should secure better noise controls. The evidence shows a development which is acoustically dependent upon substantial engineered mitigation simply to reduce operational effects, while construction still produces night-time SOAEL exceedances and Major Adverse effects at numerous homes. That combination is evidence of a fundamental incompatibility between the proposed infrastructure and the acoustic environment in which it has been placed. It is too close to homes and areas of ecological sensitivity.

Where major electrical infrastructure requires extensive barriers, restricted operating regimes and future equipment selection to approach acceptability, and significant disruptive construction noise remains even after mitigation assumptions are applied, the Applicant has not demonstrated that the development can be accommodated at this location without unacceptable effects. Chapter 12 therefore weighs materially against consent and reinforces the wider conclusion that the Scheme has been fitted into a location which lacks the environmental capacity to accommodate it.

Chapter 13 — Air Quality

The Applicant has not produced a sufficiently representative or receptor-specific evidential basis for concluding that construction and decommissioning effects will be negligible or not significant across a geographically dispersed rural NSIP.

The first weakness is the baseline. The Applicant undertook no Scheme-specific monitoring and states that existing data are sufficient. Yet seven of the eight diffusion-tube locations relied upon are in the traffic-heavy town of Long Stratton on the A140,

and the only continuous indicative monitor used for NO₂, PM₁₀ and PM_{2.5} is also beside the A140 in Long Stratton. Most of East Pye would instead be constructed across low-traffic countryside, villages, hamlets and minor rural roads. The Applicant's own figures demonstrate the mismatch: the 2024 annual mean NO₂ concentration at the selected A140 roadside monitor was 23.7 µg/m³, while DEFRA-modelled backgrounds across much of the Order Limits are only approximately 5.4–6.3 µg/m³. The measured and modelled environments are therefore materially different.

The Long Stratton evidence also has temporal limitations. Much of the diffusion-tube dataset predates completion of the bypass and therefore reflects the town's former A140 through-traffic environment. The Zephyr monitor commenced only in August 2024; its 2024 dataset had 40% capture, and the 2025 data are not separated into pre- and post-bypass periods. The Applicant consequently has no measured validation of the much lower background concentrations assumed at the rural receptors most exposed to new construction traffic.

That deficiency matters because Chapter 13 relies heavily on the EPUK/IAQM traffic screening criteria rather than receptor-specific dispersion modelling. The Applicant's own Appendix describes the thresholds of 500 LDV AADT and 100 HDV AADT outside an AQMA as indicative criteria for deciding whether detailed assessment should be undertaken. Yet where Scheme traffic remains below those thresholds, Chapter 13 simply accepts the resulting pollutant change as less than 0.5% of the relevant objective and therefore negligible. No receptor-specific NO₂, PM₁₀ or PM_{2.5} concentration is calculated.

The cumulative assessment exposes the weakness more clearly. Table 13.12 predicts cumulative construction increases of 1,387 AADT including 806 HDVs on A140 Link 01, 1,313 AADT including 806 HDVs on Link 03, and 1,160 AADT including 806 HDVs on Link 21. Those HDV increases are more than eight times the Applicant's own 100-HDV screening threshold. Chapter 13 expressly acknowledges that the criteria are exceeded on all three links, but still undertakes no quantitative dispersion modelling.

Instead, the Applicant concludes that cumulative effects are not significant because East Pye Solar contributes only part of the total traffic, historic Long Stratton monitoring remains below statutory objectives, future vehicle emissions are expected to improve, construction is temporary and traffic will be managed through the CTMP. That creates an internal methodological inconsistency: below the screening thresholds, the effect is declared negligible without modelling; substantially above the thresholds, modelling is still not undertaken and qualitative reasoning is substituted instead. The screening methodology therefore appears incapable of triggering the detailed assessment it was designed to identify.

Construction dust is similarly dependent upon mitigation rather than demonstrated low inherent risk. Chapter 13 identifies earthworks, construction and trackout as presenting a 'high risk' of dust impacts—the highest IAQM risk category—but then scopes the pathway out because CEMP, OEMP and DEMP measures are assumed to reduce the effects to not significant. That approach is only as robust as the controls on which it

depends. For a Scheme involving numerous Sites, cable routes, compounds, haul roads and extensive soil disturbance, the Examination should therefore scrutinise the secured monitoring locations, PM10 and PM2.5 controls, trigger levels, intervention requirements, trackout measures, dry-weather controls and enforcement arrangements rather than treating the existence of an outline management plan as sufficient.

This has an ecological dimension as well as a human-health one. Natural England identified SSSIs including Sexton Wood, Flordon Common, Hedenham Wood and Tindall Wood as potentially sensitive to construction traffic and dust, while Norfolk Wildlife Trust also identified construction-related air-quality effects on habitats and species. Those receptors require the mitigation relied upon to be effective and enforceable.

PM2.5 requires particular caution. UKHSA advised that particulate matter and nitrogen oxides are non-threshold pollutants and that health benefits arise from reducing exposure even below statutory standards. NCC Public Health likewise advised that vulnerable populations should be considered within the construction-dust assessment. Chapter 13 acknowledges DEFRA's PM2.5 interim target of $10 \mu\text{g}/\text{m}^3$ and its planning guidance, but its assessment remains focused principally on compliance and screening thresholds. In a rural area where modelled background PM2.5 is generally only around $5.6\text{--}6.2 \mu\text{g}/\text{m}^3$, the relevant question is not simply whether the statutory limit is exceeded but whether avoidable additional exposure has been minimised.

Other emission pathways remain similarly conditional or deferred. PINS agreed to scope NRMM emissions out only if the ES supplied sufficient information on machinery type, number, location and operating hours; Chapter 13 does not clearly demonstrate where all four elements have been provided. More significantly, PINS originally allowed operational combustion emissions to be scoped out because the Applicant stated that no combustion plant was proposed. The final Scheme now allows a backup diesel generator of up to 500 kVA at the National Grid substation. Its specification and emissions are not fixed, yet Chapter 13 declares the effect not significant on the basis of expected infrequent operation, distance to receptors and possible later mitigation such as stack-height increase or SCR. The factual premise on which the original scope-out was granted has therefore changed.

Replacement activity is also treated largely by assumption. Solar panels may be replaced extensively and BESS components repeatedly during the 60-year operational period, yet traffic and dust from those phases are screened out on the basis that they are expected to remain below generic thresholds. A transparent maximum replacement scenario has not been provided.

The decommissioning assessment is more assumption-dependent still. PINS expressly refused to allow decommissioning air-quality effects simply to be scoped out. The final ES nevertheless assumes that decommissioning traffic will not exceed construction traffic, that the duration will be similar, that background concentrations will fall, that

future vehicles and machinery will be cleaner and that significant below-ground and grid infrastructure will remain in situ. Dust is treated on the basis that because construction already falls within the maximum IAQM 'high risk' category, decommissioning 'can be no worse'. None of that constitutes a quantified decommissioning scenario.

The air-quality objection is therefore not that BEPS has proved exceedance of statutory NO₂, PM₁₀ or PM_{2.5} objectives. It is that Chapter 13 has not demonstrated with sufficient evidential robustness that effects are negligible or not significant at the receptors actually affected.

The weaknesses are cumulative: the measured baseline is concentrated in a materially different Long Stratton traffic environment; the rural baseline remains unvalidated; sub-threshold traffic is automatically translated into negligible effects without dispersion modelling; cumulative traffic substantially exceeds the Applicant's own screening thresholds without triggering quantitative assessment; high-risk dust effects depend upon future management; a new diesel generator is assessed without a defined emissions specification; and decommissioning conclusions rest on assumptions extending approximately six decades into the future.

The Applicant's 'not significant' conclusion therefore deserves limited weight unless it is supported during Examination by a representative rural baseline, receptor-specific dispersion modelling where its own screening thresholds are exceeded, clearly secured dust and PM_{2.5} controls, a defined assessment of the backup generator and a quantified worst-case envelope for replacement and decommissioning.

Chapter 14: Socio-Economics

Chapter 14 materially overstates the certainty of the Scheme's economic benefits while failing to establish an adequate baseline for the local businesses potentially exposed to adverse effects. This is not a minor omission. South Norfolk Council expressly required the socio-economic assessment to address effects and disruption to local businesses during both construction and operation, together with cumulative effects arising from other major infrastructure. It specifically identified South Norfolk's market towns, historic churches, the Waveney Valley, Boudicca Way, museums, walking and cycling routes, accommodation and visitor venues as forming a substantial tourism and visitor economy requiring assessment. The final BEPS Written Representation accordingly identifies the narrow tourism assessment, inadequate treatment of local businesses, fragmented rural-economy analysis and absence of adequate cumulative assessment as distinct defects in Chapter 14.

The most basic deficiency is that the Applicant has not established the local-business receptor. It does not identify and quantify the businesses within the affected villages and rural area which may be exposed to construction traffic, access restrictions, noise, landscape change, PRow disruption or the long-term industrialisation of the countryside. There is no sufficiently resolved business baseline showing the number,

location, type, dependency or sensitivity of potentially affected enterprises. Without that information, there is no evidential basis for concluding that adverse business effects will be negligible or not significant. Suffolk and Mid Suffolk's scoping evidence specifically required a proper baseline, identification of businesses capable of participating in the local supply chain, phase-specific analysis and evidence-led assessment of both positive and negative socio-economic effects. They considered the Applicant's original methodology insufficient and required 'a complete revision'.

This deficiency is particularly serious because the local economy is not confined to conventional retail premises. A substantial part of South Norfolk's economic offer depends upon the qualities of the place itself: rural landscape, tranquillity, historic villages and churches, walking and cycling routes, wildlife, countryside recreation and visitor accommodation. South Norfolk Council expressly identifies this combination as a 'rich tourism/visitor offer'. Businesses whose trade depends directly or indirectly upon those qualities may include accommodation providers, hospitality businesses, rural visitor attractions, leisure and recreational enterprises and other businesses whose customers come to experience the countryside. The Applicant cannot assess their vulnerability merely by counting hotel rooms or considering whether construction workers might spend money in local shops.

The original scoping approach illustrates the problem. The Applicant assumed that adverse effects on shops would not arise, treated the small operational workforce as producing only a minor benefit, and redirected wider amenity effects to the landscape, transport and noise chapters rather than considering their economic consequences. That fragmentation is precisely what prevents a proper socio-economic assessment. A landscape effect may simultaneously be a tourism effect; a PRoW closure may affect recreational use and the businesses serving it; construction traffic may discourage visitors or impede access; noise may affect accommodation or leisure premises; and the cumulative industrialisation of the countryside may alter the attractiveness of the area over the whole operational life of the Scheme. Those economic consequences do not disappear because their physical causes are assessed in another ES chapter.

The temporal scope is also too narrow. The potential effect on local businesses is not confined to the construction phase. East Pye is proposed for up to 60 years. The Applicant's own landscape assessment accepts substantial and, in places, continuing Significant landscape change. The transport and PRoW chapters identify recurring disruption during construction, replacement and decommissioning. The heritage assessment identifies changes to historic rural settings. The socio-economic assessment should therefore examine whether businesses dependent upon landscape quality, rural recreation, heritage, tranquillity, walking, cycling, nature and the broader visitor economy may suffer a long-term change in demand or competitiveness. South Norfolk Council expressly required business effects to be assessed during operation as well as construction. The failure to quantify the businesses at risk means that this question has never been answered.

The asymmetry with the Applicant's treatment of benefits is striking. Construction employment is modelled numerically, with an average and peak workforce, indirect employment and claimed net job creation. Yet adverse impacts on existing businesses are not subjected to an equivalent exercise. There is no count of potentially affected enterprises, no estimate of employment supported by them, no assessment of turnover exposure, no visitor-behaviour evidence, no business survey, no analysis of sensitivity to landscape or access change and no quantified estimate of possible displacement. The positive case is therefore expressed in numbers while the negative local-economic case is largely removed by assumption.

Even the claimed benefits are uncertain. The Applicant forecasts a substantial temporary construction workforce, but the proportion of jobs actually accessible to South Norfolk residents remains limited and unverified. The Outline Employment, Skills and Supply Chain Strategy contains no binding local-employment percentage or secured local procurement outcome. Suffolk County Council specifically required phase-specific workforce and supply-chain evidence and probability-based analysis because gross job creation does not establish local net benefit. The result is that the Applicant seeks positive weight for economic benefits that are temporary and incompletely secured while failing to quantify the existing businesses which may bear the adverse consequences.

Temporary accommodation compounds the problem. A large externally sourced workforce may increase demand for hotels, B&Bs, holiday lets and private rentals, but contractor occupation is not necessarily equivalent to tourism benefit. It may displace leisure visitors during peak periods, alter accommodation availability and change the customer base on which associated hospitality and visitor businesses depend. Earlier BEPS analysis identified the absence of visitor or business surveys, visitor-behaviour analysis, tourism-specific stakeholder evidence and assessment of booking displacement or seasonal effects.

The cumulative position is equally material. South Norfolk Council has expressly warned that the concentration of NSIP solar, grid and other major infrastructure may create economic consequences for local businesses and tourism, with overlapping construction periods worsening the effect. A rural business dependent upon visitors does not experience East Pye, Norwich to Tilbury and other infrastructure projects as separate planning files; it experiences the combined change in traffic, landscape, tranquillity, accessibility and visitor perception.

The proper conclusion is therefore substantially stronger than that Chapter 14 merely reduces the weight to be given to claimed economic benefits. The Applicant has not established the adverse side of the socio-economic balance at all. It has not identified the full population of potentially affected local businesses, quantified their economic contribution, established which depend upon tourism, countryside, heritage, recreation or environmental quality, or assessed how 60 years of landscape industrialisation and recurring construction-related disturbance may affect their viability. In the absence of that baseline, a finding of negligible or non-significant local-business harm is not an assessment conclusion; it is an unsupported assumption.

That omission is material to the overall planning balance. The Scheme's claimed employment benefits are temporary, substantially dependent on non-local labour and not secured at the level claimed, while the potential adverse effects fall upon existing South Norfolk businesses embedded in the rural economy and may persist throughout the operational life of the Scheme. The ExA cannot properly weigh speculative construction benefits against adverse economic effects which the Applicant has never quantified. **Until the local-business and tourism economy has been identified and assessed as a receptor in its own right—including long-term operational, cumulative and cross-topic effects—the Applicant has not demonstrated that East Pye would produce a net socio-economic benefit or even that its adverse local economic effects are not significant. Chapter 14 therefore represents a substantive gap in the case for consent, not merely a reason to reduce the weight given to one claimed benefit.**

Chapter 15: Soils and Agriculture

The agricultural impact is substantially greater than generic references to a 'temporary' solar use imply. The detailed surveys identify 397.4 ha of Grade 2 and 431.7 ha of Grade 3a land: 829.1 ha of surveyed Best and Most Versatile agricultural land. Work No. 1 alone contains approximately 470 ha of BMV land, while approximately 158.9 ha of the Cable Route Corridor remains unsurveyed. The WR also records up to 28.9 ha of permanent BMV loss, rising to 37.9 ha when relevant mitigation planting is included, with that worst-case loss itself treated as significant.

The central methodological defect is that reversibility is assumed rather than demonstrated. This is particularly serious because the soils are not inherently robust, freely draining soils. The Applicant's own baseline identifies predominantly Beccles 1 soils comprising 'slowly permeable, seasonally waterlogged fine loamy over clayey soils'. Across Sites 1, 2 and 8, topsoils are predominantly clay or clay loam over clay or clay-loam subsoils; across Sites 3, 4, 5, 6 and 7 the subsoils are described as generally poorly structured and slowly permeable. The same scoping material nevertheless asserted that these soils are 'generally resilient to being handled' and that adverse effects at decommissioning would be capable of rectification using 'normal agricultural land management machinery'. That assertion requires evidence. It cannot safely be treated as a soil-science fact.

The Welsh Government's 2023 Soils Policy Evidence Programme: *The Impact of Solar Photovoltaic Sites on Agricultural Soils and Land Quality* provides directly relevant technical evidence. Although Welsh planning policy is not determinative in England, the underlying soil-science evidence concerns the same Agricultural Land Classification system and the physical behaviour of agricultural soils under solar development. Its review concludes that soil texture materially affects resilience: light-textured soils have greater resilience to structural damage, whereas heavy soils containing more than 27% clay have 'low resilience to damage'; trafficking or handling them in unsuitable conditions can readily damage soil structure. That finding is directly relevant to East Pye's clay and clay-loam, slowly permeable and seasonally waterlogged soil resource.

More importantly, the Welsh Government evidence demonstrates that restoration to the original BMV grade cannot simply be presumed. It records that knowledge of natural recovery from compaction remains ‘partial and incomplete’. It also records the MAFF ALC guidance that significant compaction below 35 cm may be ‘difficult or impossible to ameliorate practically or economically’ and therefore constitutes a long-term limitation.

The Welsh Government’s modelling demonstrates the potential agricultural consequence in ALC terms. Where compaction creates an introduced slowly permeable layer, pre-development BMV land can remain downgraded at decommissioning. Its scenarios include Grade 3a becoming Grade 3b, Grade 2 becoming Grade 3b and, in more severe wetness conditions, Grade 3a becoming Grade 4. The report concludes that unremediated compaction can lead to gleying and a new slowly permeable layer, with consequent loss of BMV land or loss of its versatility; it also finds that compaction can reduce plant-available water and, in severe cases, restrict root penetration sufficiently to cause downgrading by more than one ALC grade.

That evidence is particularly important because East Pye is not exposed to a single construction event. The soil resource may be subjected successively to initial construction traffic, piling, trenching, haul roads, compounds and cable installation; operational maintenance and mowing; complete or extensive panel replacement; repeated BESS and electrical-infrastructure replacement; and finally decommissioning and restoration. The Applicant therefore needs to demonstrate recovery not from one carefully controlled intervention, but from a sequence of disturbance over a whole 60-year period.

The Welsh Government evidence expressly identifies machinery trafficking as a key determinant of compaction and warns that remediation success depends on soil strength, moisture content and depth of damage. It also concludes that soil compaction from machinery can have a residual effect on land, and that compaction and soil mixing can create continuing land-management problems after solar infrastructure is removed. That sits uneasily with any assumption that East Pye’s soil condition can simply be restored using conventional agricultural machinery at the end of the Scheme, let alone any sense that it might be ‘improved’ by this infrastructure.

The empirical evidence cited by BEPS points in the same direction. The 2025 Carvalho et al. UK solar-farm study recorded mean bulk density approximately 14–15% higher beneath panels, soil organic carbon around 9% lower and particulate organic matter approximately 29% lower. That study does not prove the precise outcome at East Pye, but it further demonstrates that long-term soil neutrality beneath operational solar infrastructure cannot safely be assumed.

The existing agricultural function must also be properly characterised. Land within the Order Limits which is currently, or has recently been, managed through the Countryside Stewardship Scheme (many of the solar fields) cannot be treated as ‘industrially farmed’ land awaiting environmental enhancement. It is productive agricultural land performing deliberately funded ecological functions, including management for

ground-nesting and other red-listed farmland birds such as lapwing and skylark and habitat relevant to turtle dove. Conversion to fenced tracker arrays and generic under-panel grassland is not evidence that those existing agricultural and ecological functions will continue.

Natural England's concerns reinforce the point. It has required complete ALC coverage, consideration and avoidance of peat, greater avoidance of permanent infrastructure on BMV land and sufficiently robust soil-management controls. PINS likewise required ALC survey evidence to inform final design and micro-siting, including the location of BESS infrastructure, and required land take for solar arrays, cable routes, tracks, substations and mitigation to be identified separately. South Norfolk Council records that approximately 80% of the surveyed land is Grade 2 or 3 and has expressly raised the immediate and cumulative loss of BMV land over the Scheme's 60-year life as a matter of concern.

The decisive issue is therefore not whether some form of agricultural use might theoretically resume after decommissioning. It is whether this particular Grade 2 and Grade 3a heavy-clay soil resource can be demonstrated to return to its existing Agricultural Land Classification after six decades of repeated disturbance and no agricultural use, or even grazing. The Applicant has not supplied that evidence. There is no East Pye-specific compaction-depth model, no evidence establishing the recovery behaviour of the relevant clay and clay-loam soil series following repeated trafficking and pile removal, no demonstrated recovery timetable, no binding requirement that restored land attain its pre-development ALC grade, and no secured long-term monitoring regime capable of requiring further remediation if it does not.

That evidential gap is fundamental. The Welsh Government research demonstrates that reversibility depends on soil type, depth of compaction, wetness, handling conditions and the effectiveness of remediation; that heavy clay soils are among the least resilient; and that deep compaction can be practically or economically impossible to reverse. It expressly models circumstances in which BMV land remains downgraded after decommissioning. Against that evidence, the Applicant cannot legitimately treat restoration to BMV condition as the default outcome merely because panels and tracks can physically be removed.

Chapter 15 therefore presents a site-selection problem, not simply a soil-management problem. East Pye Solar places one of the UK's largest proposed solar developments predominantly on Grade 2 and Grade 3a land whose heavy, slowly permeable and seasonally wet soils are intrinsically vulnerable to structural damage. The Scheme then subjects that resource to repeated trafficking and disturbance over three generations while relying upon an unproven assumption that its agricultural quality can ultimately be restored. No evidence has been provided that this land will recover to its existing BMV grade, and relevant technical evidence demonstrates that in soils of this type such recovery cannot be assumed and may, following deep compaction, be difficult or impossible to achieve. In those circumstances, characterising the agricultural effect as temporary and reversible materially understates the risk. Where the Applicant has

neither avoided the extensive BMV resource nor demonstrated that the soil can be returned to its present quality, the loss must be treated as potentially long-term or irreversible in the planning balance. That weighs materially against consent and is further evidence that a development requiring this degree of disturbance has been located on land which is fundamentally ill-suited to accommodate it.

Chapter 16: Ground Conditions

Chapter 16 remains fundamentally preliminary. Its technical basis is principally a Phase 1 desk study drawing upon geological mapping, historical records and a limited number of existing boreholes rather than comprehensive intrusive investigation across the Scheme. That is a material deficiency because East Pye would introduce thousands of driven supports, extensive cable trenching, deep BESS and substation foundations, HDD and other trenchless works, dewatering, concrete, grout and drilling fluids across land underlain by sensitive aquifers, heterogeneous superficial deposits, former military sites, private water supplies, peat and buried utilities. The Applicant instead proposes that substantial elements of ground investigation, Phase 2 assessment, Foundation Works Risk Assessments, piling assessments and crossing-specific hydrogeological work will follow consent.

The Environment Agency identified this problem at scoping. It opposed the Applicant's attempt to scope ground conditions and groundwater effects out of the EIA because the hydrogeological setting had not been adequately characterised and the relationship between groundwater and surface water was insufficiently understood. It identified incomplete or inaccurate ground information, uncertainty concerning groundwater abstractions and Source Protection Zones, and insufficient information concerning the depth and nature of foundations and HDD works. The EA considered the evidence insufficient to exclude contaminant migration to the underlying Principal Aquifer and required further investigation and risk assessment.

That concern is reinforced by the underlying geology. The Applicant cannot safely assume that the Lowestoft Formation provides a continuous impermeable barrier protecting the Chalk and Crag aquifers. HFCL identifies published BGS evidence showing a more complex system: recharge through the Till to the Chalk may amount to approximately 4.5–20% of effective rainfall; weathered Till can transmit and store groundwater; its hydraulic conductivity may be materially greater than an assumption of impermeability implies; and permeable sand and gravel horizons occur within the formation. The Lowestoft Formation is itself designated a Secondary (Undifferentiated) Aquifer.

The Environment Agency had already identified an apparent inconsistency in the Applicant's treatment of borehole TM18NE11, where 'blue clay' is recorded only to approximately 17.7 m before 'sharp sand', despite the Applicant summarising a greater thickness of Diamicton. That is not a trivial geological discrepancy. If lower-permeability clay is assumed where more permeable granular material actually occurs,

the conceptual model may fail to identify a contaminant pathway between construction activity, shallow groundwater and the deeper Principal Aquifer.

HFCL's review demonstrates that the problem is more fundamental still: the Applicant has not actually presented an adequate site-wide hydrogeological conceptual model. Chapter 9 contains no substantive description of existing hydrogeological conditions, while Chapter 16 principally describes aquifer designations without adequately defining groundwater levels, flow directions, recharge, hydraulic relationships or the interaction between the superficial deposits and the underlying Chalk and Crag Principal Aquifer. HFCL therefore concludes that the assessment of wider hydrological and hydrogeological impacts is not supported by a sufficiently characterised baseline.

This deficiency matters because the Scheme itself may alter the source–pathway–receptor relationship. Driven solar supports may extend to approximately 4 m; cable trenches may extend to approximately 2 m, with grouped working widths of approximately 7 m; BESS and major substations may require substantially deeper foundations; and HDD, pipe-jacking and dewatering may intersect groundwater-bearing horizons. Piling can penetrate lower-permeability strata and create vertical pathways; trenches can create preferential lateral drainage routes; dewatering can alter hydraulic gradients; and HDD can introduce drilling fluids or mobilise existing contaminants. Concrete, grout, fuels, oils and other construction substances introduce additional potential sources.

The Applicant's assessment of piling is consequently too narrow. Chapter 16 recognises that foundations may create preferential pathways but assesses risk principally by reference to the presence or absence of existing brownfield contamination. HFCL identifies the fundamental omission: the Scheme itself is capable of becoming the contaminant source. Construction fuels, oils, cementitious materials and spills, and operational sources including transformer oil and contaminated BESS firewater, may enter groundwater through pathways created by foundations or other intrusive works. The source–pathway–receptor model therefore cannot be confined to historic contamination.

The Environment Agency's requirement for Foundation Works Risk Assessments and Piling Risk Assessments is important for precisely this reason. Similar hydrogeological risk assessment is required for HDD and other trenchless methods where they may interact with Principal or Secondary A aquifers, watercourses or sensitive ecological receptors. These later assessments cannot safely be treated as routine construction detail where their findings may determine whether the proposed foundation system or crossing method is environmentally acceptable at all.

The private-water-supply evidence makes that uncertainty particularly serious. At scoping, 35 private water supplies were identified within 250 m for which accurate locations and/or abstraction strata were unavailable. The Environment Agency required the locations and, where possible, abstraction horizons to be established, and required a wider search around the BESS and substations. Until that work is complete, the receptor side of the source–pathway–receptor model is itself incomplete.

HFCL's independent fieldwork materially strengthens that concern. It concludes that the Applicant has not demonstrated a methodology capable of identifying all private supplies. Local Authority, BGS and Environment Agency records were not shown to have been systematically cross-checked against addresses and mains-water records followed by ground-truthing. During only a limited site visit HFCL identified an active supply at Boyland Hall which the Applicant had assumed to be disused. HFCL therefore considers it 'possible (indeed probable)' that further private supplies have been omitted. It also records that some households rely upon those groundwater supplies as their sole source of domestic water.

HFCL also identifies internal inconsistencies in the Applicant's treatment of the strata from which those supplies abstract. Technical Appendix 16.1 assumes in some instances that the presence of Lowestoft Formation makes abstraction from that formation unlikely, while elsewhere the Applicant accepts that the same formation does support a private water supply. HFCL regards those assumptions as confused and potentially unsound. In a development where protection of drinking-water supplies depends upon identifying the actual abstraction horizon and pathway, that uncertainty is material.

The aquifer and Source Protection Zone baseline is likewise inconsistent. HFCL identifies Table 16.7 as incorrectly describing the bedrock aquifers as Secondary A before later parts of Chapter 16 correctly identify the Chalk and Crag as Principal Aquifers. It also identifies confusion concerning whether SPZs relate to shallow superficial or deeper bedrock abstractions. Chapter 9 fails to identify a Zone I SPZ within the study area and understates the extent of SPZ coverage; HFCL records that most of the Scheme lies within SPZ limits. These are not merely terminological errors. Aquifer status and source-protection designation determine receptor sensitivity and the level of protection that the assessment must apply.

Groundwater-dependent terrestrial ecosystems are also incompletely addressed. HFCL identifies GWDTEs associated with nearby SSSIs which the Applicant has not fully recognised and concludes that no adequate assessment has been provided of the possible hydrogeological connections between the Scheme and those receptors. The absence of direct physical works within a designated site does not exclude an effect if groundwater level or groundwater quality on which the habitat depends is altered.

The former military sites create a separate group of inadequately characterised contamination risks. Site 3 occupies former RAF Hardwick, Site 10 lies within the former RAF Seething landscape, and Site 1/BESS lies close to RAF Tibenham. The Inspectorate identified moderate-to-high UXO potential associated with former airfields and aircraft crashes and required further investigation. The Environment Agency required consideration of historic disposal around RAF Hardwick, including aircraft, ordnance and possible radium-impacted ash. South Norfolk Council separately required further investigation of former airfield contamination and identified PFAS, firefighting-foam residues and de-icing chemicals as plausible contaminants requiring consideration.

PFAS is particularly important because it demonstrates why investigation after consent is not a neutral solution. If intrusive investigation subsequently identifies persistent contaminants in hydraulic connection with groundwater, the appropriate response may not be a minor amendment to a method statement. It may require a different foundation system, avoidance of an area, different drainage, relocation of infrastructure or abandonment of a particular construction technique. The environmental acceptability of the development would therefore be being determined after the power to construct it had already been granted.

The same concern applies to RAF Tibenham. Exclusion principally by geometric distance from identified source areas does not demonstrate absence of a hydrogeological pathway. Where Site 1 and the BESS occupy a sensitive groundwater setting, where superficial deposits are heterogeneous and where private groundwater abstractions occur locally, pathway evidence is more important than an arbitrary distance threshold.

CRC7 illustrates the same problem in relation to peat and trenchless works. HDD is proposed beneath Hempnall Beck in an area involving mapped peat and the Fritton Grange Meadows CWS. Natural England requires clarification and avoidance of peat. A trenchless crossing cannot simply be equated with avoidance: the environmental consequences depend upon actual depth, geological conditions, drilling-fluid pressures, settlement potential, groundwater movement and the hydraulic relationship between the watercourse, peat and underlying strata. Those conditions need to be understood before HDD can be relied upon as mitigation.

Buried utilities increase the constraint further. The development interacts with the National Gas Transmission network, water and sewer infrastructure, electricity systems and other buried services. A strike or failure may create not simply an engineering or health-and-safety issue, but a gas release, flooding event, contaminant pathway or major-accident consequence. Ground conditions therefore interact directly with Chapter 18 rather than forming an isolated technical discipline.

Most importantly, HFCL finds that the Applicant's division of hydrology into Chapter 9 and hydrogeology into Chapter 16 has itself produced 'inconsistencies and omissions in the overall ES'. It therefore reviewed the chapters together because surface water and groundwater form one connected physical system.

The inconsistency is methodological as well as factual. Chapter 9 uses four magnitude categories—High, Medium, Low and Negligible—whereas Chapter 16 uses five—Large, Medium, Small, Very Small and Negligible. Chapter 9 assesses water-quality change partly by WFD class, whereas Chapter 16 uses Environmental Quality Standards. The two chapters use different significance matrices. HFCL considers Chapter 9's matrix insufficiently precautionary because a single reduction in magnitude from Medium to Low may cause significance to fall two classes, from Major to Minor; Low sensitivity combined with Low magnitude produces Negligible; and Medium sensitivity combined with Low magnitude may produce Minor/Negligible. The equivalent defect is not present in Chapter 16.

That creates a substantive assessment problem. The same hydrologically connected system may receive different significance outcomes according to the chapter and methodology through which the relevant part of the pathway happens to be considered. Surface water, shallow groundwater, deeper groundwater and a groundwater-dependent receptor cannot properly be assessed as separate environmental systems where they are hydraulically connected.

HFCL also criticises Chapter 9 for partly defining sensitivity by distance from the Scheme. Sensitivity is a characteristic of the receptor; distance relates to exposure and does not establish groundwater connectivity. HFCL identifies different distance thresholds even within the Applicant's treatment of private water supplies. The existence of a hydraulic pathway, rather than whether a supply lies within an arbitrary 250 m or 1 km buffer, is the relevant question.

The inconsistency extends to the threshold for water-quality damage. HFCL records that Chapter 9 defines High magnitude as requiring a two-class WFD deterioration, whereas the relevant River Basin Management Plan objective is to prevent deterioration. The assessment methodology therefore risks understating an adverse effect before the significance matrix is even applied.

The interaction between Chapters 9 and 16 is especially important at Site 1. HFCL identifies surface-water flood risk within and around the proposed 400 kV and National Grid substation areas and warns that exceedance floodwater must not rely upon the same containment capacity as contaminated firewater, since a coincident fire and storm event could overwhelm the containment system. It also notes that the Applicant states that the BESS 'may' be divided into separately contained compartments, making it unclear whether this is committed mitigation.

That issue cannot sensibly be allocated solely to the water chapter. Firewater is the contaminant source; foundations, permeable superficial deposits and groundwater are possible pathways; and the Principal Aquifer, private abstractions and connected watercourses are receptors. Chapter 16 cannot conclude that groundwater effects are insignificant without assessing that complete chain.

HFCL identifies a further hydrogeological omission in the water-balance assessment. Rainwater harvesting is treated as effectively non-consumptive even though water removed through foul effluent, use and evapotranspiration will not all return to the local groundwater system. That may reduce infiltration and aquifer recharge. HFCL expressly finds that this consequence has not been assessed in Chapters 9 or 16 in relation to private water supplies, particularly shallow supplies drawing from the glacial Till, or reconciled with the ecological assessment.

HFCL ultimately identifies 15 principal deficiencies across the ground, hydrology and hydrogeological evidence. They include inconsistent Chapter 9/16 assessment methodologies; inadequate WFD thresholds; inappropriate exclusion of three surface-water bodies and the Broadland Rivers Chalk and Crag groundwater body; incomplete assessment of construction-water requirements; an unidentified source for imported

water; an unreliable private-water-supply baseline; omitted GWDTEs; the absence of an adequate conceptual hydrogeological model; aggregation of receptors rather than receptor-specific assessment; unresolved Site 1 flood/firewater interaction; inadequate consideration of piling as a pathway for contaminants generated by the Scheme itself; inconsistent aquifer and SPZ information; and water-balance figures which do not satisfactorily reconcile.

These findings are especially damaging because the Applicant nevertheless concludes overwhelmingly that ground-condition effects will be Minor Adverse or Negligible and Not Significant. Those conclusions depend upon the source, pathway and receptor having been reliably identified. HFCL demonstrates that all three remain materially uncertain in important parts of the Scheme.

A Phase 1 desk study cannot establish absence of significant effect where the intrusive investigation required to determine actual ground conditions has not yet occurred; the hydrogeological conceptual model is incomplete; some drinking-water receptors may be unidentified or wrongly characterised; GWDTE connectivity has not been assessed adequately; contaminant sources associated with former airfields remain unresolved; and the development itself has not been fully incorporated as a potential source of groundwater pollution. Nor can later FWRAs and HDD assessments be treated simply as mitigation of an established acceptable scheme where they may determine whether the proposed foundation or construction method is permissible in the first place.

HFCL's overall conclusion is correspondingly serious. It finds a **'significant lack of confidence' that impacts to the water environment are properly understood or can be mitigated**, identifying shallow and deep groundwater, households dependent upon groundwater as their sole water supply, other water users, local watercourses, sensitive aquatic ecosystems and GWDTEs as receptors potentially at risk from derogation or pollution. That is fundamentally inconsistent with treating Chapter 16 as demonstrating a settled, environmentally acceptable ground solution.

The conclusion should therefore be stronger than a requirement for further routine investigation. Chapter 16 has not demonstrated that East Pye can be constructed within the authorised envelope without unacceptable ground and groundwater effects. The Applicant seeks consent for extensive intrusive development before establishing the conceptual ground model necessary to determine where that development can safely occur. The outstanding evidence may require different foundation systems, alternative HDD methods, avoidance of contaminated ground, additional separation from private abstractions or GWDTEs, relocation of infrastructure, or removal of works altogether. Those are matters of scheme acceptability and design, not matters which can safely be left wholesale to post-consent construction control.

The evidence is also cumulative and mutually reinforcing: the Environment Agency questioned the ground and groundwater model from the outset; South Norfolk Council has identified inadequately investigated former-airfield contamination including PFAS; the Inspectorate required further investigation of UXO; and HFCL now identifies fundamental deficiencies in the conceptual model, the private-water-supply baseline,

aquifer and SPZ characterisation, GWDTE assessment, piling assessment and the interface between Chapters 9 and 16. HFCL's finding of a 'significant lack of confidence' in whether effects are properly understood or capable of mitigation therefore strikes directly at the Applicant's repeated Minor/Negligible, Not Significant conclusions.

On the present evidence, the Applicant has not shown that the physical ground through which East Pye would be built is capable of accommodating the proposed development without unacceptable risks to Principal Aquifers, drinking-water supplies, connected surface waters, groundwater-dependent ecosystems and human health. Where the missing information may change whether, where and how authorised Works can be constructed, a positive conclusion cannot logically precede that information. Unless the Applicant provides the necessary intrusive investigation, coherent hydrogeological conceptual model, receptor-specific assessment, contamination characterisation and foundation/HDD evidence during the Examination – and demonstrates that the resulting solution remains within the environmentally assessed DCO envelope – Chapter 16 materially undermines both the adequacy of the environmental case and the physical deliverability of East Pye. It therefore weighs strongly against development consent.

Chapter 17: Electromagnetic Fields

Chapter 17 does not demonstrate that the electromagnetic-field effects of East Pye are insignificant. BEPS does not contend that harmful human exposure has already been proved. The more fundamental objection is that the Applicant has reached a Minor/Not Significant conclusion without modelling the electrical system for which it actually seeks consent. That distinction is important. The question for the Examination is not whether generic electricity infrastructure can normally comply with public-exposure limits, but whether this particular combination of 132 kV and 400 kV infrastructure, operating in this particular configuration and in proximity to these particular human and ecological receptors, has been shown to do so.

That was precisely the concern identified at scoping. The Applicant originally sought to scope EMF out, relying on generic embedded measures such as undergrounding, locating substations and the BESS away from receptors and maintaining a 15 m offset from PRowS. It had undertaken no baseline EMF survey and proposed no further baseline work. The Inspectorate expressly refused that request because of the uncertainty surrounding the cabling design, possible 400 kV overhead infrastructure and proximity to receptors. It required the ES to address risks to both human and ecological receptors, having regard to relevant technical guidance, and to identify the design measures relied upon to prevent significant effects. Chapter 17 therefore needs to be judged against an explicit requirement for a project-specific human and ecological assessment, not merely a generic demonstration that electricity infrastructure is normally capable of compliance.

The scale of the electrical system makes that requirement material. East Pye comprises extensive 33–132 kV internal networks; 400 kV underground circuits; existing and diverted 400 kV overhead lines; new pylons; Project Substations; a proposed National Grid Substation; transformers, switchgear, conversion units and inverters; the BESS and its power-conversion equipment; and cable joints, terminations and connection infrastructure. At Site 1B in particular, the Scheme concentrates the proposed National Grid Substation, Project infrastructure, the existing/diverted dual-circuit 400 kV overhead line and new pylons in the Great Moulton area. The relevant environmental question is therefore the field environment created by the system as a whole, including simultaneous operation of adjacent sources, rather than the behaviour of an isolated generic cable or generic overhead line.

Appendix 17.1 does not provide that assessment. Its essential function is public-exposure compliance screening using published generic field values and reference levels. It does not contain a source model of East Pye, receptor coordinates, field contours or calculations for the actual electrical layout. There is no modelling based on the proposed conductor configurations, maximum currents, circuit spacing, phasing or bonding arrangements; actual burial depths; number of circuits within particular corridors; joint bays and terminations; final overhead-line geometry, conductor clearance and sag; topography; simultaneous operation of neighbouring electrical sources; or the range of configurations permitted by the DCO envelope. Nor are maximum predicted electric and magnetic fields given for identified homes, workplaces, PRoWs or ecological receptors.

That omission is particularly important because the generic numbers relied upon do not provide large margins from the selected reference levels. Chapter 17 cites approximately 95 μT at one metre above the centreline of a generic 400 kV underground cable against a public magnetic-field reference level of 100 μT . That is a margin of only 5 μT , or 5%. Yet the Applicant does not demonstrate that the East Pye configuration corresponds to the generic cable from which the figure is taken. It does not show whether the calculation assumes one circuit or several, what current is flowing, how conductors are arranged, whether parallel circuits reinforce or partly cancel their fields, what occurs at joint bays and terminations, or what tolerances arise from detailed design and later replacement. A generic result lying only 5% below the selected reference level cannot rationally support a categorical project-wide conclusion of Low magnitude and Minor/Not Significant effect without showing that the authorised East Pye system remains within that result under its maximum design case.

The overhead-line evidence raises the same issue more clearly. The Applicant itself records generic electric fields immediately beneath a 400 kV overhead line of approximately 10–10.6 kV/m, more than twice the 5 kV/m public reference level on which it relies. The assessment then depends upon the proposition that the electric field falls below the reference level with lateral separation, including reliance on a 15 m distance. But Chapter 17 provides no receptor-specific calculations showing the actual field at the relevant distance from the East Pye conductors; no contours demonstrating where the 5 kV/m line would fall after diversion of the existing circuit; no assessment of conductor height, sag, pylon geometry or topography; and no clear demonstration that

the necessary separation is secured throughout the DCO. South Norfolk Council separately identified errors or ambiguities in the presentation of the figures, noting that explanatory text referred to underground-cable drop-off even where the figures related to overhead lines, and requested clarification of the applicable ICNIRP criteria.

The guidance issue should also be expressed accurately. The relevant later ICNIRP low-frequency guidance is the 2010 guidance for 1 Hz–100 kHz; the 2020 ICNIRP guidance relates principally to radiofrequency exposure and should not simply be substituted as the applicable 50 Hz standard. The important criticism is that the Applicant needs to explain clearly which exposure criteria apply, how the 1998 and 2010 guidance relate to the assessment, and why the chosen criteria are appropriate for each source and receptor. SNC expressly requested that comparison.

There is also no measured baseline. That matters because the western part of the Scheme already contains a 400 kV overhead line. Chapter 17 effectively treats that existing field as part of the baseline and therefore not an effect of the Scheme, while the Scheme itself would alter that electrical environment through diversion of the line, construction of new pylons and addition of major 400 kV infrastructure. No measurements establish existing field strengths at nearby dwellings, PRowWs, workplaces or ecological corridors, and there is consequently no empirical baseline against which the change caused by East Pye can be tested. The Applicant's original Scoping Report expressly confirmed that no baseline EMF surveys had been undertaken.

The human-receptor assessment is also insufficiently differentiated. Chapter 17 generally assigns human receptors Medium sensitivity because exposure to EMF is an ordinary feature of modern life. That does not explain the sensitivity of individual receptors to this development. Homes represent potentially long-duration exposure; PRowWs may pass through or alongside electrical corridors; agricultural and maintenance workers may spend repeated periods near equipment; and persons with implanted medical devices may require different consideration from the general population. Nor does Chapter 17 provide an exposure schedule showing the predicted maximum field at each identified receptor. The Applicant therefore moves from a generic characterisation of people as Medium sensitivity directly to a project-wide Minor conclusion without the receptor-specific exposure calculation that should sit between them. Norfolk County Council had already identified EMF as an issue requiring thorough investigation within the wider health assessment because of its potential significance to local communities.

The treatment of substations, transformers, inverters and the BESS is weaker still. Their effects are not quantitatively modelled. The assessment relies substantially on enclosure, access control and CE/UKCA conformity to infer that they will not create material public exposure. Product conformity is not a substitute for an environmental field calculation. Chapter 17 provides no equipment-specific source inventory, transformer or inverter ratings, maximum operating currents, magnetic-field contours around the BESS or substations, or calculation of the combined field where several pieces of equipment operate together. This is significant for a 60-year development in

which electrical plant can be replaced: there is no clear EMF performance limit ensuring that replacement equipment remains within the field characteristics assumed at consent.

The most serious deficiency, however, is ecological. The Inspectorate did not merely require consideration of human exposure. Scoping Opinion 3.4.1 expressly required assessment of human and ecological receptors. Chapter 17 nevertheless constructs its sensitivity classifications, magnitude criteria, significance conclusions and residual-effects assessment essentially around human exposure. Ecological effects are largely displaced into Chapter 8 without a corresponding EMF methodology identifying ecological receptors, exposure pathways, field strengths, thresholds or significance criteria. A cross-reference to Ecology cannot discharge the Scoping Opinion where neither chapter actually undertakes the assessment.

The omission is particularly stark at Hempnall Beck. The Environment Agency specifically advised that the Beck contains a notable fish population including brown/sea trout, bullhead, European eel and brook lamprey. It identified a potential adverse EMF pathway from the 400 kV cable crossing at CRC7 and requested either an assessment of effects or evidence that the cable would be buried sufficiently deeply for magnetic fields not to be detectable by fish. The Inspectorate adopted that issue expressly in Scoping Opinion 3.15.17: the ES was to assess EMF effects on fish or demonstrate that burial depth at the Hempnall Beck crossing would avoid detectable magnetic fields.

Chapter 17 does not provide that crossing-specific demonstration. There is no calculation of magnetic flux density at the stream bed, banks or water column; no stated cable configuration and loading at the crossing; no modelling of alternative burial depths; and no assessment of whether parallel circuits alter exposure. The generic human calculation at one metre above a buried cable does not answer the question posed by the Environment Agency or the Inspectorate, because an aquatic organism may be immediately above the bed and the relevant ecological question is not whether a human public-exposure limit is exceeded.

That omission has become more important as the ecological baseline has developed. The River Tas is a chalk-stream priority habitat and white-clawed crayfish have been recorded within the system; the Scoping Opinion specifically required crayfish to be investigated at relevant watercourse works. Aquatic invertebrates were also expressly required to remain within the assessment. Yet Chapter 17 contains no receptor-specific EMF analysis for fish, white-clawed crayfish or aquatic invertebrates. BEPS does not need to establish that a particular field strength will necessarily harm those species in order for the omission to matter. The Applicant was expressly required to assess the pathway, and it has not demonstrated the field to which those receptors would actually be exposed.

The same evidential problem arises in relation to bats. East Pye occupies a landscape of exceptional bat importance, including widespread barbastelle activity and maternity-colony networks. Yet there is no overlay of the high-voltage infrastructure with known

roosts, core sustenance zones, commuting routes or woodland and hedgerow corridors, and no calculation of fields within those habitats. The scientific evidence concerning biological responses to EMF is less settled than the human acute-exposure framework, which makes it particularly important not to convert uncertainty into an assumption of no effect. The defensible requirement is a receptor-specific ecological assessment capable of demonstrating that the proposed electrical infrastructure does not materially affect the ecological functions on which protected species depend. Chapter 17 does not provide one.

The phase assessment is also too narrow. Construction and decommissioning are effectively excluded on the reasoning that unelectrified new cables do not themselves generate operational EMF. That does not address construction beneath or beside the existing live 400 kV system, commissioning and staged energisation, replacement works undertaken alongside operational equipment, or eventual decommissioning where National Grid infrastructure is expected to remain. Worker and contractor exposure during those interfaces is therefore not captured simply by stating that unenergised cables produce no field.

Nor is there a satisfactory cumulative assessment. Chapter 17 gives limited consideration to cables sharing trenches and refers to ordinary household electrical sources, but does not model the cumulative field at a receptor from multiple East Pye circuits, an existing or diverted 400 kV overhead line, the National Grid and Project substations, transformers, BESS power-conversion equipment and nearby cables operating simultaneously. The comparison with household appliances does not answer the cumulative EIA question created by concentrating several high-voltage sources within the same area. Nor is there a coherent ecological cumulative assessment where the cable system repeatedly crosses or runs alongside the same connected habitat network.

The mitigation relied upon is correspondingly underdeveloped. Undergrounding removes or screens the external electric field but does not eliminate the magnetic field. A 15 m offset from overhead infrastructure cannot be treated as effective mitigation until the field at that distance has been calculated for the actual design and the offset legally secured. CE/UKCA conformity says nothing about the cumulative environmental field created by several compliant products operating together. There is no scheme-wide EMF management strategy; no mapped exclusion contours; no ecological separation requirement; no maximum field performance standard tied to the DCO; no requirement for post-energisation validation; no trigger for remedial action if predicted fields are exceeded; and no control ensuring that replacement equipment over the 60-year operational period remains within the assessed envelope.

There are also internal indicators that the assessment has not been carried through consistently. Chapter 17 variously describes human receptors as Medium sensitivity while one table records High sensitivity; uses terminology inconsistently between magnitude and effect; refers in places to ‘measured’ field values despite there having been no East Pye measurements; and describes effects as temporary by reference to the project lifetime even though exposure could continue for up to 60 years. The main

text and technical appendix also use slightly different generic overhead-line figures. Individually these may be drafting issues, but collectively they make it more difficult to reproduce the route by which the Applicant moves from its source data to a Minor/Not Significant residual conclusion.

The resulting evidential gap is therefore substantial. The Applicant has shown, at most, that selected generic examples of individual electricity assets can fall within selected human public-exposure reference levels at particular distances. It has not shown what electric and magnetic fields the East Pye system itself would produce at its actual human and ecological receptors; whether the narrowest generic margins remain valid under the maximum DCO design; whether multiple sources materially alter those fields; whether the specific Hempnall Beck requirement imposed by the Inspectorate has been satisfied; or what enforceable measures would prevent later design or replacement from exceeding the assumptions on which the assessment depends.

The proper conclusion is consequently stronger than a request for clarification. The Applicant has not yet supplied the evidence necessary to support its Minor/Not Significant conclusion. Before consent can safely be recommended, it should provide a scheme-specific maximum-case EMF model covering every relevant 132 kV and 400 kV circuit, overhead-line configuration, substation, transformer, inverter, BESS installation, joint and termination; map predicted electric and magnetic fields against identified human and ecological receptors; undertake the crossing-specific aquatic assessment expressly required by the Inspectorate and Environment Agency; assess the combined field from simultaneously operating infrastructure; and secure the resulting separation distances, burial depths, equipment limits and monitoring requirements within the DCO.

That evidence may show that effects can be satisfactorily controlled. But until it exists, the Examination does not know whether the authorised design complies with the assumptions on which Chapter 17 depends, whether particular cable or overhead-line alignments require greater separation, whether ecological crossings require deeper burial or rerouting, or whether infrastructure must be relocated. Those are pre-consent questions capable of changing the physical design of the Scheme, not matters which can safely be left to detailed design after consent. The Inspectorate specifically refused to allow EMF to be scoped out because precisely these uncertainties existed. Chapter 17 has not resolved them. Its Not Significant conclusion should therefore be afforded little weight and, unless the deficiency is remedied during the Examination within the assessed DCO envelope, it weighs materially against development consent.

Chapter 18: Other Environmental Matters and Major Accidents

Chapter 18 identifies a series of risks which become materially more serious when considered together. East Pye does not merely introduce solar panels and electrical equipment into open countryside. At Sites 1 and 5 in particular, the Scheme concentrates high-voltage

infrastructure alongside aviation activity, strategic gas and rail infrastructure, groundwater and drinking-water receptors, sensitive aquatic and terrestrial ecology, roads and nearby communities. The central issue is therefore one of **risk interaction**. Demonstrating that each asset can normally be operated safely in isolation does not establish that the combined probability–consequence profile of the East Pye infrastructure clusters is acceptable.

The utilities evidence is important in its own right. National Gas Transmission has confirmed that its FM05 Yelverton–Stowmarket high-pressure feeder main lies within or close to the Order Limits, together with cathodic-protection infrastructure and associated apparatus. Its easements preserve access and restrict buildings, structures, ground-level changes and storage within the protected strip. NGT also specifically identifies high-voltage cable crossings and parallelism, AC pylon parallelism, BESS and PV installations as capable of interfering with cathodic protection and requiring assessment and approval.

The gas-main issue is therefore not confined to the ordinary risk of excavation striking a buried pipeline. The electrical development itself may interact with the protection and operation of the gas transmission system. East Pye consequently requires a resolved utilities-conflict assessment showing the relationship between cables, piles, substations, solar arrays, BESS infrastructure and gas assets; the required separations and construction controls; restrictions on loading and ground levels; cathodic-protection compatibility; continuing operator access; emergency arrangements; and the protective provisions applying throughout construction, operation, replacement and decommissioning. Equivalent clarity is required for water, sewer, fibre and other buried infrastructure. Later discovery of an incompatible easement or safety requirement may necessitate relocation of authorised infrastructure rather than simply a different construction method.

The most serious major-accident issues are concentrated at **Site 1** and **Site 5**.

At Site 1, the proposed National Grid and associated 400 kV infrastructure would create a permanent cluster of substations, gantries, transformers, busbars, pylons and overhead-line works immediately south of Great Moulton and north of Tibenham Airfield. The site lies within the airfield safeguarding context and within mapped glider launch-failure or EFATO sectors associated with runway headings 03/21, 08/26 and 15/33.

That makes the aviation issue wider than conventional obstacle clearance or glint and glare. Gliders and tow aircraft experiencing launch failure or engine failure may have very limited altitude, time and manoeuvrability and rely upon unobstructed emergency landing areas. Additional pylons, substations, fencing and other infrastructure may therefore alter the available emergency environment even where individual structures do not technically infringe a conventional obstacle surface.

The cumulative aviation context is also important. Norwich–Tilbury would introduce further 400 kV infrastructure to the west of the airfield, while Simpsons Maltings Solar Farm lies to the south-east. East Pye would add further transmission-scale infrastructure to the north. The relevant question is whether the combined infrastructure progressively constrains emergency glide-out options around several quadrants of the airfield. That requires airfield-specific EFATO trajectory assessment, obstacle modelling and engagement with the operator, not simply analysis of each structure in isolation.

The consequence of an aircraft interaction with the Site 1 electrical infrastructure also distinguishes the issue from ordinary safeguarding. The 400 kV compound would contain transformers, high-voltage equipment and substantial quantities of insulating oil. A credible impact sequence could involve structural damage, oil release, ignition and secondary fire, followed by smoke, contaminated firewater and mobilisation of pollutants beyond the compound.

The consequence assessment therefore needs to consider impact resistance, transformer-oil containment, bund performance under accident conditions, fire escalation, smoke and particulate dispersion, firewater containment and emergency-service access, rather than merely the probability of an aircraft strike.

Those consequences are magnified by the receiving environment. Site 1 is above a **Principal Aquifer**, lies within the wider **River Waveney catchment** and is close to private water supplies. A major fire or impact event which compromises oil or firewater containment therefore creates a credible source–pathway–receptor chain from the substation through soils, drains and groundwater to potable abstractions and connected surface waters. Ordinary operational drainage calculations do not establish that containment would remain effective under the abnormal conditions which a major-accident assessment is intended to test.

The London–Norwich main railway adds a further strategic receptor. It lies within the wider infrastructure corridor between Tibenham Airfield and the proposed transmission development. A constrained aircraft trajectory, debris, smoke or secondary fire could therefore affect not only East Pye infrastructure but the electrified railway, passengers, staff and continuity of a strategic transport route. The aviation, electricity and railway interfaces need to be considered as one scenario where a single initiating event could connect them.

Great Moulton adds a direct human receptor. The WR identifies homes approximately 100–200 m north of the proposed compound. A transformer fire, aircraft impact, smoke plume or major containment failure would therefore occur close to an established village rather than within an isolated industrial estate. The assessment needs to address radiant heat, smoke and particulate dispersion, emergency cordons, evacuation, access for responders and the ability to manage an incident while adjacent infrastructure remains energised. Norfolk Fire and Rescue Service has already raised concern about the safety of the Site 1B location because of its proximity to Great Moulton.

The combined Site 1 case is therefore:

aviation safeguarding + 400 kV infrastructure + transformer fire and oil + Principal Aquifer + private drinking-water supplies + Waveney catchment + strategic railway + nearby homes.

Each element increases either the likelihood, pathway or consequence of a credible abnormal event. The Application does not presently provide an integrated worst-case assessment of that infrastructure cluster.

The risk environment at **Site 5** is different but equally concentrated. The proposed 400 kV substation lies on elevated land connected by field drains, ditches and culverts to the River Tas system. In the event of transformer-oil release, bund failure, firewater exceedance or

major electrical fire, contamination could therefore be carried beyond the compound into the connected chalk-stream catchment.

That pathway is environmentally important because the River Tas system contains repeated evidence of **white-clawed crayfish, including breeding evidence**. Site 5 also has groundwater-fed private water supplies to the north. An accident may therefore create both a surface-water pathway towards highly sensitive aquatic ecology and a groundwater pathway towards drinking-water receptors.

The location also creates a direct interface between major electricity and gas infrastructure. The site is intersected by a high-pressure gas transmission main together with local gas infrastructure. A transformer fire, explosion or ground failure could threaten pipeline integrity; conversely, gas release or ignition could escalate an electrical incident. Assessment is therefore required of separation distances, thermal radiation, blast or overpressure, pipeline resilience to external fire, electrical ignition interaction and coordinated emergency response.

The National Gas evidence reinforces the point. NGT itself identifies PV arrays, BESS, high-voltage cables and high-voltage pylons as infrastructure requiring specific assessment because of possible interaction with its protected assets and cathodic-protection system. The coexistence of a 400 kV substation and strategic gas infrastructure therefore requires a demonstrated engineered solution rather than an assumption that the two regulated systems will independently remain safe.

The human receptors at Site 5 materially increase the potential consequence. The WR identifies residential properties and the Fritton Conservation Area immediately south of the proposed infrastructure and a **children's nursery directly to the north**. A gas or transformer-related incident therefore requires quantitative consideration of smoke dispersion, radiant heat, emergency cordons, evacuation or shelter, emergency access and the particular vulnerability of young children.

Site 5 also lies within the functional landscape of multiple barbastelle maternity colonies. Fire, smoke, prolonged emergency lighting, chemical release and emergency activity could affect ecological corridors beyond the substation boundary. The consequence assessment cannot stop at the compound fence where nationally important protected-species habitat and hydrologically connected aquatic receptors occur immediately outside it.

The combined Site 5 case is therefore:

400 kV infrastructure + high-pressure gas transmission + transformer oil and firewater + River Tas drainage pathways + chalk-stream ecology + white-clawed crayfish + private drinking-water supplies + nearby homes + a children's nursery + nationally important bat habitat.

That level of constraint stacking requires an integrated cross-hazard assessment.

The fact that PINS allowed a standalone Major Accidents and Disasters chapter to be scoped out at an earlier stage does not resolve these later and more developed issues. The Scoping Opinion was based upon the scheme and information available at the time and expressly expected BESS fire risk, firefighting and containment to be addressed elsewhere. It does not establish that later-developed Site 1 and Site 5 configurations are acceptable once the

combined interactions between transmission infrastructure, aviation, gas, railway, groundwater, ecology and human receptors are identified.

Glint and glare forms the other significant part of Chapter 18 and reinforces rather than sits separately from those safety concerns.

The Applicant's own earlier assessment identified potentially significant reflections towards the A140 and B1527 within drivers' primary fields of view, potentially significant effects at residential properties requiring mitigation, and reflections at some aerodromes above the 'low potential for temporary after-image' threshold.

The aviation context is unusually dense. Applicant material identifies Hardwick Airfield approximately 30 m from Sub-Site 3A, Seething approximately 220 m from Sub-Site 10B, Norfolk Gliding Club/Tibenham approximately 1 km from Sub-Site 1A, together with Topcroft Farm, Long Stratton, Nut Tree Farm and Tibenham Priory airstrips within the wider area. Glint and glare must therefore be understood as part of a wider aviation-safety environment rather than as a purely visual effect.

PINS required the glint-and-glare assessment to justify its methodology and receptor selection and to address construction and decommissioning as well as operation. The absence of a standalone ES chapter does not mean those effects were substantively scoped out.

The residential evidence is also material. South Norfolk Council records that the Glint and Glare Assessment identified **68 remaining dwellings, 46 of which require mitigation**. SNC also questioned inconsistencies between Chapter 18 and the technical appendix and challenged reliance on 'embedded mitigation' where the nature and maturity of the planting had not been demonstrated.

That is important because planting which may take years to become effective does not eliminate the intervening effect. Nor is screening environmentally neutral. Dense planting introduced to control glare may itself alter landscape openness, heritage setting or ecological function. The mitigation therefore needs to be assessed across topics rather than credited as a cost-free solution.

For roads, glare engages driver distraction and highway safety. For homes it creates repeated residential exposure. For airfields it may affect operational safety. Those are materially different receptors and need controls designed around their actual functions.

The central conclusion of Chapter 18 is therefore that East Pye creates **two concentrated high-consequence infrastructure nodes without yet demonstrating the combined risk created at either**.

Major-accident assessment is not defeated merely because an individual event has a low probability. Low-frequency events remain material where the consequences are severe and where one failure may cascade across several systems.

At Site 1, aviation, high-voltage transmission, transformer fire, groundwater, drinking-water supplies, the railway and Great Moulton converge within one risk environment.

At Site 5, high-voltage infrastructure, high-pressure gas transmission, oil and firewater, chalk-stream drainage, protected aquatic ecology, private drinking-water supplies, a nursery, homes and nationally important bat habitat converge within another. Those combinations are themselves evidence of inadequate constraint avoidance.

A location which depends upon multiple independent safety and containment systems all functioning successfully to prevent a single initiating event escalating across aviation, gas, electricity, water, ecology and human-health receptors requires a materially higher level of pre-consent demonstration than the Applicant has provided.

The omission cannot be cured simply by pointing to separate fire, gas, drainage, aviation, ecology or emergency-management controls. The critical question is what happens when those systems interact under abnormal conditions.

Before the ExA could safely conclude that Chapter 18 effects are acceptable, the Applicant would need to provide a coherent cross-hazard assessment addressing, where relevant, aviation and EFATO trajectories, obstacle risk, transformer fire and smoke, oil and firewater containment under accident conditions, gas–electricity domino effects, hydrogeological pathways, railway interaction, emergency access, evacuation and secured glint-and-glare mitigation.

This is ultimately a **site-suitability** issue rather than merely one of residual risk management. If adequate safety margins require relocation of substations, increased separation from gas pipelines, homes or vulnerable receptors, alteration of the transmission layout, protection of aviation emergency corridors or materially different drainage and containment systems, those are changes to the physical design and location of the Scheme. They cannot safely be deferred to later management plans.

On the present evidence, the Applicant has not demonstrated that the Site 1 and Site 5 infrastructure clusters are environmentally and operationally acceptable. Chapter 18 therefore weighs strongly against development consent and reinforces the wider conclusion that East Pye has been located in a landscape where multiple major constraints overlap rather than being avoided.

Chapter 19: Cumulative and In-Combination Effects

The Scheme Has Not Been Assessed as One Functioning Environmental System

Chapter 19 is the point at which the Environmental Statement should demonstrate that East Pye Solar is environmentally acceptable as a whole. Instead, it largely assembles residual conclusions already reached in the separate technical chapters. By the time an effect reaches Chapter 19 it has already been filtered through topic-specific significance thresholds, embedded-mitigation assumptions, professional judgment and, in several cases, incomplete baseline evidence or mitigation deferred to later design. Chapter 19 therefore does not independently test the environmental consequences of the authorised Scheme; it largely reproduces the assumptions and weaknesses of Chapters 6–18.

That is a serious methodological problem for East Pye Solar because this is not a compact generating station affecting a small number of discrete receptors. It comprises ten dispersed Sites and numerous Sub-Sites, approximately 24 km of cable corridor, multiple Project Substations, BESS, a new National Grid Substation, 132 kV and 400 kV infrastructure, existing and diverted overhead lines, new pylons, highway works, access and haul roads, construction compounds and extensive temporary working areas across approximately 54 square miles of the South Norfolk Claylands. Those components repeatedly affect the same villages, roads, landscapes, heritage settings, soils, aquifers, watercourses and ecological networks. The cumulative question is therefore not whether each isolated effect can individually be reduced to Minor or Not Significant. It is what happens to the same receptor when those pressures are experienced together.

The Applicant's methodology is poorly equipped to answer that question. Chapter 19 takes forward only residual effects of Minor or greater magnitude and excludes effects already characterised as Negligible. It then assesses broad 'receptor groups' rather than every individual receptor and expressly acknowledges that 'the scale of the effect interaction has not been identified'. Those three methodological choices mean that effects are filtered out before interaction is tested; specific worst-affected receptors are aggregated into broad categories; and the spatial and temporal extent of the remaining interaction is not quantified.

The exclusion of Negligible effects is particularly inappropriate for a dispersed development. The principal cumulative harm may arise precisely through repetition of individually small changes. One hedge gap may be negligible; numerous gaps across a connected bat landscape may fragment commuting routes. One low-level source of lighting may be negligible; lighting associated with substations, BESS, compounds, accesses, vehicles, HDD works and security installations may progressively erode a previously dark landscape. One localised area of soil compaction may be limited; repeated compaction from haul roads, compounds, trenching, construction, maintenance and replacement may materially change soil structure and agricultural drainage. One small drainage alteration may appear insignificant, but repeated changes across several micro-catchments, cable corridors and foundations may change the volume, timing and quality of water reaching the same downstream chalk-stream receptor. The same principle applies to traffic, noise, landscape and heritage.

There is therefore an element of circularity in the Applicant's approach. An effect is excluded from cumulative assessment because it was found negligible in isolation, even though the purpose of cumulative assessment is to determine whether several such effects become significant when repeated or experienced together. For East Pye Solar, that screening threshold is capable of producing false negatives by design: the more the environmental consequences are divided into individually small components, the more likely they are to disappear before their combined importance is examined.

The Applicant's express statement that 'the scale of the effect interaction has not been identified' is still more damaging. Scale is not incidental to cumulative significance; it is often determinative. The assessment should establish how many receptors are

affected, how many Sites contribute, how much of a habitat or landscape is exposed, how frequently effects occur, how many work fronts operate simultaneously, whether impacts overlap or follow sequentially, whether alternative unaffected habitat or routes remain and whether the interaction persists for hours, months, years or through repeated lifecycle phases. Chapter 19 assigns significance without first quantifying those matters.

For a barbastelle maternity colony, scale means the number and importance of commuting and foraging routes affected across the Core Sustenance Zone, not simply the effect of one hedge crossing. For a settlement, it may mean the number of approaches industrialised by arrays, substations, pylons and construction traffic. For a road network, it means the number and timing of simultaneous work fronts drawing HGVs through the same constrained junctions and lanes. For a catchment, it means the combined area of compaction, trenching, foundations and drainage modification contributing to the same receiving watercourse. For heritage, it means progressive alteration of the historic landscape surrounding several related assets. None of those questions can be answered adequately while the scale of interaction remains unidentified.

This defect was foreseeable at scoping. The Planning Inspectorate required the Applicant to seek agreement with the relevant local planning authorities on the list of cumulative schemes and specifically required the ES to include a figure depicting the ‘locations and extent’ of cumulative developments in relation to East Pye. The present approach does not adequately convey that extent. Large solar schemes, housing developments, BESS installations and linear grid projects are represented substantially through point-symbol mapping. A development occupying hundreds of hectares, or a transmission corridor extending for kilometres, cannot meaningfully be represented by a dot if the purpose is to identify shared landscapes, roads, catchments, ecological networks and heritage settings.

The external cumulative context is also considerably greater than the present summary suggests. Chapter 14 itself identifies **47 cumulative schemes, including 23 energy-related developments and 11 solar farms**, and relies upon the possibility of simultaneous construction when claiming Major Beneficial cumulative employment effects. That is highly significant. If the surrounding development pipeline is sufficiently real to support a Major Beneficial economic conclusion, the same pipeline must be treated with equal seriousness when considering adverse effects on roads, labour availability, temporary accommodation, tourism, landscape, agriculture, drainage, ecology and community amenity. The Applicant cannot adopt an expansive cumulative scenario for benefits and a restrictive one for harms.

South Norfolk Council makes the same broader point. It identifies Tasway Energy Park, Norwich to Tilbury, other proposed solar NSIPs and consented and proposed TCPA schemes and states that their significant cumulative impact on South Norfolk has not been adequately explored and is of serious concern. Norfolk County Council’s LLFA similarly supports the inclusion of proposed but as yet unconsented solar and BESS schemes because many have similar programmes and may be constructed at the same

time. It specifically identifies flood risk as an area where downstream cumulative effects may extend much further than the individual project boundary.

Tasway Energy Park is the clearest example of inconsistent treatment. It remains a real proposed project, albeit one whose programme and configuration have been uncertain, and both local authorities have treated it as relevant to the cumulative development context. It is also geographically and functionally relevant to the Great Moulton/Tivetshall infrastructure landscape. The WR identifies a legitimate inconsistency in the Applicant's approach: uncertainty is used to diminish Tasway's cumulative relevance while East Pye's own BESS remains integral to the Scheme and its claimed benefits despite its similar Gate 1 connection status and unresolved delivery position. A consistent methodology should either apply comparable evidential treatment to both or include Tasway at least as a reasonable worst-case sensitivity scenario.

Norwich to Tilbury is separately important because it is not simply another project on a list. It is major linear electricity infrastructure affecting the same broad rural landscape. It may add pylons and transmission infrastructure to the same landscape character areas, affect the same heritage settings, use parts of the same strategic and local highway network, disturb hedgerows and vegetation, fragment ecological networks and contribute further visual industrialisation. The relevant question is therefore not whether East Pye and Norwich to Tilbury are technically different developments, but whether the same church, village, woodland, road, airfield, historic landscape or ecological network experiences both.

Other solar and BESS developments require the same receptor-led approach. Multiple solar developments can cumulatively remove BMV land, reduce open-country habitat, generate repeated construction traffic, increase pressure on labour and temporary accommodation, transform landscape character and require additional grid infrastructure. Multiple BESS developments can add industrial compounds, transformer and inverter noise, lighting, HGV movements, drainage and firewater risks and demands on emergency services. Existing and proposed grid infrastructure further adds pylons, overhead lines, substations and electrical compounds. Chapter 19 needs to determine the environmental carrying capacity of the receiving landscape rather than simply establish that each individual project has been assessed separately.

Housing growth is also part of the relevant future baseline. Strategic and local housing around Long Stratton, Tasburgh and other settlements can overlap with East Pye through HGV movements, road capacity, construction noise and dust, labour demand, accommodation pressure and drainage. It also creates new residents who will experience the changed landscape and increases use of PRow's and rural roads. The future environment in which East Pye would operate for approximately 60 years is therefore not the present landscape frozen in time. The cumulative assessment needs to model the future development context realistically.

The internal cumulative assessment is even more important. **East Pye must be assessed cumulatively with itself.** The ten-Site configuration creates repeated

industrialisation across one connected rural landscape. A settlement may see development on more than one approach; a barbastelle population may use hedges and woods spanning several Sites; one road may serve several construction areas; and the same catchment may receive runoff and drainage changes from several development parcels. Chapter 19 does not adequately demonstrate whether those repeated pressures collectively change the function and character of the South Norfolk Claylands.

The approximately 24 km cable network is itself a major cumulative component. It requires trenching, HDD, joint bays, working widths, soil storage, access, dewatering and repeated crossings. Those activities simultaneously engage soils, agricultural drainage, groundwater, archaeology, watercourses, ecology, transport and EMF. The fact that the cables will ultimately be underground does not make their construction environmentally neutral. The proper cumulative question is how many ecological, hydrological and agricultural systems are disturbed by the complete cable system, and whether those disturbances overlap spatially or temporally.

The multiple electrical compounds likewise need to be treated as one infrastructure system. East Pye includes Project Substations, the National Grid Substation, 132 kV and 400 kV infrastructure, transformers, BESS, underground circuits, overhead lines and new or altered pylons. Their combined effects include landscape change, noise, lighting, EMF, drainage, deep foundations, transformer oil, abnormal-load transport and long-term retention. It is artificial to assess each substation or cable component locally without asking what cumulative industrial environment is created by the electrical system as a whole.

Site 1 is the clearest example of this **internal constraint stacking**. It combines BESS, Project and National Grid 400 kV infrastructure, existing and proposed overhead-line works and pylons with nearby homes, groundwater and private-water receptors, landscape and ecological constraints, Tibenham Airfield, the railway and major construction access. The cumulative question is not whether each technical chapter contains some mitigation. It is whether fire containment, drainage, noise mitigation, aviation safeguarding, AIL access, groundwater protection, landscape mitigation, ecology, electrical safety and residential protection can all be achieved simultaneously within one physically deliverable Site 1 design. Chapter 19 does not undertake that test.

The construction worst case is similarly undefined. The Applicant has not established the realistic maximum number and location of simultaneous compounds, active solar work fronts, piling areas, cable sections, HDD operations, highway works, haul routes and illuminated working areas. Each produces noise, traffic, dust, lighting, runoff, fuel storage, vegetation disturbance and human activity. Several ‘temporary’ effects can collectively become a prolonged landscape-scale pressure if they move sequentially through different Sites or operate concurrently. Without a programme-linked maximum simultaneous scenario, there is no demonstrated construction worst case.

Transport illustrates why mitigation cannot simply be deducted from the cumulative assessment. Passing places, visibility splays, internal haul roads, road widening and revised accesses may reduce a highway problem but create other effects. They may require hedge or tree loss, excavation of verges, impact Roadside Nature Reserves, compact BMV soil, interfere with field drainage, alter historic lanes, affect culverts and watercourses or move traffic closer to houses and heritage assets. Where NCC has required an access strategy materially different from that originally assessed, the environmental consequences of the revised solution must themselves be assessed cumulatively. A transport solution is not environmentally neutral merely because it solves a transport constraint.

Landscape mitigation creates the same problem. New hedges, woodland and scrub can screen infrastructure, but that planting may simultaneously reduce the openness required by skylark and lapwing, alter historic relationships between churches, farmsteads and open fields, change the characteristic structure of the Claylands and constrain subsequent restoration of agricultural land. The same hedge cannot simply be credited as landscape mitigation, heritage mitigation and ecological enhancement without assessing what it encloses, what habitat it changes and what historic view or spatial relationship it removes.

Water, soils and ground conditions provide perhaps the clearest illustration of why a topic-led cumulative assessment is inadequate. Heavy clay soils influence infiltration and runoff; compaction changes agricultural drainage; cable trenches may intercept drains; piling may create groundwater pathways; HDD can affect surface and groundwater; contaminated soil may be mobilised; and concrete, oils, dewatering and BESS or transformer firewater introduce pollutant sources. Those pathways may all ultimately affect the same Principal Aquifer, private water supply or River Tas/Waveney-connected receptor. Chapter 19 should integrate them into one source–pathway–receptor model. It does not.

Ecology also needs to be assessed by functional network rather than habitat label. The cumulative barbastelle receptor is the maternity-colony landscape: multiple colonies, overlapping Core Sustenance Zones, woodland, hedges, dark corridors, field margins and watercourses. It is exposed simultaneously to panel land-take, hedge gaps, lighting, noise, fencing, traffic, woodland-edge disturbance, cable routes and compounds. Six ancient woodlands directly adjoining the Scheme are similarly exposed not simply to direct loss but to enclosure, lighting, edge effects, disturbance, hydrological change and loss of connectivity. Farmland birds experience loss of open habitat combined with planting, fencing and construction disturbance. Roadside Nature Reserves and botanical corridors face repeated access works, widening, visibility splays and vegetation removal. Great crested newt populations depend upon pond-and-terrestrial networks which can be fragmented without any individual pond being destroyed. The River Tas system experiences HDD, sediment, runoff, groundwater changes, electrical crossings and construction disturbance. Chapter 19 does not adequately assess those functional systems as cumulative receptors.

The heritage case is similarly broader than simultaneous visibility. East Pye occupies historic agricultural ancient countryside containing churches, farmsteads, conservation areas, historic lanes and long-established relationships between settlement and countryside. Solar arrays, substations, pylons, highway interventions, traffic, lighting and screening vegetation progressively alter that landscape. Screening may hide some infrastructure but cannot restore an historic open field, recover tranquillity or reverse industrialisation of an approach to a church; in some circumstances the screening itself changes historic openness. Chapter 19 does not adequately assess that landscape-scale accumulation.

For residents, the ‘receptor group’ methodology is particularly unsatisfactory. A household does not experience landscape, noise, lighting, traffic and loss of tranquillity as separate technical topics. It experiences one altered place. During construction that may comprise HGV movements, piling or HDD noise, temporary lighting, road disruption, visual change, severance and repeated disturbance. During operation it may comprise a permanently changed landscape, substation or BESS noise, security lighting and loss of rural character. Chapter 19 largely identifies significant residential interaction only where already-significant visual and noise effects coincide. That misses the possibility that a significant visual effect combined with individually Minor traffic, lighting and noise effects may produce a materially greater overall amenity burden.

The same is true of PRowS. Users of Boudicca Way, Via Beata and other routes may encounter arrays, substations, fencing, HGVs, crossings, temporary closures, diversions, lighting and loss of tranquillity during a single journey. For promoted and long-distance routes, the relevant cumulative receptor is the experience of the route, not each isolated crossing or viewpoint.

Transport needs a programme-level cumulative analysis. East Pye already depends on call-forward systems, holding areas, restricted delivery periods, one-HGV-at-a-time controls, school-related restrictions, AIL movements and narrow rural roads. Those controls must remain workable when several East Pye construction fronts operate concurrently and when Norwich to Tilbury, Tasway, housing and other projects use the same A47, A140 and local-road network. National Highways has sought greater granularity because a network may appear acceptable at strategic-link level while a particular junction, bridge, village lane or school route becomes the actual limiting constraint.

The cumulative noise evidence is also weaker than Chapter 19 suggests. Construction noise arises from HGVs, piling, general works and HDD; operational noise from substations, BESS, transformers and inverters; replacement and decommissioning bring further construction-type noise. South Norfolk Council specifically states that Chapter 19 cannot conclude that cumulative operational noise will be only Minor Adverse and Not Significant where the BESS and substation noise effects had not been adequately assessed. Its acoustic adviser considered that those installations could significantly affect amenity and potentially amount to statutory nuisance unless significant mitigation were provided.

The socio-economic treatment exposes another asymmetry. Chapter 19 is willing to combine projects when doing so increases employment and skills benefits, but is less precautionary about the corresponding competition for skilled workers, pressure on accommodation and private rental housing, tourism displacement, construction traffic, disruption to rural businesses and pressure on services. The same 47-scheme development pipeline cannot rationally be treated as a real cumulative opportunity when counting benefits but as too uncertain or remote when assessing burdens.

Agricultural effects also need to be considered geographically rather than through national percentages. East Pye removes or disturbs substantial BMV and stewardship land. Other solar, grid, housing and infrastructure projects remove or disturb more in the immediate vicinity. The cumulative issue is the concentration of productive and conservation-managed land loss in the same small rural economy, together with repeated soil compaction, fragmentation of holdings and interference with agricultural drainage—not the proportion of England’s total agricultural area represented by one project.

EMF is another topic where Chapter 19 simply inherits an inadequate underlying assessment. There is no project-wide cumulative model of the combined electrical environment from East Pye’s underground circuits, existing and diverted 400 kV overhead lines, substations, BESS, transformers and inverters, still less their interaction with Norwich to Tilbury or other surrounding electrical infrastructure. There is no hotspot mapping and no adequate cumulative aquatic assessment at electrical crossings. A cumulative chapter cannot cure the absence of the underlying scheme-specific model.

Utilities and major-accident risks likewise need synthesis. East Pye crosses or approaches National Gas Transmission infrastructure, water and sewer assets, telecommunications, railway infrastructure and existing electricity systems. Site 1 combines BESS, 400 kV infrastructure, overhead lines, railway, homes, groundwater, private supplies, fibre-optic cables, aviation and construction access. Site 5 combines major electrical infrastructure with gas infrastructure, hydrological pathways, private supplies and sensitive River Tas ecology. The question is whether the combined emergency scenario has been assessed—not merely whether each individual discipline has an outline management plan. Chapter 19 should provide the cross-hazard synthesis which is otherwise missing.

Tibbenham Airfield similarly needs to be treated as one cumulative aviation receptor. The relevant future environment includes East Pye Solar arrays and substations to the north and east, Norwich to Tilbury pylons immediately to the west, Simpson’s Maltings Solar to the south, Tasway Energy Park if it progresses to the north, cranes, lighting, glint and glare and progressive loss or alteration of emergency landing terrain. Each additional project may remove operational flexibility even if its individual obstacle or glare assessment appears acceptable. The cumulative question is whether a safe aviation environment remains around the airfield after the whole foreseeable development pattern is superimposed.

Chapter 19 also materially underestimates the temporal cumulative case. A 60-year NSIP is not simply ‘construction → passive operation → decommissioning’. The Scheme anticipates wholesale or substantial solar-panel replacement, repeated BESS replacement—potentially up to five cycles—transformer replacement and associated reuse of compounds, roads and lifting infrastructure. These are foreseeable intermediate construction phases involving renewed HGV traffic, noise, soil disturbance, waste, lighting and ecological disturbance. By the time they occur, mitigation habitats may have matured and become valuable receptors in their own right. They therefore need to be assessed as separate cumulative phases, not absorbed into ‘operation’.

The assumption that decommissioning will simply be construction in reverse is equally unsafe. After six decades, the receiving environment will be different: mitigation trees and hedges may be mature, new habitats established, soils changed, climate conditions altered, settlements expanded and some electrical infrastructure intended to remain. Decommissioning will also generate a different waste stream, involving removal or recycling of ageing solar, battery and electrical equipment. Removing infrastructure may damage mature mitigation habitats and soils; leaving it may prevent restoration. It is also unclear who will be responsible for decommissioning, and whether they will have adequate skills or funds to achieve this.

That leads to a major internal inconsistency about the post-decommissioning end state. The National Grid Substation and some grid infrastructure may remain. Mature screening woodland and hedges may remain. BNG habitats may remain. Underground ducts, cables, foundations, drainage and access works may remain in whole or part. If those elements remain, the historic and agricultural landscape is not restored to its former condition. If they are removed, further ecological, soil, traffic, waste and hydrological effects arise. Landscape, ecology, heritage, agriculture, soils and water cannot each assume a different end state because that produces the most favourable conclusion within that chapter. One defined removal-and-retention scenario is required across the ES.

The claimed Significant Beneficial operational ecological in-combination effect is also particularly vulnerable. Chapter 19 assumes that cessation of conventional farming, fertiliser and chemical inputs combined with habitat creation will produce ecological and water-quality benefits. But substantial parts of East Pye have already been subject to Countryside or Environmental Stewardship management. The existing baseline therefore includes conservation-managed fields, margins and habitat which already support substantial farmland-bird populations. The Applicant records 81 skylark territories, 70 of them within areas of permanent development, together with other Red List breeding birds. Expiry of a stewardship agreement does not erase the ecological condition created by that management.

The same claimed benefit is difficult to reconcile with the Applicant’s own nationally important bat baseline and the peer-reviewed evidence cited in the WR showing reduced bat activity at operational solar farms, including along retained field boundaries. New grassland, hedges and reduced fertiliser inputs may produce some

benefits, but they do not demonstrate that barbastelle maternity-colony function, open-land bird habitat, commuting routes or prey networks will remain equivalent. BNG cannot answer those species-specific functional questions. Chapter 19 therefore has not demonstrated a Significant Beneficial ecological effect; it has assumed one by comparing the Scheme with an oversimplified intensive-agriculture baseline.

The broader design implication is the most important point in Chapter 19. East Pye Solar depends upon numerous mitigation systems working simultaneously: landscape planting, ecological buffers, drainage, highway controls, acoustic barriers, lighting restrictions, groundwater protection, firewater containment, aviation safeguarding, gas-pipeline requirements, BNG and eventual agricultural restoration. Yet many of those measures compete for the same physical space or create effects in another discipline. A new haul road may solve access while harming soils, hedges and drainage. A noise barrier may reduce sound but increase visual harm. Planting may screen infrastructure but harm open-country bird habitat or historic openness. Additional drainage may require more land. Retaining BNG habitat may prevent agricultural restoration. Chapter 19 assumes the separate mitigation packages will all work; it does not demonstrate that they can all coexist within one physical design.

That is why cumulative assessment becomes a question of site selection as well as EIA methodology. East Pye intersects a nationally important bat landscape, six directly adjoining ancient woods, extensive BMV agricultural land, sensitive heritage assets, chalk-stream systems, Principal Aquifers and private water supplies, constrained rural roads, aviation interests, National Gas infrastructure, existing and proposed grid infrastructure and quiet rural residential receptors. Several of those constraints occur together at the same Sites. The very density of mitigation required is evidence of the underlying environmental constraint of the location.

A well-sited infrastructure project will require mitigation. The distinction at East Pye Solar is the extent to which environmental acceptability depends upon numerous independent controls all succeeding simultaneously and without creating new effects elsewhere. At some point mitigation ceases to be refinement of an environmentally suitable project and becomes the mechanism by which an intrinsically over-constrained location is made to appear acceptable on paper. Chapter 19 provides substantial evidence that East Pye has crossed that line.

In conclusion: Chapter 19 does not demonstrate that the cumulative and in-combination effects of East Pye are acceptable. Its methodology systematically narrows the evidence before the cumulative question is asked: Negligible effects are removed; receptors are aggregated; the scale of interaction is expressly left unidentified; unresolved assumptions and deferred mitigation from Chapters 6–18 are imported unchanged; external projects are treated inconsistently; construction phasing is insufficiently defined; replacement cycles are largely omitted; and decommissioning proceeds from an incoherent future baseline. Each weakness tends to suppress, rather than reveal, the environmental worst case.

More fundamentally, Chapter 19 fails the test it should have been designed to answer: whether there is one physically deliverable East Pye design in which access, drainage, groundwater protection, landscape mitigation, ecological connectivity, heritage protection, agricultural restoration, noise control, aviation safeguarding, utilities, fire safety and decommissioning can all be achieved simultaneously. The Environmental Statement contains numerous topic-specific mitigation solutions, but it has not demonstrated that those solutions are mutually compatible. That is not merely a deficiency in presentation; it goes to whether an environmentally coherent Scheme actually exists within the DCO envelope.

The concentration of cumulative constraints is itself material evidence of poor site selection. The same receptors are repeatedly subjected to different parts of East Pye and to a wider development pattern of solar, BESS, transmission infrastructure and housing. The Applicant cannot obtain a reliable ‘Not Significant’ conclusion by dividing that physical reality into small effects, separate chapters, broad receptor groups and different project boundaries. Receptors experience one East Pye Solar Scheme, not nineteen Environmental Statement chapters.

Accordingly, the repeated ‘Not Significant’ conclusions in Chapter 19 should be afforded little weight unless the Applicant provides a genuinely receptor-led, spatially and temporally quantified cumulative assessment; models a realistic maximum simultaneous construction case; includes reasonably foreseeable external development on a consistent basis; resolves the mitigation conflicts between technical disciplines; assesses replacement and decommissioning against coherent future baselines; and demonstrates at least one complete design in which every relied-upon environmental control can actually coexist. If that exercise identifies the need for substantial relocation, reduction or removal of development, that is evidence that the present Scheme is not environmentally acceptable as designed. Unless those defects can be remedied within the Examination without materially altering the assessed project, Chapter 19 materially supports refusal of development consent.

Chapter 20: Residual Effects

The Applicant’s Final Summary Does Not Represent the True Environmental Balance

Chapter 20 exposes the central weakness in the Applicant’s environmental case. It presents a strikingly asymmetric final picture: extensive Significant adverse landscape and visual effects are expressly acknowledged, yet almost every other environmental topic is reduced to ‘no significant residual effect’ once mitigation is assumed. At the same time, substantial beneficial effects are attributed to ecology, water quality, employment, skills and climate. That outcome is difficult to reconcile with either the Applicant’s own underlying evidence or the continuing concerns of statutory and specialist consultees. Chapter 20 is therefore not an independent confirmation that the Scheme is environmentally acceptable. It is the end-product of the assumptions,

significance judgments, incomplete baselines and mitigation dependencies contained in the preceding chapters.

The Applicant's own landscape evidence provides the clearest test of scale. Chapter 20 records Significant construction effects across NCA 83 South Norfolk and High Suffolk Claylands, the Tas Rural River Valley, Tas Tributary Farmland, Chet Tributary Farmland, Thurlton Tributary Farmland with Parkland and Great Moulton Plateau Farmland. Sites 1, 7 and 8 experience Major Adverse landscape effects, while residents, PRowers and promoted recreational routes experience repeated Major or Major-to-Substantial visual effects. The operational assessment remains materially adverse: Major effects occur at the BESS area, Site 1 and Site 8, with widespread Moderate effects elsewhere. Even at Year 15, Significant effects remain on Tas Tributary Farmland, Great Moulton Plateau Farmland, Sites 1, 7 and 8 and numerous residential, recreational and PRow receptors.

That is not evidence of a development whose impacts have been successfully absorbed by the landscape. It demonstrates landscape-scale transformation which remains significant after fifteen years of planting and mitigation. The planting relied upon to screen the development is itself part of that transformation. Existing open and semi-open agricultural relationships between villages, medieval churches, farmsteads, lanes, woodlands, hedgerows and river valleys in this area of ancient countryside are replaced by a deliberately engineered landscape of screening woodland, new hedges, energy infrastructure and enclosed fields. Reduced visibility of panels after fifteen years is therefore not equivalent to restoration of landscape character. The Applicant's own conclusions establish that East Pye would require the South Norfolk landscape to be substantially and enduringly reorganised around the Scheme.

That admitted landscape transformation provides the proper context for the much more optimistic conclusions reached elsewhere in Chapter 20. The historic environment is the most obvious example. Chapter 20 reports no significant residual cultural-heritage effect even though Historic England describes an extensive agricultural historic landscape containing important rural churches, listed buildings and small conservation areas centred on medieval settlement. Its application-stage evidence identifies concerns involving a Scheduled Monument, two Grade I buildings, two Grade II* buildings, 42 Grade II buildings and four Conservation Areas, acknowledges residual policy harm and confirms that parts of the Order Limits remain incompletely archaeologically evaluated.

The difficulty is not simply that some individual heritage judgments are disputed. Landscape and heritage describe the same physical place. A Scheme which the Applicant accepts will cause Major and long-term landscape change around medieval settlements, rural churches and historic farmsteads cannot rationally be treated as having no meaningful residual historic-environment consequence merely because individual asset effects have been placed below an EIA significance threshold. Setting is not limited to direct visibility. It includes the relationship between an asset and its rural surroundings, approaches, openness, tranquillity, historic land use and the spatial relationship between church, village, lane and field. Screening may reduce the visibility of panels while itself damaging that openness. Archaeological recording

similarly preserves information, not the archaeological resource which is destroyed. Where parts of the cable corridor and other land remain unevaluated, the final residual effect cannot properly be treated as settled before it is known whether archaeology requiring preservation in situ exists.

The ecological conclusions are still more difficult to sustain. Chapter 20 predicts no Significant adverse construction or decommissioning ecological effect, but assigns Moderate Beneficial operational effects to bats, skylark, hedgerows, ponds, rivers, woodland, badger, water vole and otter. That conclusion sits uneasily with the Applicant's own finding that the bat assemblage is of national importance, with widespread barbastelle activity and multiple maternity colonies whose Core Sustenance Zones overlap the entire development landscape. The relevant receptor is not an isolated roost or retained hedge but an existing functioning network of maternity colonies, satellite roosts, ancient and other woodland, mature trees, hedgerows, dark corridors, ponds, watercourses and foraging habitat.

The specialist evidence shows that this network is not yet fully understood. The Norfolk Barbastelle Study Group confirmed a maternity colony at Little Wood, with a pre-parturition emergence count of 36 and an estimated post-parturition colony of approximately 55 bats, identified evidence of probable additional maternity colonies and called for further radiotracking and woodland investigation. Other woodlands contain known maternity colonies while others remain insufficiently surveyed. There has also been no proper full botanical survey, notwithstanding the risk to roadside verges, hedgebanks, field margins and other semi-natural habitats directly exposed to highway, access and cable works. Norfolk Wildlife Trust continues to require additional information and design refinement before it considers the Scheme ecologically acceptable, while Natural England continues to treat protected-species licensing as an unresolved matter. It is therefore premature to describe the operational effect on bats and other ecological receptors as beneficial before the complete functional baseline and the effectiveness of the mitigation have been established.

The claimed ecological benefits also conflate habitat quantity with ecological function. Conversion of arable land to grassland, additional woodland and hedgerow planting may produce habitat units, but a BNG metric does not demonstrate functional equivalence. Existing Countryside Stewardship land already performs ecological functions for farmland birds. Lapwing require extensive open ground and sightlines; skylark require open nesting and foraging habitat; turtle dove require particular combinations of nesting vegetation, seed-rich habitat and water. Enclosing those areas with panels, fencing and woody planting cannot automatically be characterised as an ecological improvement simply because the post-development habitat receives a higher metric score.

The same applies to bats. A mature hedgerow connecting maternity roosts to established feeding habitat cannot be replaced instantly by an equivalent number of metres of new hedge elsewhere. Its value depends upon location, maturity, darkness, continuity, tree structure and its relationship with the wider colony network. Norfolk Wildlife Trust expressly questions the assumption that relatively small hedge breaks are

harmless to barbastelle movement. There is an unavoidable temporal deficit where replacement habitat takes decades to acquire the function which existing habitat possesses at the point of loss. Ancient woodland relationships, veteran-tree systems and long-established dark commuting routes are still less replaceable.

Chapter 20's treatment of water demonstrates the same optimism. It reports no Significant residual construction effect but assigns a Major Beneficial operational effect, principally because conventional agricultural fertiliser and chemical inputs are expected to decline. That potential benefit cannot be considered in isolation from the unresolved risk pathways created by the development itself. The Environment Agency has raised issues concerning groundwater-surface-water interaction, piling and deep foundations, underground cabling, watercourse crossings, pollution prevention, BESS and substation design, private and public water supplies, historic contamination, fisheries and aquatic ecology. Foundation Works Risk Assessments and some HDD hydrogeological assessments remain deferred until after consent.

The drinking-water baseline is particularly important. The Environment Agency originally identified 35 private water supplies within 250 m whose precise locations and/or abstraction strata were uncertain and required consideration over greater distances because of the Principal Aquifer setting. Six licensed groundwater abstractions occur within 1 km, including a public-water-supply borehole whose Source Protection Zone extends into the Scheme area. Proximity mapping does not establish abstraction depth, groundwater flow direction, hydraulic connectivity, contaminant travel time or whether piling, trenching, HDD, altered recharge or a pollution incident could create a pathway to a supply.

The LLFA also continues to question impermeable-area assumptions, infiltration evidence and drainage information in a landscape containing downstream communities with existing flood problems. The Environment Agency has unresolved concerns about fish, European eel, aquatic invertebrates, watercourse crossings and pollution control. Reduced agricultural fertiliser use may therefore be beneficial in one respect, but it cannot neutralise possible effects from soil compaction, drainage alteration, piling, dewatering, cable trenching, HDD, transformer oil, BESS pollutants, firewater or sediment. Chapter 20 effectively credits the benefit before the Applicant has demonstrated control of the competing harms.

The soils conclusion contains an equally important internal contradiction. The Applicant itself accepts 'irreversible loss or downgrading' of BMV agricultural land as a Moderate Adverse Significant effect. The WR records approximately 829.1 ha of surveyed BMV land within the solar Sites, approximately 78.7% of that surveyed area. Natural England continues to seek complete ALC information for the Cable Route Corridor, avoidance of peat, avoidance of permanent infrastructure on BMV land and adequate soil safeguards. Yet Chapter 20 thereafter presents operational and decommissioning soil effects largely as non-significant and reduces wider agricultural consequences to Minor Adverse.

That distinction is artificial. The Scheme would affect slowly permeable and structurally vulnerable soils through initial construction, haul routes, compounds, trenching, soil storage, permanent tracks, drainage interference and foundation works. It then permits future panel replacement, repeated BESS replacement and other heavy maintenance before decommissioning. Temporary occupation does not mean temporary soil effect: Natural England itself recognises that temporary construction works can cause permanent ALC degradation. Nor is a commitment to restore land to comparable agricultural condition proof that the existing grade will actually be recovered after six decades of altered management and repeated disturbance.

This feeds directly into Chapter 20's reliance on the description of East Pye as 'temporary'. Sixty years is not a short environmental interval. The Applicant anticipates full panel replacement and potentially up to five BESS replacement cycles. Those are foreseeable construction-like phases involving renewed traffic, lifting equipment, compounds, waste movements and disturbance. During the same period mitigation woodland and hedgerows may mature, ecological communities may reorganise, soils and drainage may change and settlements and infrastructure around the Scheme may evolve.

Moreover, the Scheme is not wholly temporary. The National Grid Substation and elements of the grid connection are expected to remain. Underground ducts, joint bays or foundations may remain in the ground; foundations may be cut off below ground rather than completely removed; permanent access and drainage associated with retained transmission infrastructure may remain; and mature mitigation planting may itself be retained. The proposed National Grid compound is substantial and new or replacement pylons may remain as part of the transmission network. The post-decommissioning landscape therefore cannot simply be assumed to revert to the pre-development baseline.

The distinction is important: **removability of solar panels is not reversibility of environmental change**. Historic openness cannot necessarily be recreated after sixty years. Archaeological remains cannot be reinstated after excavation. Ancient ecological relationships and mature commuting corridors cannot be recreated on demand. BMV soils may not recover if their structure or drainage is permanently altered. Damage to a vulnerable aquifer or drinking-water supply may be difficult or impossible to reverse. Countryside Stewardship habitat and community experience of tranquillity cannot retrospectively be restored for the generation which experiences the development. Some effects therefore require avoidance rather than progressively more elaborate mitigation.

Transport demonstrates a different but equally important problem with Chapter 20's use of 'Not Significant'. Chapter 20 predicts no Significant residual construction transport effect, yet National Highways maintains a formal objection requiring further evidence on the A47/A140 junction, cumulative construction traffic, worker travel and Requirement 15. At local level, important routeing and access issues remain concerning Sites 7–10, Hall Lane, passing places, highway boundaries, vegetation clearance, local geometry and AIL delivery.

An AIL route illustrates why EIA significance and physical deliverability are not the same question. A large transformer cannot be divided into smaller deliveries. If no route is physically capable, structurally suitable, legally available and environmentally acceptable, the component cannot reach its destination. Traffic management cannot solve that binary problem. Nor can a new internal haul road automatically be treated as mitigation where it requires additional land, hedge removal, drainage works, soil compaction, watercourse crossings or ecological disturbance. Chapter 20's single 'no significant residual effect' conclusion obscures rather than resolves those interactions.

The 'Other Environmental Matters' conclusion is similarly over-compressed. Norfolk Gliding Club continues to identify four separate aviation-safety mechanisms at Tibenham—glint and glare, thermal updrafts, engine failure after take-off and bird strike—and argues that only the first has been substantively addressed by the Applicant's aviation consultant. These concerns concern operational safety, including emergency landing opportunities, rather than merely visual amenity. National Gas likewise continues to require satisfactory protective provisions for the FM05 Yelverton–Stowmarket high-pressure feeder main and associated cathodic-protection equipment. The Scheme places major new high-voltage infrastructure, gas infrastructure, BESS, aquifers, private water supplies, residential receptors and aviation interests into overlapping physical environments. Low probability does not make a credible high-consequence event environmentally irrelevant.

A further systemic problem is Chapter 20's reliance upon mitigation which is not yet final. Residual effects are meaningful only after the measures relied upon to produce them have been adequately defined, demonstrated to be effective and legally secured. Yet important Ground Investigation and Foundation Works Risk Assessments remain post-consent; some HDD hydrogeological assessment is deferred; access arrangements remain subject to further agreement; ecological protection depends upon later detailed plans; lighting controls are not fully fixed; drainage remains subject to detailed design; archaeological mitigation depends upon further evaluation; replacement and decommissioning arrangements remain incomplete; and statutory undertaker protective provisions continue to be negotiated.

The Environment Agency goes further. Its Relevant Representation identifies permitted preliminary works which are not adequately covered by the CEMP, creating what it describes as an unmitigated risk of environmental harm, and objects to drafting such as 'substantially in accordance with' where it weakens control. National Gas continues to seek protective provisions; National Highways seeks stronger requirements and additional evidence; Historic England seeks further archaeological investigation. These are the very controls upon which the Applicant's final Not Significant conclusions depend. A predicted future mitigation outcome is not yet an established residual effect.

Chapter 20 also fails to capture the burden experienced by actual receptors because it summarises by technical discipline. A resident experiences changed landscape, HGV traffic, noise, lighting, road disruption and loss of tranquillity together. A medieval church experiences new arrays, substations, traffic, road works, noise, screening vegetation and loss of open agricultural setting together. A barbastelle colony

experiences lighting, hedge severance, disturbance, woodland-edge change, fencing, altered prey resources and vehicle movements together. A private water supply may be exposed simultaneously to altered recharge, piles, trenches, contaminant mobilisation, drainage changes and transformer or BESS pollution pathways. A chalk stream receives runoff, sediment, groundwater changes, cable crossings, HDD and accidental pollution through one connected system. Separating those effects into individually Minor or Not Significant categories can materially understate the aggregate receptor experience.

External cumulative effects compound that defect. South Norfolk Council and Norfolk County Council have identified Tasway Energy Park, Norwich to Tilbury and the wider concentration of solar, BESS, transmission and infrastructure development as matters requiring assessment. The LLFA has specifically supported inclusion of proposed but unconsented solar and BESS projects because similar construction programmes may overlap and because cumulative drainage and flood consequences may extend downstream beyond individual project boundaries. Historic England has identified cumulative interaction with Tasway, while National Highways considers the cumulative construction-traffic evidence insufficiently granular.

Uncertainty about the exact programme of another development is not evidence that cumulative effects do not arise. Tasway Energy Park may affect the same Great Moulton/Tivetshall landscape, roads, ecological systems, heritage receptors and aviation environment. Norwich to Tilbury is a major linear transmission project with potential effects upon many of the same landscapes, roads, hedgerows and historic settings. Housing growth and other infrastructure add further pressure upon labour, accommodation, road capacity, drainage and settlement character. Reasonably foreseeable scenarios should therefore be tested rather than excluded because programme overlap is uncertain.

Chapter 20 is also materially asymmetric in its treatment of benefits and harms. Adverse effects are repeatedly reduced because planting will mature, mitigation is expected to work, impacts are temporary or later controls will be agreed. Benefits are treated with much greater certainty even where they depend upon equally uncertain future events. Construction employment in South Norfolk is classified as Major Beneficial and skills as Moderate Beneficial, while the underlying evidence indicates much weaker resident-based employment benefit. South Norfolk Council's evidence recorded that, of an earlier estimate of 1,006 direct and indirect jobs, only 73 were expected to be filled by South Norfolk residents and 501 from outside the region. There are no binding local-employment percentages or equivalent secured outcomes commensurate with the weight claimed.

Tourism is reduced to Minor Adverse notwithstanding the rural visitor economy associated with churches, the Waveney Valley, Boudicca Way, walking, cycling and riding, countryside accommodation and heritage. Ecological benefits are treated as established although the botanical and barbastelle baselines remain incomplete and no account has been taken of potential harm to them. Water benefit is treated as Major despite outstanding regulatory concerns. Climate benefit is treated as secure despite

the unresolved whole-life GHG accounting, replacement assumptions, grid-intensity assumptions, BESS position and uncertainty over actual exported electricity identified in Chapter 6. The same evidential rule should apply to both sides of the balance: a claimed effect should receive weight according to whether it is demonstrated, deliverable and secured.

That leads to the most important planning point in Chapter 20. BEPS does not dispute the national need for renewable electricity. The question is whether the **specific public benefit of East Pye Solar**, at approximately 500 MW, in this location and configuration, is sufficient to justify the specific harm it causes. The Applicant's alternatives exercise treated approximately 500 MW as the starting requirement and sought sufficient land to accommodate that output. Smaller or materially different schemes were disadvantaged because they did not reproduce the predetermined capacity. The assessment therefore asks how 500 MW can be fitted into the landscape rather than what scale and configuration the environmental capacity of this sensitive, 'nature-dense' landscape of ancient countryside could accommodate.

The need case does not answer that defect. No quantified T7 deficit has been identified which would arise if East Pye were refused. Gate 2 status is relevant to connection reform but does not itself demonstrate project-specific locational necessity. The substantial regional solar pipeline remains relevant to the weight given to the argument that these particular harms must be accepted here. The BESS also does not presently have the equivalent connection position relied upon for the solar generation element, so benefits attributed to the integrated solar-and-storage Scheme cannot simply be treated as equally certain.

The correct question is therefore not whether renewable generation is needed nationally. It is: **what material regional or system deficit would arise if East Pye were not built, and why does that deficit require 500 MW to be delivered across these ten Sites rather than through a smaller, less dispersed or less environmentally constrained solution?** Chapter 20 does not answer that question.

This produces a clear proportionality problem. On the harm side, there are admitted Significant landscape effects persisting beyond Year 15; irreversible loss or downgrading of BMV land; unresolved heritage harm and archaeology; a nationally important bat assemblage and multiple barbastelle maternity-colony networks; incomplete botanical and aquatic evidence; sensitive aquifers and drinking-water receptors; continuing highway objections; aviation concerns; and repeated whole-life construction effects. On the benefit side, there is a nationally important renewable-energy objective but no demonstrated locational requirement that those particular harms be incurred at East Pye. The planning balance is not between East Pye's environmental harms and 'net zero' as a whole. It is between East Pye's harms and East Pye's additional, demonstrable and secured contribution relative to available alternatives and the existing regional pipeline.

Chapter 20 also has an important consequence for compulsory acquisition. Section 122 of the Planning Act requires both that the land or rights are required for the

development and that there is a compelling case in the public interest. That test becomes significantly harder to satisfy where parts of the authorised development remain optional or unresolved. NGET has not confirmed that the precise Site 1B National Grid solution sought through the DCO will ultimately be constructed or used; granting the DCO would not itself oblige NGET to use that solution. The final construction-access arrangements are also not fully resolved. Yet the Applicant seeks compulsory powers across the land necessary to preserve those implementation options.

System ‘optionality’ or allowance for future attrition in the wider generation pipeline is not the same thing as demonstrating that particular private land must be compulsorily acquired now. Nor does compensation remove the need to establish necessity. Where the connection, access solution or design changes, land presently included for substations, cables, access, drainage, landscaping, construction compounds or rights may cease to be needed. The compulsory-acquisition case therefore needs to be tested plot by plot against a confirmed deliverable Scheme, including whether permanent freehold is actually necessary rather than lesser rights or temporary possession.

Chapter 20 does not show that East Pye has limited residual environmental effects. It shows how extensive harm has been progressively filtered through separate methodologies until almost everything other than landscape harm appears in the final tables as Not Significant, while uncertain future benefits are simultaneously credited as Significant or Major Beneficial. The Applicant’s own evidence, together with the continuing positions of the Environment Agency, Historic England, Natural England, Norfolk Wildlife Trust, National Highways, Norfolk County Council, National Gas and aviation interests, demonstrates that the environmental case is not settled to anything approaching the degree of certainty implied by those tables.

The fundamental defect is not simply that more mitigation is required. It is that the Scheme has not been shown to have exhausted avoidance. The Applicant has retained the approximate 500 MW scale, ten-Site geography and extensive cable and grid infrastructure and then sought to make the receiving environment accommodate them through planting, buffering, acoustic measures, drainage engineering, route management, habitat creation and future management plans. In several instances those measures themselves create further landscape, ecological, heritage, soil or hydrological effects. The resulting complexity is evidence of an over-constrained site and design, not proof of environmental suitability.

Nor can the remaining harm properly be dismissed as temporary or reversible. Significant landscape change persists after fifteen years; BMV loss or downgrading is expressly acknowledged as irreversible; archaeological destruction cannot be reversed; mature ecological networks cannot be recreated on demand; vulnerable groundwater cannot safely be restored after contamination is allowed to occur; and part of the transmission infrastructure may remain indefinitely. East Pye would therefore leave a materially different landscape even after the generating equipment was removed.

The final balance must consequently be based on what has actually been demonstrated. On the adverse side are extensive, site-specific, long-term and in some cases irreversible effects. On the beneficial side, several claimed benefits remain conditional upon future ecological establishment, mitigation performance, local employment capture, BESS delivery, grid utilisation and assumptions about whole-life carbon performance. Those prospective benefits cannot properly be afforded greater certainty than the harms which already exist in the evidence.

Most importantly, no project-specific case has been established showing that approximately 500 MW must be delivered through this particular dispersed Scheme in this particular South Norfolk landscape. Generic national renewable-energy need does not answer that question, and Gate 2 status does not establish it. Where the Applicant has not shown that the environmental harm is genuinely unavoidable, has not demonstrated that all relied-upon mitigation is effective and secured, and has not established a location- and scale-specific public benefit sufficient to justify the remaining harm, the residual-effects case fails.

The ExA should therefore not treat Tables 20.1–20.4 as the environmental balance. They materially understate the consequences of the Scheme. The proper conclusion from the evidence as a whole is that East Pye has not been demonstrated to be an environmentally coherent, proportionate and deliverable project within the present DCO envelope. Unless the outstanding evidence results in substantial avoidance, reduction and redesign capable of removing these conflicts during Examination, development consent should not be recommended. Further layers of mitigation would not cure the central problem: the Scheme is requiring the landscape to be reshaped around the project, when the project should have been reshaped—or relocated—to respect the environmental capacity of the landscape.

Cumulative Case Against Development Consent

The evidence provided by BEPS across the three volumes of its Written Representations leads to a substantially stronger conclusion than any single chapter considered alone.

1. The Applicant has not established project-specific necessity commensurate with the harm. National policy strongly supports additional renewable generation, but that does not establish that East Pye Solar itself is indispensable. The T7 pipeline already exceeds the 3,300 MW modelling envelope relied upon by BEPS; NESO's Gate 2 regional test used only operational capacity; the BESS does not share the solar project's Gate status; the final engineering-backed transmission solution is unresolved; and no disclosed Scheme-specific analysis establishes that East Pye will avoid material curtailment or provide the claimed consumer-system benefit.
2. The alternatives evidence does not establish that this environmentally sensitive location represents the least harmful reasonable way of delivering the claimed benefit. The land package was assembled around Norwich Main before that

connection was established as viable. When Norwich Main failed, the Applicant retained the land package and searched for a replacement connection which would serve it. The 500 MW scale was likewise treated as a premise rather than an outcome of environmental capacity assessment. The land options were agreed before detailed surveys revealed the multiple constraints impacting each land parcel and the area in general.

3. The development for which consent and compulsory powers are sought is not yet sufficiently settled in several material respects. The BESS is severable and differently connected; NGET has not confirmed Site 1B as the final solution; the application permits extensive design-envelope flexibility; major AIL and local access routes remain unresolved; and the Scheme expressly includes repeated replacement and infrastructure capable of surviving solar decommissioning.
4. The receiving environment is substantially more constrained than a conventional agricultural solar site. The Applicant itself establishes a nationally important bat assemblage; the Scheme affects overlapping barbastelle maternity-colony landscapes, six adjoining ancient woods, BMV soils, sensitive aquifers and private water supplies, chalk-stream systems, high-grade heritage assets, tranquil rural landscapes and constrained historic roads.
5. Several matters central to environmental acceptability remain unresolved rather than merely awaiting detailed implementation. The ecology baseline lacks a complete botanical and functional species picture; HFCL finds a significant lack of confidence in the water assessment; intrusive ground investigation and foundation-risk work are deferred; the final highway access architecture is not agreed; final noise plant and mitigation are not fixed; and the EMF assessment is not project-specific. These are not simply matters of selecting the colour of equipment or the precise position of a drain. They may determine whether elements of the Scheme can be constructed at all, or whether they require relocation or removal.
6. Substantial harm is already established even on the Applicant's own case. Significant landscape effects persist after fifteen years of mitigation. Independent heritage evidence identifies harm to 36 designated assets. The Scheme contains 829.1 ha of surveyed BMV land. Major night-time HDD noise is predicted at identified receptors before duration is used to reduce EIA significance. NCC says the current Sites 7–10 transport strategy cannot be supported, while National Highways maintains its objection.
7. The mitigation case does not demonstrate that all of those constraints can be resolved simultaneously. Landscape screening alters openness and heritage setting. Internal haul routes may create ecological, drainage and land impacts. Foundation changes affect noise, ground conditions and groundwater. Habitat creation cannot demonstrate maintenance of protected-species function.

Future management plans cannot compensate for a baseline that has not established what must be protected.

8. the Applicant seeks compulsory powers of unusual breadth before those matters are resolved. Section 122 requires a compelling public-interest case for the particular land interest acquired. That case is materially weakened where the development is severable, the Grid solution is unconfirmed, land may become unnecessary, and permanent freehold acquisition is sought where the Applicant's own commercial arrangements contemplate leases.

Overall Conclusion

Read as a whole, BEPS's Written Representation demonstrates two propositions which are decisive to the planning balance.

First, East Pye Solar is not a finished or sufficiently resolved project. Material questions remain over the final National Grid connection solution, the relationship between the solar and Gate 1 BESS elements, the construction envelope, highway access and abnormal-load routes, the ecological baseline, private water supplies, the hydrogeological model, foundations and HDD, operational noise, EMF, BESS safety, decommissioning and long-term restoration. Several of those matters may determine whether parts of the Scheme can be constructed at all, whether infrastructure must be relocated or reduced, and whether the environmental effects remain within the assessed envelope. They are therefore questions of principle and deliverability, not merely post-consent detail.

The transport case illustrates the wider problem particularly clearly. Norfolk County Council states that the submitted strategy for Sites 7–10 'cannot be supported' and requires a materially different internal-haul-route architecture, while National Highways maintains outstanding objections. The water case is equally serious: independent review identifies 15 substantive deficiencies and a 'significant lack of confidence' that effects on the water environment are properly understood or capable of mitigation. The ecological baseline remains incomplete despite the Applicant's own evidence establishing a nationally important bat assemblage and multiple barbastelle maternity-colony networks.

Secondly, the harms are not hypothetical. The Applicant itself identifies extensive Significant landscape and visual effects, including Major effects persisting to Year 15. Independent heritage evidence identifies harm to 36 designated assets where the Applicant identifies harm to two. Approximately 829.1 hectares of surveyed land is BMV agricultural land, much of it slowly permeable and seasonally wet heavy clay whose full restoration after repeated disturbance over 60 years has not been demonstrated. Night-time HDD is predicted to place 15 receptors above SOAEL. The Scheme also concentrates major electrical infrastructure beside sensitive groundwater, private water supplies, strategic gas and rail infrastructure, aviation receptors, protected ecology and nearby communities.

Those harms cannot be dismissed as the ordinary local consequences of nationally necessary infrastructure. The national need for renewable energy under EN-1 is substantial, but it does not establish that East Pye itself is indispensable or that this location is necessary. The T7 evidence shows an extensive advanced solar pipeline, while East Pye's Gate 2 status does not independently establish locational necessity. The BESS remains less certain than the solar element, the final NGET solution is unresolved and the Applicant's claimed whole-life carbon benefit itself contains material calculation and methodological uncertainty.

The mitigation case does not cure the problem. Much of the Scheme's environmental acceptability depends upon later surveys, later engineering, later management plans and future detailed design. Screening, buffers, acoustic barriers, habitat creation, drainage measures and later risk assessments may reduce effects, but they also demonstrate that the chosen landscape is being required to accommodate a development whose conflicts should first have been avoided through site selection, scale and design.

The whole-life case further weakens the description of East Pye as temporary. The Scheme allows major replacement cycles during its 60-year life, significant grid infrastructure may remain permanently, restoration of BMV soils is not assured and the newly disclosed private landowner decommissioning securities do not yet demonstrate a coordinated, publicly enforceable and insolvency-resilient whole-Scheme restoration mechanism.

The cumulative conclusion is stark: too much is already known about the harm, and too little is yet known about the solution.

The Application asks the Secretary of State to accept significant and enduring environmental harm now while allowing essential questions of design, deliverability and mitigation to be resolved later. That reverses the proper planning sequence. Development consent should follow demonstration that an environmentally acceptable and deliverable project exists; it should not be granted in the expectation that such a project will be designed after consent.

The planning balance therefore weighs decisively against East Pye Solar. The harms are extensive, cumulative, long-term and in important respects irreversible. Several are Significant on the Applicant's own evidence. The project-specific and locational benefits relied upon to outweigh them are materially less certain than the Application suggests.

BEPS accordingly submits that the Application is unfinished, premature and fundamentally disproportionate to the environmental capacity of the landscape selected for it. The Examining Authority should recommend refusal, and the Secretary of State should refuse to make the Development Consent Order.

AI notice: BEPS's bespoke closed-project GPT has been used to create this summary from BEPS's three-volume Written Representation, as the task was too large and complex to do manually with this degree of accuracy. The content has been checked, edited and signed off by a human before submission. The contents is the responsibility of BEPS.

Objections submitted in response to East Pye Solar

PINS Reference: EN0110014

Land Parcel 1 - Great Moulton

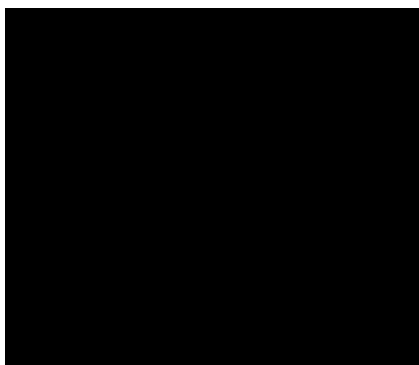
See Document - Objection to Grid Infrastructure

See Document - Objection to BESS Infrastructure

See Document - Objection to Tivetshall The BESS and Sites 2A & B

See Document - Objection to Wacton Site 2C

Submitted by



& everyone who has given time and energy to helping support our campaign



DISCLAIMERS

Research Method and Use of AI

This document has been prepared from research undertaken by multiple human researchers using information available at the date of preparation. Sources include East Pye Solar application documents, Planning Inspectorate material, National Grid/NGET information, statutory consultee evidence, relevant government and regulatory material, guidance, best practice and, where relevant, peer-reviewed research.

Given the scale and complexity of the documentary record, BEPS-Great Moulton Great Moulton also uses a closed-project bespoke GPT as a research and analytical aid. It assists with organising, cross-referencing and comparing material, identifying links between documents and topics, and supporting analysis of evidence already gathered by the research team.

The GPT is not treated as an independent source of evidence or as a substitute for human judgement. All submissions are reviewed, edited and checked by human members of BEPS-Great Moulton Great Moulton. Material sources and significant factual propositions are checked against the underlying documents before reliance is placed upon them, and the authors determine the arguments and conclusions advanced.

This document is therefore a human-reviewed submission, not an independent expert report. Responsibility for its contents, accuracy and arguments remains with the authors. AI has been used only as an analytical, cross-referencing and document-management tool within a human-led research and review process.

Where this draft refers to National Grid Electricity Transmission plc (NGET) representations, it relies on the wording quoted in the source document unless the final submission team has separately checked the published Examination Library version.

The Ofgem material is used for a narrow purpose: it supports the proposition that BESS connection deliverability, queue credibility, battery oversupply and network-capacity allocation are live regulatory matters. It is not used to assert that East Pye has lost its connection or that the BESS cannot connect

It is understood that East Pye Solar has continued to amend, supplement and update material submitted to the Planning Inspectorate during the examination process. Accordingly, we respectfully ask the Examining Authority to read this submission in the context of the information reasonably available to us at the time it was prepared. Where subsequent Applicant submissions clarify, amend or supersede earlier information, any resulting discrepancy within this document is unintentional and should not be interpreted as an attempt to misrepresent the Applicant's case or evidence.

On behalf of the Village of Great Moulton we have sought throughout to present the Applicant's evidence accurately and fairly, while identifying those matters on which we consider further clarification, evidence or examination is required.

Initial Comments on Submission by the Writers of this Document

Great Moulton residents submit that the East Pye Solar application is unusually difficult for affected residents to understand because the principal effects on Great Moulton are split across multiple application documents, plans, appendices and outline management documents. The issue is not merely volume. It is the absence of one consolidated, parcel-specific explanation of the National Grid Substation, the 400 kV Project Substation, the BESS interface, overhead-line works, pylons, access, drainage, construction compounds, lighting, safety controls and retained infrastructure affecting Site 1.

This submission therefore asks the Examining Authority to test the Scheme as it will be experienced locally: as a concentrated western grid infrastructure hub on and around Site 1 and the BESS, not as a set of isolated technical components.

The Structure of East Pye's documents and lack of clarity, means that we are unable to obtain a full understanding of the design being proposed. From incorrectly labelled images and photographic co-ordinates making it impossible to actually ascertain what and where they have photographed - see document [EN01110014](#), this document actually includes the National Grid Substation although labelled BESS.

Oxford EN010147 Secretary of State Request

The Secretary of State request for further information in Botley West Solar Farm, EN010147, is not relied upon as a binding precedent. It is relied upon only as a recent comparator showing that, in a large solar NSIP, unresolved issues about alternatives, site selection, grid connection, design evolution, cumulative effects and mitigation can justify further information before determination.

The same type of scrutiny is appropriate here because Land Parcel 1 / Site 1 combines the National Grid Substation, 400 kV Project Substation, overhead-line works, cable routes, pylon works, access requirements, PRow interactions, Grade 2 BMV land, private-water-supply risk, landscape harm and the functional relationship with the BESS.

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Initial Comments on Submission by the Writers of this Document

The Structure of East Pye's documents and lack of clarity, means that we are unable to obtain a full understanding of the design being proposed. From incorrectly labelled images and photographic co-ordinates making it impossible to actually ascertain what and where they have photographed - see document [EN01110014](#), this document actually includes the National Grid Substation although labelled BESS.

Oxford EN010147 Secretary of State Request

The Secretary of State's request for further information in the Botley West Solar Farm case, EN010147, is not relied upon as a binding precedent. However, it is relevant to East Pye because it shows the type of additional information that may be required in a large solar NSIP where there are unresolved questions about site selection, alternatives, grid connection, design evolution, mitigation and cumulative impacts.

Those issues are also relevant to East Pye, particularly at Land Parcel 1 / Site 1, where the National Grid Substation, Project Substation infrastructure, overhead-line works, cable routes, access requirements and adjoining BESS-related infrastructure are concentrated.

BEPS-Great Moulton therefore considers that the Botley West request provides a useful recent comparison. It supports the need for East Pye to provide a clear and site-specific explanation of why this location was selected, what reasonable alternatives were considered and rejected, how the grid infrastructure will be delivered, and whether the cumulative effects of the combined infrastructure have been fully assessed and adequately controlled.

Executive Summary

Land Parcel 1 in Great Moulton is not merely constrained; it is **intrinsically incompatible with lawful development**. It is subject to **multiple overlapping, front-loaded constraints**, each of which independently undermines deliverability and, taken together, make implementation impossible in practice and unlawful in principle.

1. European Protected Species – Licensing and Evidential Risk

The parcel lies within overlapping Core Sustenance Zones associated with Barbastelle bat maternity colonies. Given the scale and nature of the proposed substation, lighting, noise, excavation, access and associated works, effects on commuting, foraging and other functionally linked habitats require careful consideration.

Although the presence of European Protected Species automatically means an EPS licence must be granted or that development cannot proceed, if the proposed works would result in an offence under the Habitats Regulations, an EPS mitigation licence would be required and the relevant licensing tests would have to be satisfied. Those tests include whether the activity is for a permitted purpose, whether there is a satisfactory alternative, and whether the action would be detrimental to the maintenance of the population of the species concerned at favourable conservation status in its natural range.

The key Examination issue is therefore whether the Applicant has provided sufficient site-specific evidence to establish the functional use of the affected habitat, the likely effects of lighting, severance, construction and operational disturbance, the effectiveness of proposed mitigation and whether an EPS licence may ultimately be required.

If licensing is potentially required, the ExA should be satisfied that the ecological information and mitigation proposals are sufficiently developed to demonstrate that there is no evident impediment to the necessary licence being obtained. This is particularly important where final layout, lighting, access or detailed design could materially affect the extent of disturbance or habitat loss.

BEPS-Great Moulton therefore asks the ExA to ensure that functional habitat use, lighting, severance, construction effects and any EPS licensing implications are sufficiently understood before the relevant design parameters are fixed or relied upon in determining the acceptability of the development.

2. Additional Protected Species Burden

The parcel lies within a **Great Crested Newt strategic area** and is also relevant to breeding birds, bats and other protected or priority species. Taken together, these ecological receptors reinforce the need for a receptor-led assessment of ponds, hedgerows, field margins, construction routes and retained dark corridors.

The ExA should be satisfied that the proposed mitigation, Biodiversity Net Gain measures and the operational and safety requirements of the grid hub are mutually compatible, deliverable and properly secured through the DCO and associated management plans.

3. Countryside Stewardship Land – Irreversible Loss of Funded Habitat

Large parts of the parcel are subject to **live Countryside Stewardship agreements** explicitly funded to support **ground-nesting birds (lapwing, skylark, turtle dove)**, where these countryside stewardship or other agree-environment commitments overlap affected land, the Applicant should identify the agreement, habitat objective, affected area and how temporary or permanent land take would be reconciled with it.

The ExA should ensure that the loss or displacement of established habitat functions are taken into account and whether replacement measures are evidenced and secured.

Empirical evidence from the Gwent Levels demonstrates that mitigation and compensation measures have consistently failed to prevent adverse impacts on these species. The proposal would therefore **erase publicly funded conservation outcomes**, creating a direct policy conflict and an irreversible ecological loss that cannot be balanced away.

4. Soils and Agricultural Land – Permanent Damage

The parcel is dominated by heavy clay soils, highly vulnerable to compaction and structural damage. Substation foundations, crane pads, access tracks and trenching would cause irreversible harm, contradicting claims of temporary use or reversibility. Detailed ALC evidence identifies Grade 2 BMV land within the Site 1 infrastructure area, including permanent land take associated with the National Grid Substation.

The ExA should test whether the alternatives case was reconsidered in light of that later detailed ALC evidence and whether soil protection/restoration commitments are enforceable for temporary areas. National evidence confirms that loss of productive soils is a long-term, non-recoverable harm: JNCC, Defra’s State of the Environment: Soil, and Cranfield University’s National Soil Inventory (NSI). Together, they demonstrate that once productive soils are degraded, the damage is persistent, costly, and—critically—cannot be restored within meaningful planning or agricultural timescales.

5. Water Environment and Private Supply Risk

The parcel lies within **Source Protection Zones, Drinking Water Safeguard Zones and a high-priority WFD catchment**, and is adjacent to a **private borehole supply with a number of other private supplies identified in the surrounding area**. The continuing issue is whether the final foundation design, drainage, pollution-prevention measures, firewater and emergency-water

arrangements, and receptor-specific protection measures are sufficiently defined before works begin.

The ExA should be satisfied that the relevant **source–pathway–receptor relationships have been verified** and that robust, enforceable controls are secured for identified private water supplies and groundwater receptors.

The underlying hydrogeological sensitivity is **inherent to the location**. Mitigation may reduce the likelihood or consequence of an impact, but it does not remove the need to demonstrate, on a receptor-specific basis, that groundwater and private water supplies will be adequately protected throughout construction, operation and any emergency event.

6. Safety Constraints – Aviation, Fire and Rail

The parcel lies within the **EFATO safeguarding context for Tibenham Airfield**, where the relationship between major infrastructure, construction activity and gliding operations requires careful assessment. East Pye has undertaken aviation and glint/glare assessment, and Norfolk Gliding Club has raised detailed concerns relating to matters including **emergency landing opportunities, reflective surfaces and visual effects, and the potential interaction of development with airflow, thermals and wind conditions relevant to gliding operations**.

The issue is therefore not the absence of any aviation assessment, but whether the latest technical evidence, consultation responses and mitigation demonstrate that the final Site 1 layout can operate safely without materially compromising gliding activity or emergency landing requirements. The ExA should be satisfied that the final position of Norfolk Gliding Club and any other relevant aviation consultees is understood and that any necessary mitigation is clearly secured.

Fire and emergency-response considerations also require particular scrutiny because the Site 1/BESS cluster would combine the BESS, National Grid Substation, Project Substations, transformers, electrical equipment and associated access infrastructure in proximity to residential receptors. East Pye has submitted battery-safety and firewater-related material, but the ExA should require a **coordinated Site 1/BESS emergency-access, firefighting-water and contaminated-firewater containment strategy**, addressing the interaction between the BESS, substations and other electrical infrastructure rather than considering each element in isolation. The final position of Norfolk Fire & Rescue Service should be clearly established and any outstanding requirements secured before the relevant works commence.

The proximity of the **Great Eastern Main Line / London–Norwich railway corridor** introduces a further interface. Construction traffic, abnormal-load movements, emergency access, electrical incidents and any potential smoke or fire event should be considered against railway safeguarding requirements, with the ExA satisfied that all necessary Network Rail protections and operational interfaces have been addressed.

7. Critical Infrastructure Conflict – Unmapped Community Broadband

B4RN community fibre-optic cables run both along Station Road (subject to widening) and through the centre of the site along Frith Way. These networks are unmapped, shallow-laid and essential to local homes and businesses. Construction presents a high risk of severance and service loss. The Applicant should confirm utility searches, trial-hole/verification procedures, protection measures, outage response and emergency communications before intrusive works or road crossings.

8. Rights of Way and Hundred Lane

Land Parcel 1 affects a network of public rights of way, historic lanes and recreational routes, including FP13 and Great Moulton RB19/Hundred Lane. Of particular concern is East Pye's proposal for a haul-route crossing of RB19 which would also remain as permanent maintenance access.

This requires explanation because the earlier Option 4B access strategy relied on the BESS Site, Station Road, Lodge Road and Frith Way, while the final Scheme introduces an additional permanent crossing of Hundred Lane. The ExA should require the Applicant to explain why the crossing is necessary, what asset it serves, what alternatives were considered, how the permanent change was consulted upon, and whether it will remain after the 60-year solar/BESS period to serve retained National Grid infrastructure.

9. Heritage and Archaeological Time-Depth

Great Moulton has been referenced multiple times in the Domesday Book, signalling exceptional archaeological potential with a long-established historic settlement and agricultural landscape, reflected in its listed buildings, churches, historic lanes, field pattern and archaeological potential.

The concern is whether the combined effects of the Site 1 grid hub, solar development, access works, cabling and mitigation planting have been assessed in a way that properly reflects the relationship between these individual heritage features and the wider historic landscape.

The ExA should be satisfied that the final development layout, ground-disturbance works and mitigation adequately protect identified heritage and archaeological interests, and that any necessary investigation, preservation and recording measures are clearly secured.

10. Statutory Development Plan Conflict

Parts of the parcel fall within **Tivetshall parish** and are subject to the **adopted Tivetshall Neighbourhood Plan**, which protects rural character, historic landscape, dark skies, valued routes and community infrastructure. The proposals conflict directly with these policies, and the PIER fails to assess neighbourhood plan compliance parcel-by-parcel. This is a **material policy failure**.

Overall Conclusion – Land Parcel 1 / Site 1

Land Parcel 1 forms the principal **western infrastructure concentration** of the East Pye Scheme. Within and around Site 1 are the proposed National Grid Substation, Project Substation infrastructure, overhead-line and pylon works, cable connections, access arrangements and the adjoining BESS. Some of the National Grid infrastructure would remain after the approximately 60-year solar/BESS development has been decommissioned.

East Pye has submitted substantial environmental, design, cumulative-effects and site-selection evidence. BEPS-Great Moulton's concern is therefore not that these matters have been wholly unassessed, but whether the evidence sufficiently demonstrates why this particular concentration of infrastructure at Great Moulton remains justified when **landscape, residential amenity, noise, lighting, ecology, groundwater, BMV agricultural land, transport, PRow, heritage, emergency response and the adjoining BESS are considered together**.

APP/7.20 records the evolution of the National Grid Substation search through Options 1–3 and subsequently Options 4A and 4B, with Option 4B within Sub-Site 1B ultimately selected. The outstanding issue is whether the later Great Moulton options were subjected, at the relevant decision-making stage, to an equivalent and sufficiently transparent assessment and whether the complete contemporaneous audit trail demonstrates how environmental, engineering, grid-connection and land-availability considerations were balanced.

There also remains uncertainty over the final relationship between the development authorised by the DCO and NGET's eventual connection solution, while the solar and BESS components currently have different Gate positions. These matters are relevant to the scale, timing and justification of the infrastructure and land sought at Site 1.

BEPS-Great Moulton therefore asks that the identified evidence and outstanding matters are resolved and tested before the ExA reaches conclusions on whether the Site 1/BESS configuration, permanent National Grid infrastructure and associated land and rights are adequately justified, assessed and secured.

Chapter 1: Introduction



The scale of the proposed solar, battery and substation development must be understood within the context of a landscape whose form, character and settlement pattern have remained largely unchanged for centuries. The lanes, field boundaries and dispersed village structure that define Great Moulton today are direct survivals of its historic development, and this continuity is central to the area's identity. Introducing large-scale industrial infrastructure into such a landscape would represent a profound break from its historic character, with far-reaching impacts on its setting, function and sense of place.

1.1 Summary of the Historic Landscape of Great Moulton (Moulton St Michael)

Moulton [St Michael] was a settlement in Domesday Book, in the hundred of [Depwade](#) and the county of [Norfolk](#) as recorded in 1086 and its recorded population of 72.3 households putting it in the largest 20% of settlement

Great Moulton (also known as Moulton St Michael)^[1] and until the 16th century it also included the Little Moulton parish.^[2]

The name Moulton derives from Old English and could mean 'Mula's village' or 'a place where mules are kept'. An alternative version is that it could derive from the Old Norse Mula-tún, meaning "the settlement on the ridge between two valleys". This is a more accurate description of the parish's position on the broad plateau between the Tas and Waveney valleys, a landscape that has shaped its development since the early medieval period.

1.1.1 Historic Sensitivity of the Area

Little Moulton, Hundred Way and the Former All Saints Church

The Site selected lies within one of the most historically sensitive parts of the parish.

We believe the developers have not identified this medieval parish landscape, which was about three miles long and a mile wide, — nor have they recognised the former church site and its 15 acres of glebe or the effect the proposal would have on its setting. [Hundred of Depwade: Moulton-Magna | British History Online](#)

This landscape preserves the footprint of Little Moulton, a medieval settlement that contracted and disappeared after repeated plague outbreaks. Although no buildings survive above ground, the position of the village is securely identified through historic mapping, documentary sources, and the surviving lane network.



The site of the church, All Saints, is still known locally as The Sanctuary, the former churchyard lies just south of this boundary on slightly rising ground overlooking the parish fields. The church was in use until **1570**, and then was totally demolished; **The site is still named All-Saints churchyard and to date remains consecrated land..**

Consecration applies to the ground rather than the building. **There is no evidence of formal deconsecration.** The site therefore retains archaeological, spiritual and communal significance, consistent with heritage value. When the Norwich Domesday was written, “the rector had no house but held thirteen acres of glebe. The church was valued at three, and later four, marks. It paid procurations, synodals, Peter Pence and Carvage. These details confirm the long-standing ecclesiastical and communal importance of the site”.

(Source: An Essay Towards a Topographical History of the County of Norfolk, vol. 5)

The lanes, footpaths and bridleways that frame this area are long-established features belonging equally to the medieval parish and the present-day community. Their alignment reflects the original structure of Great and Little Moulton and remains a defining part of the historic landscape.



This map shows the original placing of the church

1.1.2 The Proposed Loss And Enduring Change To Historic Hundred Lane



An Early Administrative Boundary and Historic Rural Route Hundred Lane forms the northern boundary of the BESS Site and broadly reflects the historic boundary of Depwade Hundred, a long-standing territorial division. East Pye's own evidence records the route on historic mapping from 1883–1884 and describes it as a tree-lined rural lane and Restricted Byway whose alignment has remained substantially unchanged. Great Moulton RB19 follows the lane for approximately 960 metres towards Frith Way.

BEPS-Great Moulton does not suggest that Hundred Lane is a designated

heritage asset. The significance lies in its historic continuity, its multiple mentions in the Domesday book, surviving rural character, mature vegetation, public use and relationship with the surrounding agricultural landscape. It forms part of a wider historic and recreational route network and contributes to views across the plateau and towards nearby heritage assets, including Barn Cottages.

Hundred Lane / Great Moulton RB19 requires particular attention. At PEIR stage, APP/7.20 records access to National Grid Substation Option 4B via the BESS site, Station Road, Lodge Road and Frith Way. The later PRoW Visual Amenity Assessment identifies a haul-route crossing of RB19 which would also form permanent maintenance access, with vegetation removal and the crossing remaining permanently. The Applicant should explain when and why that change was made, what asset the crossing serves, and whether it remains after the 60-year solar/BESS period.

Relevant documents: APP/7.20 Site Selection Assessment, para. 3.5.23; APP/6.3.7.9 PRoW Visual Amenity Assessment; APP/7.7 Outline Operational Traffic Management Plan; Access and Rights of Way Plans.

1.1.3 Narrowgate Way – the Medieval Street Line

Narrowgate Way contributes to the historic lane framework and provides a useful reference for understanding the relationship between Sub-Site 1B, the village edge and surrounding PRoW, Narrowgate Way preserves the original street line of the lost village. In Norfolk, gate derives from Old Norse gata, meaning street. Its narrow, bending alignment is characteristic of a medieval village street leading to a church or central cluster of dwellings.

Effects should be assessed not only as views from individual points but as changes experienced while moving through the historic route network.

1.1.4 Frith Way – the Woodland Edge

Frith Way preserves the line of the medieval woodland boundary. The name derives from Old English frith, meaning woodland or wooded pasture. It is both an access route and part of the rural landscape structure. Its position beside The Sanctuary indicates that Little Moulton stood on the edge of medieval wood-pasture, a typical location for early Norfolk settlements

1.1.5 Broadgate Lane - The Wider Continuation of the Ridge Route

Broadgate Lane forms part of the wider ridge-route context around Great Moulton. It should be considered alongside Hundred Lane, Narrowgate Way and Frith Way when assessing cumulative landscape, heritage and recreational effects.

Broadgate Lane and Narrowgate Way form two ends of a medieval ridge-top route. Their shared alignment, with Hundred Farm lying between them, is unlikely to be accidental. In many Norfolk parishes, gate names occur in pairs, marking different stretches of an older through-route. Narrowgate reflects the tight, enclosed street of Little Moulton, while Broadgate represents the wider continuation of that route into the dispersed holdings of Great Moulton. Taken together, Frith Way, Hundred Lane, Narrowgate Way, and the site known as The Sanctuary form a coherent medieval landscape framework. These elements define the position of the deserted village, the location of All Saints Church (demolished in 1570), and the structure of the surrounding settlement. Even though the village itself has vanished, the landscape pattern remains intact and is of high archaeological and historic sensitivity.

Any development in this area risks damaging the surviving framework of the medieval settlement and erasing one of the parish's most significant historic landscapes.

References: Moulton [St Michael] | Domesday Book; National Library of Scotland - View map: Ordnance Survey, TM18NE - A - Ordnance Survey National Grid Maps, 1940s-1970s Norfolk Heritage Explorer - mnf10969 - Norfolk Heritage Explorer

1.2 Village Character

Great Moulton's character is predominantly rural and agricultural, with low levels of existing industrial development. The parish sits within the South Norfolk Claylands and is one of only three recognised Plateau Farmland areas in the district, alongside Ashwellthorpe and Hingham. This makes its landscape character unusually distinctive and highly sensitive.

The Plateau Farmland designation reflects a set of defining characteristics that shape both the appearance and the lived experience of Great Moulton:

- distinct flat and elevated landform
- large fields of arable monoculture
- strong sense of openness and exposure due to scarcity of enclosing elements
- long views of the district from the plateau edges and across the plateau
- presence of some mature remnant oak hedgerow trees
- straight plateau-top roads with wide grass verges and ditches wooded horizons
- sparsely settled landscape mostly comprising small nucleated and long linear settlements
- presence of historic features within the landscape including isolated churches, moats, and farm ponds
- some vernacular buildings particularly including use of bricks and Dutch gable ends



This combination of openness, elevation, historic field patterns, and sparse settlement gives Great Moulton a landscape character that is both visually distinctive and deeply rooted in its agricultural past. The lanes, footpaths, and bridleways that cross and surround the parish are integral to this character. They preserve the structure of the medieval landscape, connect dispersed farmsteads and hamlets, and provide the only accessible green space for the community. South Norfolk's Landscape Sensitivity and Susceptibility evidence identifies Plateau Farmland as highly vulnerable to large-scale energy and industrial development. Its openness, long views, and lack of natural screening mean that even modest infrastructure can appear visually intrusive. In Great Moulton, where the landscape has remained largely unchanged for centuries, these sensitivities are especially pronounced.

[South Norfolk District Council - Landscape Susceptibility in relation to Energy Generation, Storage and Transmission - SPD](#)

1.3 Great Moulton Sign



Located on the small green opposite the Fox and Hounds Public House, and rising above the village is the Great Moulton Sign. It depicts St. Michael's Church at the top. Below this is the brick wall which represents the railway bridge, under which the Norwich to London line passes. The open trestle postmill, destroyed by fire just before the Great War, is on the left-hand side. The Grade II Rectory built 1831 sits on the right-hand. The apple represents a former cider maker in the village by the name of William Bales and the ears of corn represent the agricultural nature of the parish.

1.4 General Village History

Great Moulton's historical significance lies in its Domesday Book-era origins, its surviving Romanesque architecture in St. Michael's Church, and its character as a traditional rural community with historic timber-framed houses and moats. The village provides insight into Norfolk's medieval and later agricultural landscape

1.5 Medieval and Architectural History

1.5.1 Domesday Book

The village appears multiple times in the Domesday Book of 1086, indicating it was a sizable settlement with over 70 households at the time, the lord in 1086 was [Count Alan of Brittany](#)

1.5.2 St. Michaels Church

The church has Romanesque elements, such as a round tower arch and imposts, with some original masonry surviving from its earlier construction. Though the main church was rebuilt in 1887, its historical roots are evident.

1.5.3 Timber-Framed Houses and Moats

The area is noted for its historic timber-framed houses and associated moats, which reflect the region's medieval landscape. Examples include Old Boyland Hall and Wacton Hall, which are considered architecturally and historically significant.

*Alan Rufus Rufus - from a larger 14th century illumination
swearing fealty to William the Conqueror[a]*



1.6 Modern History and Community

1.6.1 War Memorials from both World Wars.

A war memorial was unveiled in 1919 to commemorate local lives lost in World War I and was later updated with names from World War II.

1.6.2 Former Tin Tabernacle

Great Moulton was once home to a distinctive Congregational “tin tabernacle”, erected in the

1890s to serve the village’s nonconformist community.

This lightweight corrugated-iron chapel was a familiar landmark for decades before being replaced by a more permanent building. Recognising its rarity and cultural value, the original tin tabernacle was later donated to the

Museum of East Anglian Life, where it survives today at The Food Museum in Stowmarket. It remains an important link to the village’s nonconformist heritage and the wider tradition of temporary mission chapels across rural East Anglia.

The replacement Congregational Chapel provided the village with a more substantial and enduring place of worship, reflecting both the stability of the congregation and the desire for a

building that better matched its role in parish life. Constructed in brick and built to last, it offered a permanent architectural presence in contrast to the modest tin structure it succeeded. The chapel continued the long nonconformist tradition in Great Moulton, serving as a centre for worship, fellowship and community activity, and it stands today as a testament to the evolution of religious life within the village.

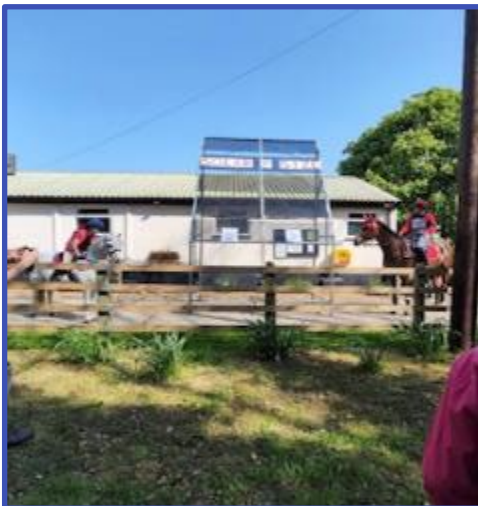


1.6.3 Community Hall

The Aslacton and Great Moulton Coronation Hall has served the two parishes since 1953, when it was built to mark the Coronation of Queen Elizabeth II and to provide a shared centre for community life in these South Norfolk villages. Created through local fundraising and volunteer effort, the hall quickly became the focal point for social events, clubs, celebrations and parish gatherings. Over the decades it has been enlarged, improved and modernised, yet it has retained its original purpose as a safe, warm and welcoming space for residents of all ages. Today it operates as a registered charity, managed by a dedicated team of Trustees and helpers who work tirelessly to maintain it as a valued community resource. All of its income is generated through hiring and locally organised events, with no external funding, making it a rare example of a community building sustained entirely by the people it serves.



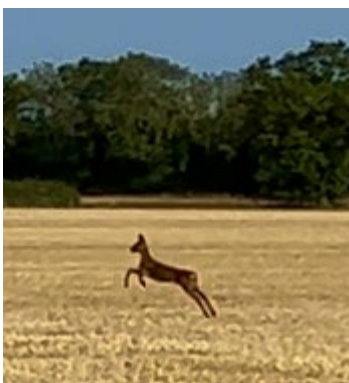
The Interior/Garden of the Hall VE Day Celebrations



The Coronation Hall also demonstrates the depth of community cohesion in Great Moulton. Built and funded entirely by local residents and still sustained without external support, it remains a shared space created, maintained and governed by the community itself. This level of participation and self-reliance is recognised in both the NPPF and South Norfolk policy as a key component of strong, healthy and resilient rural communities. The hall therefore stands as clear evidence of an active, functioning social infrastructure whose character and setting would be harmed by the industrial scale of the East Pye proposal.

This photograph shows the Community Horse Ride against East Pye, where a full-height mock solar panel was constructed to demonstrate the approximate height of the proposed installation in relation to the hall.

1.7 Rural Character



Today, Great Moulton retains much of its traditional rural character, with a close-knit community and a picturesque, traditional English countryside setting. The land surrounding the Moultons preserves the footprint of a medieval landscape that has remained largely unchanged for hundreds, if not thousands, of years. Little Moulton itself is a lost medieval settlement, yet its form survives in the surrounding fields, particularly those long known as The Sanctuary, where the ancient field patterns, routeways, and topographical lines still mirror the layout of the vanished village. This continuity is exceptionally rare. It allows the settlement to be understood

not through surviving buildings, but through the land itself, which has held its shape across the centuries with remarkable integrity. For this reason, the setting is sacrosanct in heritage terms.

This landscape has long drawn pilgrims, walkers, and heritage seekers who come precisely because it offers an authentic encounter with the past. People are drawn to the quiet lanes, the sense of enclosure and openness in balance, and the feeling of stepping into a place shaped by centuries of human presence. Pilgrims and visitors value the spiritual calm, the unbroken rural views, and the ability to walk through a landscape that still carries the imprint of medieval life. The area was chosen historically because of its fertile soils, its gentle topography, and its strategic position along early routeways, the same qualities that now make it a place of reflection, heritage interest, and rural recreation.

1.8 Via Beata Pilgrimage Route

The site lies directly on the Via Beata, a nationally recognised pilgrimage route stretching from Lowestoft, Suffolk to St Davids, Wales. Great Moulton hosts one of its way-stations, featuring a sculptural representation of the parable of the Wise and Foolish Builders—a reflection on buildings with integrity and strong foundations. As the route leaves Great Moulton, it passes through the East Pye site itself, forming part of a spiritually resonant landscape that has been entirely overlooked in the proposal. This section is valued for its contemplative rural character, which would be fundamentally disrupted by a large industrial development and undermining its purpose as a place of reflection and spiritual engagement. The recently established pilgrimage cycling route, linking each Way Station and following local quiet lanes—including St Michael’s Church, Narrowgate Way, Hundred Lane and the railway crossing—further reinforces the area’s role as a multi-modal spiritual corridor. These lanes form part of a broader experiential journey, and the proposed development would erode their tranquillity, safety, and cultural significance.



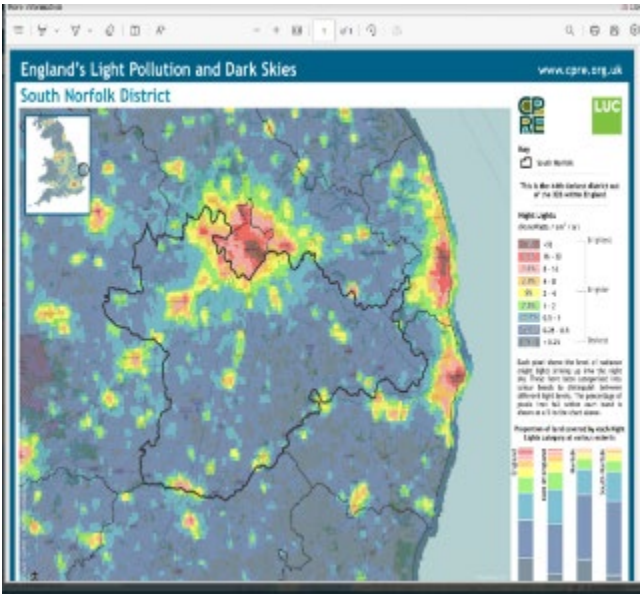
1.9 England’s Light Pollution & Dark Skies South Norfolk District B

England’s Light Pollution & Dark Skies policy (South Norfolk District, Zone B) recognises the rural character, the importance of preserving naturally dark skies for wildlife, landscape quality, and residential amenity. This land parcel sits within an area specifically identified as sensitive to intrusive or upward-directed lighting, where development must demonstrate minimal light spill, no sky-glow, and strict control of operational illumination. The proposed scheme would introduce an intensity and scale of artificial lighting wholly out of keeping with the Dark Skies expectations for this zone, eroding the rural night-time environment, disrupting nocturnal species, and diminishing the tranquillity that the policy seeks to protect. This conflict with Zone B requirements forms a clear and material planning harm.

DMSP data collected by the US Air Force Weather Agency www.cpre.org.uk Key South Norfolk

This is the 44th darkest district out of the 326 within England Night Lights

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA
F 08 Created by LUC Contains Ordnance Survey data



Chapter 2: Environmental Impact Assessment

Methodology & Flaws

Introduction

The Applicant has produced an Environmental Statement with topic chapters and supporting appendices. BEPS-Great Moulton concern is not that EIA work is absent, but that the effects experienced at Great Moulton cross the boundaries between those chapters. A foundation choice can affect noise, groundwater and archaeology; an access route can affect traffic, hedgerows, drainage, soils and PRoW; lighting can affect landscape, residents and bats. The ExA should therefore test the combined scenario rather than assume that separate topic conclusions automatically reconcile with one another.

2.1 Rochdale Envelope - Design Flexibility and Control

East Pye expressly adopts the Rochdale Envelope approach, allowing a degree of detailed-design flexibility within the DCO, this principle is understood.. Such flexibility can be legitimate where the environmentally material parameters are sufficiently defined, the reasonable worst case has been assessed, and the DCO contains clear controls to ensure that the final design remains within that assessed envelope.

THE RELEVANT PRINCIPLE IS THAT FLEXIBILITY MUST NOT RESULT IN AN INADEQUATE DESCRIPTION OF THE DEVELOPMENT OR DEFER ENVIRONMENTALLY SIGNIFICANT MATTERS BEYOND THE POINT AT WHICH THEIR EFFECTS CAN PROPERLY BE UNDERSTOOD. AS THE ESTABLISHED ROCHDALE GUIDANCE MAKES CLEAR, “THE NEED FOR FLEXIBILITY SHOULD NOT BE ABUSED AND DOES NOT GIVE APPLICANTS AN EXCUSE TO PROVIDE INADEQUATE PROJECT DESCRIPTIONS.”

BEPS-Great Moulton concern is therefore not that every engineering detail must be fixed before consent. The issue is whether matters that remain open — including final foundation design, ground conditions, equipment selection, layout, lighting, drainage, access and aspects of BESS and substation detailed design — are sufficiently bounded by the environmental assessment and secured through the DCO.

BEPS-Great Moulton therefore asks the ExA to require a single auditable schedule identifying, for each environmentally material flexible parameter:

- the parameter that remains flexible;
- the maximum and, where relevant, minimum value permitted;
- the reasonable worst case assessed in the Environmental Statement;
- the DCO Requirement, commitment or management plan that secures that limit; and

- the stage at which the final detail must be approved before the relevant works commence.

The purpose is **certainty and enforceability**: the Examination should be able to establish that the final design cannot lawfully move outside the assessed envelope or give rise to materially different environmental effects without further assessment and approval.

2.2 Sensitive Groundwater and Private Water Supply Receptors

The Great Moulton/Tivetshall part of the Scheme lies over sensitive groundwater receptors, including the Crag Group/Norwich Crag Formation and Chalk Formation aquifers, together with Source Protection Zones and private water supplies in the surrounding area.

East Pye's Water Environment assessment identifies relevant groundwater receptors as Very High sensitivity and also treats private water supplies within 1 km of the Order Limits as Very High sensitivity. Private supplies between 1 km and 3 km are identified as High sensitivity [APP/6.1.9].

For the BESS, National Grid Substation and Project Substations, East Pye applies a 1 km study area, reflecting the potential for deeper excavations or piled foundations. Within that study area, East Pye identifies 29 private water supplies or permitted abstractions, of which 19 are considered potentially active.

A separate 250 m study area is applied to the PV and cable-route areas. Within that dataset, 53 supplies or abstractions are identified, of which 44 are considered potentially active [APP/6.1.16; APP/6.3.16.1]. **These figures relate to different study areas and should therefore not be combined or presented as though they describe the same receptor population.**

The assessment draws upon information from South Norfolk/Broadland Council, BGS water-well and borehole records and Environment Agency permitted-abstraction data. East Pye also acknowledges possible duplication between datasets and, where information such as well depth or abstraction aquifer is available for only one of two potentially duplicated records, applies assumptions in interpreting the other record.

For the 1 km BESS/substation study area, East Pye concludes that the identified supplies appear, or on the available geological evidence are assumed, to abstract from the Chalk at depth beneath the overlying Diamicton. **It also concludes that credible risks arising from mobilisation of existing contamination during construction or decommissioning have not been identified.**

BEPS-Great Moulton does not contend that groundwater or private water supplies have been left unassessed. The concern is whether a dataset containing acknowledged assumptions provides sufficient receptor-specific certainty where conclusions may depend upon the exact location, construction, depth, source aquifer and hydrogeological relationship of an individual private supply.

The key issue is therefore whether the later receptor-specific information is adequately translated into the final foundation design, piling and trenching methodology, drainage, pollution-prevention measures, transformer-oil controls, BESS firewater arrangements, construction-compound controls and emergency-response procedures.

BEPS-Great Moulton considers that private water supplies which could reasonably be affected should be positively identified and, where a credible pathway exists, supported by appropriate baseline water-quality and yield information, monitoring and contingency arrangements.

The ExA should therefore require the Applicant to provide a clear PWS schedule for receptors within the relevant study areas, identifying where practicable:

- whether each supply is confirmed or considered potentially active;
- its location and relevant distance from the proposed works;
- the likely source aquifer and available information on borehole or well construction;
- whether the owner or user has been consulted;
- whether baseline water-quality and yield testing is proposed;
- the relevant source-pathway-receptor relationship;
- the specific mitigation and monitoring applicable to that receptor; and
- the contingency arrangements, including alternative water supply and remediation, should a private supply be adversely affected.

The purpose is not to duplicate East Pye's existing groundwater assessment, but to ensure that the identified sensitivity and remaining receptor-specific uncertainty are carried through into final design, construction controls and enforceable protection measures before intrusive works commence.

2.3 Environment Agency Concerns and Remaining Areas of Uncertainty

The Environment Agency's earlier consultation identified significant uncertainty in relation to ground conditions and groundwater.

The EA considered that the hydrogeological setting had not at that stage been adequately characterised and that the available information was largely derived from a limited set of historic exploratory-hole records. It therefore sought further assessment of Ground Conditions. East Pye subsequently updated its Phase 1 Ground Conditions Assessment and records that, following discussion with the EA on 27 March 2025, intrusive ground investigation would be undertaken post-consent and secured through the CEMP rather than being necessary to support the submitted ES. [APP/6.1.16; APP/7.1]

The EA also identified insufficient evidence and design information at the earlier stage to discount the possibility that piling or deep foundations could create contaminant migration

pathways into deeper groundwater units. It recommended a Foundation Works/Piling Risk Assessment for the BESS, substations and other structures requiring deep foundations. East Pye has responded by committing to a Foundation Works Risk Assessment (FWRA) post-consent, informed by the results of the later ground investigation.

The Environment Agency separately raised uncertainty concerning private water supplies where accurate locations and abstraction-stratum information were unavailable and recommended that locations and, where possible, abstraction strata should be determined, with a reasonable worst-case approach adopted where reliable information remained unavailable. East Pye subsequently expanded and updated its assessment. [APP/6.1.16; APP/6.3.16.1]

BEPS-Great Moulton is concerned as to whether East Pye's subsequent desk-based assessment and secured post-consent work resolve those concerns sufficiently to justify the environmental conclusions now relied upon.

2.3.1 Groundwater Travel Times

This is one particularly important point where East Pye expressly records a departure from the amendments requested by the Environment Agency.

APP/6.1.16 states that the majority of the EA's requested amendments were adopted, except those relating to groundwater travel times around private water supplies. East Pye explains that application of travel times to fissured Chalk could generate very large theoretical screening zones - potentially several kilometres - which it considers highly conservative for the generally small-scale abstractions involved.

BEPS-Great Moulton submits that the consequences of departing from the EA-requested travel-time methodology should be clearly tested where the actual abstraction source and local groundwater behaviour of individual potentially affected supplies have not been independently verified and that a fixed-distance screening exercise should not automatically be treated as equivalent to a receptor-specific hydrogeological assessment where a credible preferential groundwater pathway cannot reasonably be excluded.

2.3.2 The Water Resources Assessment Does Not Determine Contamination Risk

East Pye states in the Water Resources Assessment that there is "no potential impact" on existing lawful water users, including private water supplies, because new groundwater and surface-water abstraction options have been scoped out. East Pye will therefore not compete with existing lawful users by abstracting new water from the groundwater or surface-water system. [APP/6.3.9.3]

BEPS-Great Moulton submits that, although this is a useful and relevant conclusion, it is a water-resource/abstraction conclusion. It is therefore essential that it is not treated as determining the separate potential for effects through:

- piling or deep foundations;

- contaminant migration or altered groundwater pathways;
- construction spills or leaks;
- transformer oils or other electrical infrastructure;
- drainage or containment failure;
- contaminated surface-water runoff; or contaminated BESS firewater.

Those pathways are addressed elsewhere in the Water Environment, Ground Conditions, drainage and BESS safety documentation. [APP/6.1.9; APP/6.1.16; APP/6.3.9.1; APP/7.1; APP/7.5]

This distinction is reinforced by East Pye's Consultation Report. When asked to provide evidence of engagement with private-water-supply owners and Environmental Health to establish the extent of the issue and an appropriate monitoring protocol, the Applicant referred to the absence of new abstraction and stated that there would be "appropriate engagement where required". That response does not itself demonstrate that a comprehensive property-by-property verification and baseline-monitoring programme has already been undertaken. [APP/5.11]

2.3.3 Important Ground and Foundation Assessment Remains Post-Consent

The submitted documents confirm that several significant matters remain to be determined after consent: intrusive ground investigation will be undertaken post-consent and will inform detailed design; Phase 2 Ground Conditions Assessment will be undertaken following that investigation; a Foundation Works Risk Assessment will be undertaken post-consent for the BESS, National Grid Substation and other structures requiring deep foundations and/or piling, including relevant Project Substations; and where trenchless crossings interact with Principal or Secondary A aquifers, pass beneath watercourses or affect sensitive ecological receptors, a Hydrogeological Risk Assessment may be required post-consent to assess the specific groundwater risks and identify additional mitigation or remediation. [APP/6.1.16; APP/7.1; APP/7.26]

BEPS-Great Moulton does not submit that post-consent investigation or detailed engineering is inherently inappropriate. Nor should the HRA commitment be overstated: the existing commitment is principally directed to relevant trenchless crossings, rather than constituting a general HRA requirement for every structure.

The examination issue is instead whether these controls are sufficiently defined, precautionary and enforceable so that the conclusions reached in the ES remain valid when the results of the intrusive investigation and final foundation designs become known.

This is significant because APP/6.1.16 itself records Very High hydrogeological receptor sensitivity while nevertheless concluding Minor Adverse/Not Significant residual effects.

2.3.4 BESS and Substations - Integrated Groundwater Protection

Although the BESS is situated in the Parish of The Tivetshalls, it is important that the closeness of the scheme to Great Moulton and the residents whose properties who use wells, are situated only some 250m from the BESS, so this is an important aspect of the scheme and how it will affect their families, livestock and wellbeing.

The BESS and substation infrastructure warrant particular scrutiny because their foundations, drainage and firewater arrangements create different groundwater risks from the solar arrays.

East Pye has made substantive design and mitigation commitments. However important details remain for later design, including battery technology and layout, foundation design, equipment spacing, drainage, lining, firewater containment and emergency response. [APP/7.5; APP/7.18; APP/6.1.9; APP/6.3.9.1] The more pressing issue is that the foundation design, BESS technology and layout, drainage, bunding/lining, isolation, firewater containment and emergency response ultimately need to function as one integrated groundwater-protection system.

The Examining Authority should therefore be satisfied that the DCO controls prevent the final detailed design from moving outside the environmental envelope assessed in the ES.

Further ground investigation and post-consent assessment are also proposed, including a Foundation Works Risk Assessment for relevant piling/deep foundations and, where required, Hydrogeological Risk Assessment for works capable of affecting sensitive aquifers or water receptors. [APP/6.1.16; APP/7.1]

BEPS--Great Moulton's concern is therefore whether these separate measures are secured as one integrated groundwater-protection system before relevant works commence, particularly where private water supplies may be affected.

Groundwater travel times around private water supplies have not been adopted. The Applicant considers the larger travel-time zones overly conservative in the. BEPS-Great Moulton considers that this departure warrants further explanation where the precise abstraction source, borehole construction and local – potentially fracture-controlled groundwater behaviour have not been verified for every supply that may be affected. [APP/6.1.16]

East Pye also records that certain Environment Agency-requested amendments concerning groundwater travel-time assessment were not adopted. The Applicant's response was that there would be “appropriate engagement where required”; Where the source aquifer, borehole construction and groundwater pathways of potentially affected private supplies have not been verified, BEPS-Great Moulton considers that reliance on fixed-distance screening requires clear justification. [APP/6.1.16]

Areas that the Examining Authority need to prioritise:

- potentially affected private supplies and groundwater pathways are adequately verified;
- the departure from the Environment Agency's requested approach is clearly justified;
- required Foundation Works and Hydrogeological Risk Assessments are completed before relevant works; and

- proportionate baseline and ongoing private-water-supply monitoring is secured where a credible pathway cannot be excluded.

The DCO should ensure that the final BESS, foundation, drainage and firewater design cannot move outside the groundwater-protection envelope assessed in the Environmental Statement.

2.3.5 The Water Resources Assessment Does Not Resolve Contamination Risk

BEPS-Great Moulton submits that the “no potential impact” conclusion in the Water Resources Assessment [APP/6.3.9.3] should be read in its proper context. It principally reflects the fact that the Scheme does not propose significant new groundwater or surface-water abstraction and therefore is not expected to compete with, or reduce, existing private water supplies.

It does not demonstrate that private water supplies are free from other potential risks, including contamination or changes to groundwater pathways arising from piling, deep foundations, spills, drainage failure, contaminated runoff or BESS firewater. Those matters are considered separately within the Water Environment and Ground Conditions assessments. [APP/6.1.9; APP/6.1.16]

BEPS-Great Moulton therefore asks the Examining Authority not to treat the absence of an abstraction or water-quantity effect as evidence that all potential risks to private water supplies have been excluded.

2.3.6 Significant Ground and Foundation Information Remains Post-Consent

East Pye reaches a series of Minor/Negligible and Not Significant conclusions for groundwater and water-environment effects while important intrusive investigation and design-specific assessment remains to be completed after consent.

The submitted documents confirm that intrusive ground investigation will inform detailed design;

- Phase 2 Ground Conditions Assessment will follow that investigation;
- Foundation Works Risk Assessment (FWRA) will be undertaken post-consent for structures requiring deep foundations and/or piling; and where trenchless crossings interact with Principal or Secondary A aquifers, watercourses or sensitive ecological receptors;
- Hydrogeological Risk Assessment will be undertaken, where required, for relevant works interacting with Principal or Secondary A aquifers, watercourses or other sensitive receptors. [APP/6.1.16; APP/7.1]

BEPS-Great Moulton does not suggest that post-consent investigation or detailed design is inherently unacceptable. The examination issue is whether the submitted Rochdale-envelope assessment, and secured requirements are sufficiently precautionary and enforceable to

ensure that no materially different or unacceptable groundwater effects can arise when the final design is developed.

This is particularly important because the Environment Agency identified that the information and design detail then available were insufficient to discount the possibility that piling or deep foundations could create contaminant migration pathways into deeper groundwater units. East Pye has responded by securing a later FWRA informed by further investigation rather than completing that structure-specific assessment within the submitted ES.

The question for the Examining Authority is therefore not whether a FWRA has been promised, but whether its scope, timing and approval mechanism ensure that no relevant foundation works can proceed until groundwater risks have been properly assessed and controlled.

2.3.7 BESS and Substations Require Particular Scrutiny

BEPS-Great Moulton submits that the “no potential impact” conclusion in the Water Resources Assessment [APP/6.3.9.3] should be read in its proper context. relates primarily to the absence of significant new water abstraction.

It should not be taken to mean that private water supplies face no separate contamination or hydrogeological risk from piling, drainage failure, spills, contaminated runoff or BESS firewater. Those risks are addressed elsewhere in the Water Environment and Ground Conditions assessments. [APP/6.1.9; APP/6.1.16]

The Examining Authority should therefore distinguish between no identified abstraction effect and the separate question of groundwater and contamination risk.

2.3 Remaining Ecological Evidence and Mapping

Site 1 and Site 2B (Part) appear within East Pye’s ecological Survey Programme, lighting, INNS and species mitigations are expressly addressed. No separate botanical/rare flora report is available, although East Pye have produced habitat/plant information within the Extended Habitat Survey, but I would not appear to provide a standalone rare-flora survey.

Our issue is the lack of a readily auditable site site1 and Site 2 ecological and BNG Breakdown. East Pye has not submitted a standalone Site 1 or Site 2 Ecology Report, instead everything is incorporated into the scheme-wide Ecology and Biodiversity Assessment and species appendices.

BEPS-Great Moulton's concern is therefore not an absence of ecological survey, but whether the Site baseline, survey results, habitat losses, protected-species effects, mitigation and BNG consequences can be readily identified and audited at individual sub-site level from evidence dispersed across numerous scheme-wide documents.”

The ecological evidence for the Site 1 hard-infrastructure cluster is dispersed across scheme-wide chapters, appendices, figures, management plans and the BNG assessment rather than being brought together in one readily auditable location.

We submit that this distinction is particularly important because Site 1 and the adjoining BESS contain a concentration of solar generation, substations, National Grid infrastructure, BESS equipment, roads, fencing, lighting, drainage and associated construction activity.

The BNG Report provides statutory metric results for the **Order Limits as a whole** and separately for the collective **“Sites only”**, rather than providing a separate transparent Site 1 metric showing the baseline units, direct losses, retained habitat, enhancement and creation attributable to this infrastructure cluster. [APP/7.23; APP/7.24]

No separate botanical/rare flora report is available, although East Pye have produced habitat/plant information within the Extended Habitat Survey, but I would not appear to provide a standalone rare-flora survey.

Likewise, operational and construction lighting effects are addressed through the scheme-wide Lighting Strategy and ecological assessment, and INNS are addressed through Chapter 8 and the Outline Protected Species Mitigation Strategy. What remains important is whether the Examining Authority can readily identify, specifically for Site 1 and Site 2 (part) the existing habitat baseline, direct and indirect habitat loss, hedgerow effects, bat and bird constraints, great-crested-newt considerations, lighting controls, fencing permeability, drainage and pollution pathways, mitigation, monitoring and resulting BNG consequences.

BEPS-Great Moulton therefore asks that a clear Site 1/BESS ecological schedule or equivalent evidence auditable evidence, parcel-specific for final Site 1/BESS access, trenching, lighting and grid works and whether final mitigation maintains connected habitat and dark corridors., bringing those matters together so that the consequences of this particularly intensive infrastructure location can be properly understood

The remaining issue is parcel-specific auditability for the final Site 1/BESS access, trenching, lighting and grid works and whether final mitigation maintains connected habitat and dark corridors.

2.4 Telecoms & Emergency Access

Telecommunications and broadband are community-resilience infrastructure in a rural parish. Damage or service loss affects home working, businesses, alarms, medical alerts, education and emergency contact.

The Applicant should provide a consolidated utilities protection plan covering Openreach, Gigaclear, BRN or any community fibre, electricity, water, drains and other affected services, with emergency repair contacts and minimum service-continuity commitments.

2.5 Climate Change [Chapter 7: Climate Change](#)

It is acknowledged that Chapter 6- ES Chapter 6 – Climate Change [APP/6.1.6] contains a Climate Change Risk Assessment. Our concern is whether these scheme wide assessments provide sufficient Great Moulton Site 1 and Site 2 specific analysis of the interaction between future climate conditions and the changes introduced by the Scheme.

climate change The EIA fails to provide a robust, site-specific assessment of the scheme's resilience to climate change or the potential for the development itself to exacerbate local climate risks. Great Moulton already experiences the effects of more intense rainfall, prolonged dry spells, and higher summer temperatures, and these pressures are projected to increase. A development of this scale must demonstrate how it will perform under future climate conditions, not just current baselines.

There is no quantification or modelling of how the extensive area of solar panels may increase surface water runoff, exacerbate flash flooding, or alter groundwater recharge. This omission is particularly significant in Great Moulton, where shallow groundwater, permeable soils, and a dense network of ditches and drains make the landscape highly sensitive to changes in water movement. Concentrated runoff beneath panel drip lines, soil compaction from construction traffic, and altered infiltration patterns all have the potential to worsen local flood risk under projected climate scenarios.

The EIA also fails to consider whether the introduction of large-scale hard infrastructure could lead to localised overheating, changes in wind patterns, or drought vulnerability affecting adjacent farmland and communities. Great Moulton's agricultural land is already exposed to seasonal water stress, and any reduction in soil moisture or alteration of microclimates could have direct impacts on crop viability, hedgerow health, and the resilience of local wildlife.

There is no assessment of how the BESS compound, substation, or extensive cabling infrastructure would perform under extreme heat, prolonged drought, or high-intensity rainfall events. These are critical considerations for fire safety, thermal runaway risk, and the integrity of bunding and drainage systems.

The absence of a detailed local climate risk assessment and adaptation strategy falls short of best practice and EN-1 requirements for demonstrating that both the project and surrounding communities will not be made more vulnerable as a result of the development. Without this analysis, the scheme cannot be shown to be climate-resilient, nor can it be demonstrated that it will avoid increasing climate-related risks to Great Moulton's residents, farmland, and water environment.

2.6 Missing Analysis of Views from Listed Buildings or Impacted Homes



The scale of the proposed changes is substantial, East Pye's own Landscape and Visual Assessment shows why the Great Moulton Effects require particular careful scrutiny, and the Great Moulton landscape and residential receptors are predicted to **experience Significant Adverse Visual Effects**

The submission significantly downplays the level of disruption and environmental harm that would be brought to the village of Great Moulton. The infrastructure would in some instances be circa. 25m from their garden/land boundaries, with increased pylon and substation heights, 4.5-metre solar panels, security fencing, lighting columns, and surveillance cameras.

This configuration appears to have been developed without meaningful consideration of the local community or the sensitivity of the surrounding landscape. The proximity and sheer massing of this industrial infrastructure would cause severe and long-term disruption to residents' daily lives, eroding residential amenity, tranquillity, and the rural character of the plateau.

The impacts extend beyond people. The plateau supports a range of wildlife that relies on its open, connected habitats, footpaths and byeways. The introduction of tall, dense, and illuminated structures would fragment these habitats, displace species, and fundamentally alter the ecological function of the area.

Taken together, the proposal would transform a rural landscape into an industrialised zone, with consequences that have not been adequately assessed, mitigated, or justified. The community

and its environment deserve far more rigorous consideration than this scheme currently provides

Photographic images of Listed Buildings in Great Moulton
Listed Buildings and their locations in Great Moulton—Frith Way

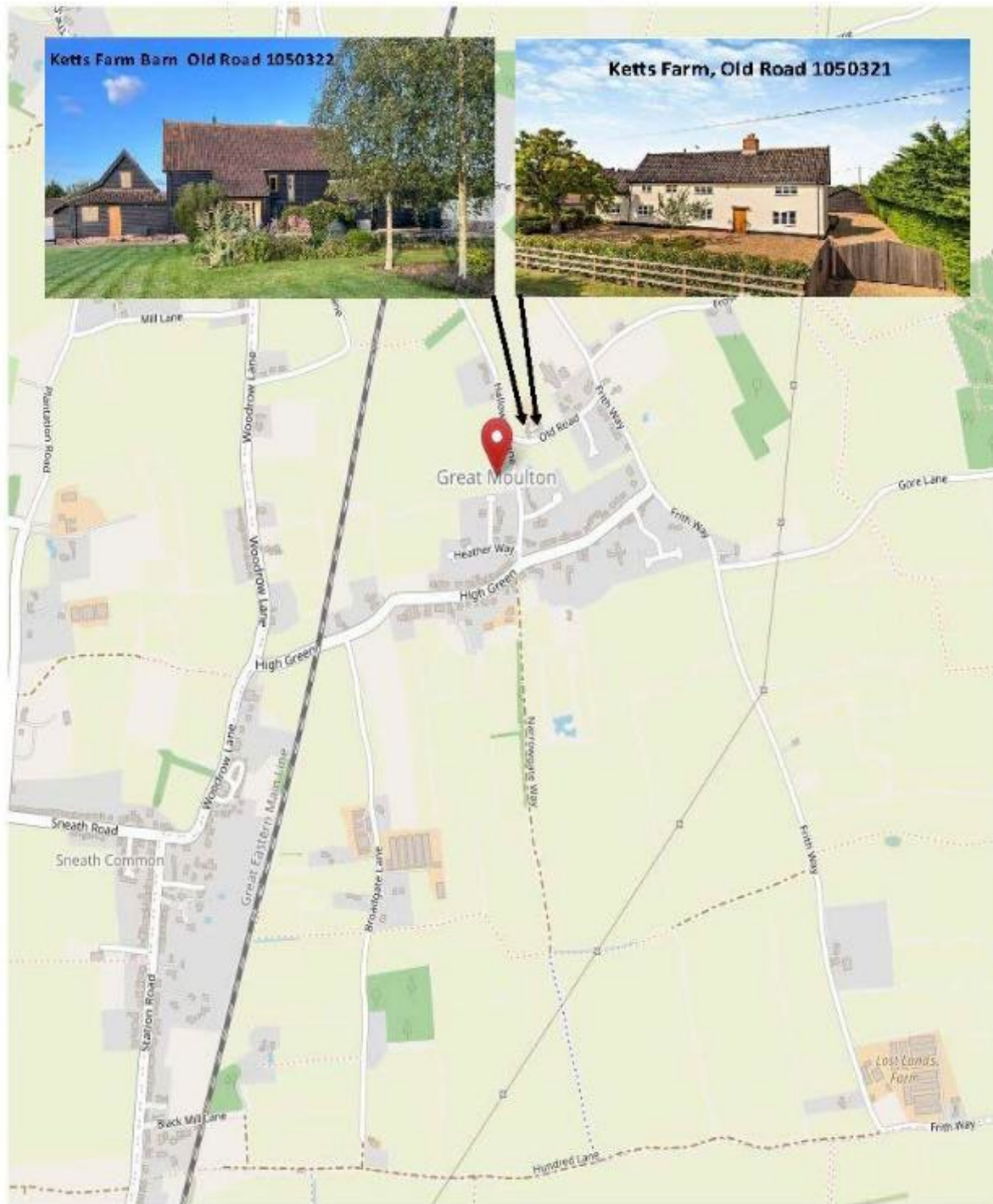


The image is a composite of a map and four property photographs. The map shows the area around High Green, North Yorkshire, with roads such as Woodrow Lane, Carr Lane, Great Eastern Main Line, Hallowing Lane, Fresh Way, Front's Lane, Market Lane, Gore Lane, and Station Road. A red location pin is placed near the center of the map, labeled 'High Green'.

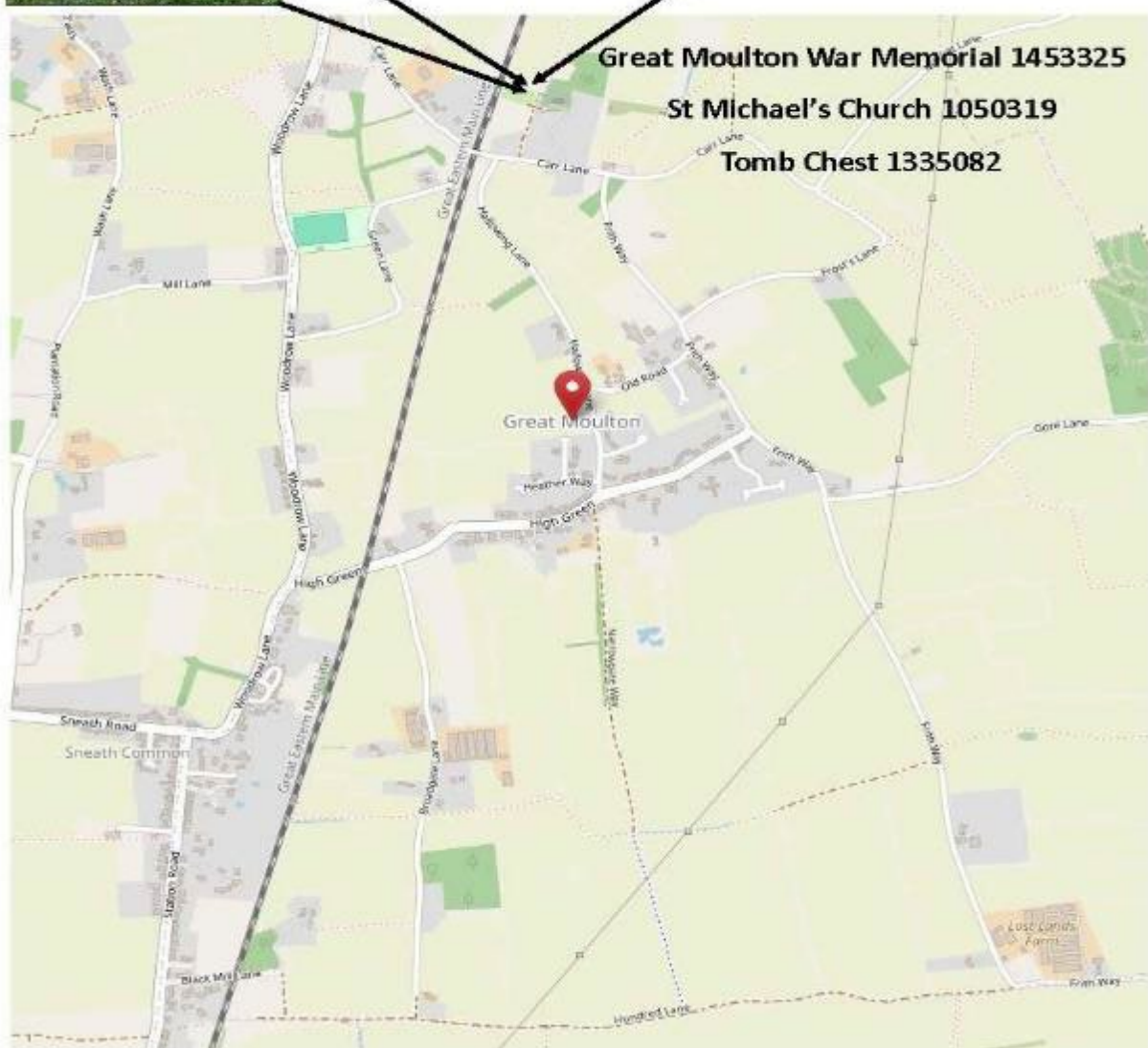
Four property photographs are overlaid on the map:

- White Farm House, High Green, 1050324**: A large, white, two-story house with a red-tiled roof and a stone outbuilding.
- South Cottage, High Green, 1050774**: A small, stone cottage with a thatched roof and a chimney.
- Sneath Farm, High Green, 1133155** and **Sneath Farm Barn, High Green, 1373234**: A large, white, two-story house with a thatched roof and a stone outbuilding.
- Rosetree Farmhouse, High Green, 1378272**: A large, white, two-story house with a red-tiled roof and a stone outbuilding.

Listed Buildings and their locations in Great Moulton—Old Road



Listed Buildings and their locations in Great Moulton—Carr Lane



2.6.1 Oak Lodge, High Green, Great Moulton

Views from & to the property of the Proposed Substation planned c.25m from boundary fence

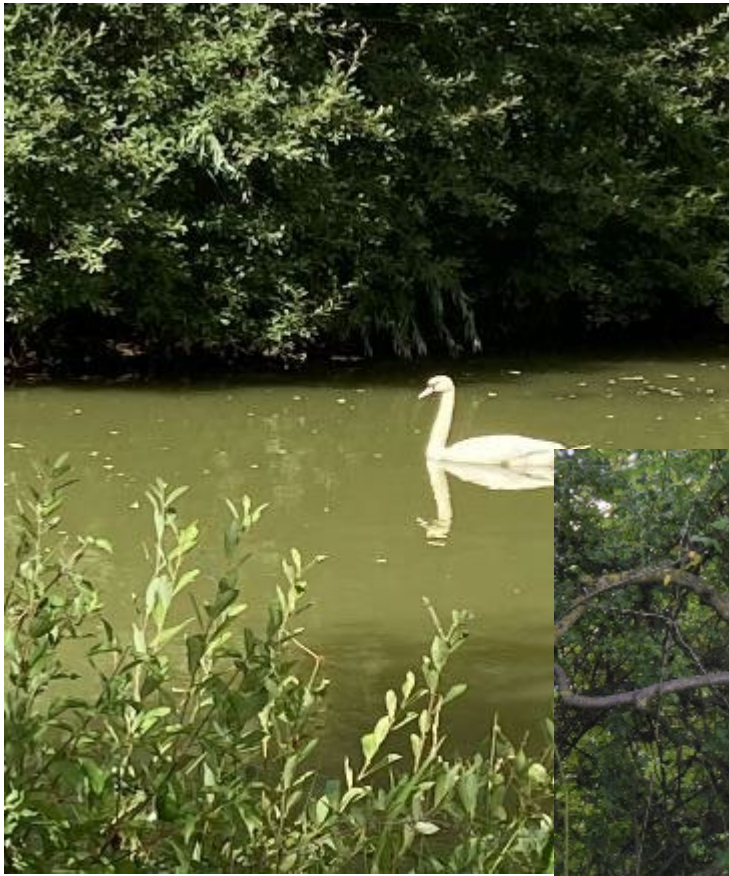


2.6.2 Laburnham Farm House, High Green, Great Moulton

Views from & to the property to Proposed Substation and wildlife and bee apiaries) (National Grid Transmission Substation planned c.25m from boundary fence and a 400KV substation also planned in adjoining fields)



2.6.2 continued - Laburnham Farm House, High Green, Great Moulton



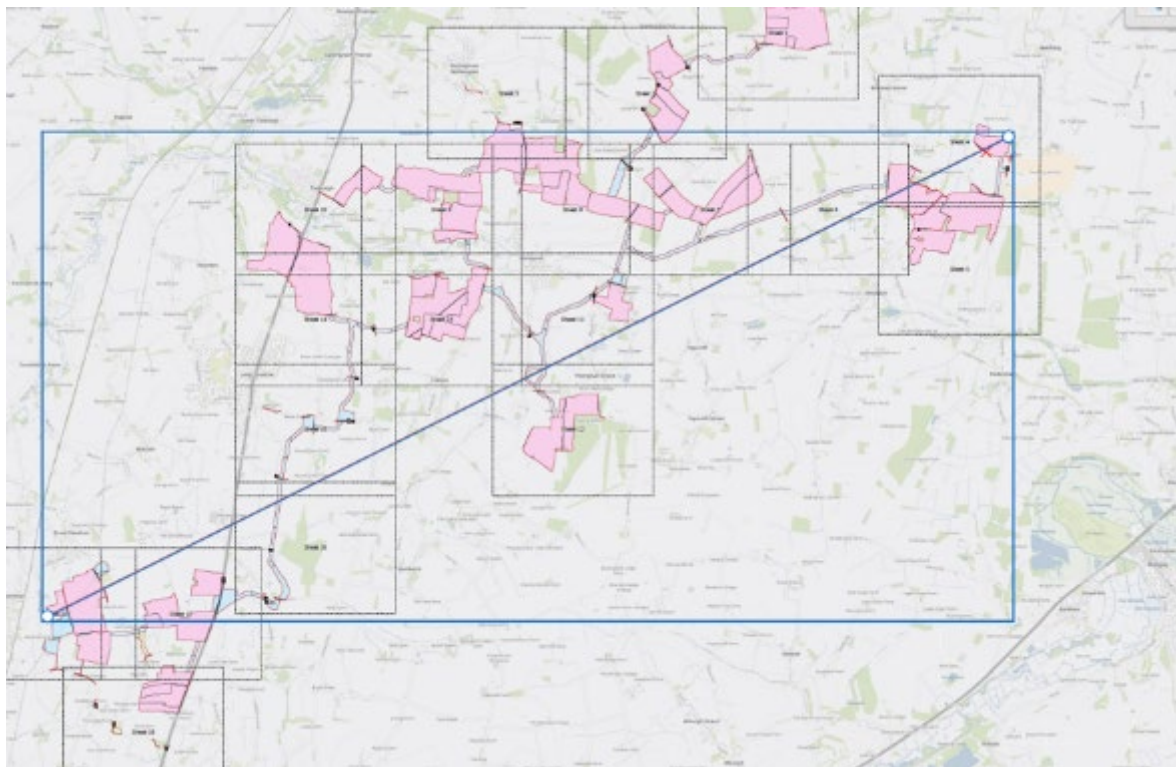
2.6.3 Potters Crescent

Views from local houses where both the 400Kv national grid substation and 400kv project substation are sited.





Chapter 3: The Order Limits- Site and Surroundings



3.1 Site Selection, Retention and Reasonable Alternatives

East Pye Solar state in their Site Selection Assessment document APP/7.20 / APP215 sets out a site selection methodology and identifies policy preferences, therefore we do not state that East Pye did not undertake any site selection exercise.

Our issue is narrower, how that strategic methodology was then translated into later inclusion and retention and refinement of Site 1 and sub-sites 1A-1D following the change in the Point of Connection.

APP/7.20 records that The Applicant has not undertaken a detailed assessment of every unconstrained agricultural parcel. Instead, it focused in large part upon large landholdings identified through land agents as having potentially willing landowners and ultimately upon land which landowners were willing to make available.

APP/7.20 also records that the land originally coming forward for solar development comprised eight sites elsewhere and that Sites 1 and 2 were subsequently added after the Point of Connection had been identified on land south of Great Moulton. The Applicant further records that land availability was an important consideration and that some potentially suitable alternative land was not progressed because it had not been made available to the Applicant.

This may be a legitimate factor, for land availability, deliverability and commercial. However, this is not the same as environmental suitability. The examination issue is therefore not whether a site-selection exercise took place, but whether the submitted evidence allows the ExA to understand clearly:

- why each of Sub-Sites 1A, 1B, 1C and 1D was added once the Point of Connection changed;
- what environmental, technical, land-availability and commercial considerations were applied to each parcel;
- why each parcel remained necessary as the design evolved and environmental constraints became better understood; and
- whether reasonable opportunities to avoid or reduce effects through parcel deletion, whole-field removal, further reduction or use of other reasonably available land were considered.

We would submit that this distinction is particularly important because the level of explanation is not the same for all parts of Site 1.

BEPS-Great Moulton therefore asks the ExA to consider requiring the Applicant to provide one consolidated and auditable Site 1 selection and design-evolution schedule, drawing together information presently dispersed across APP/7.20, ES Chapter 5, the Design Approach Document and the relevant technical assessments.

The schedule should identify, for each of Sub-Sites 1A, 1B, 1C and 1D:

- When and why the parcel entered the Scheme, including its relationship to the change in the Point of Connection.
- The function and development proposed within the parcel, distinguishing solar generation land from National Grid infrastructure, Project Substations, Grid Connection Infrastructure, overhead-line works, cables, access, mitigation or other uses.
- The environmental, technical, operational, commercial and land-availability criteria applied, together with sufficient explanation to understand how those considerations influenced the decision to select and retain the parcel.
- The principal constraints subsequently identified through environmental assessment, consultation and design evolution, and the design changes made in response.
- The reasonable design alternatives considered after those constraints became known, including where relevant further reduction, removal of individual fields or parts of fields, deletion of the parcel, relocation of infrastructure and use of other reasonably available land.
- For Sub-Site 1B specifically, an integrated explanation of why the selected location remains appropriate when the cumulative presence of the National Grid Substation, Project Substation infrastructure, Grid Connection Infrastructure, overhead-line works, access requirements and the adjoining BESS is considered together, rather than solely through the earlier comparison between National Grid Substation Options 4A and 4B.

- A clear distinction between land which was environmentally or technically unsuitable and land which was potentially suitable but was not available to the Applicant.

This would not require the Applicant retrospectively to demonstrate that Site 1 was the theoretical “best” or “least harmful” site. Rather, it would allow the ExA to understand the Applicant's actual decision-making process and determine whether the reasonable alternatives that were studied, and the subsequent decisions to retain and refine Sites 1A–1D, have been explained with sufficient environmental and design justification.

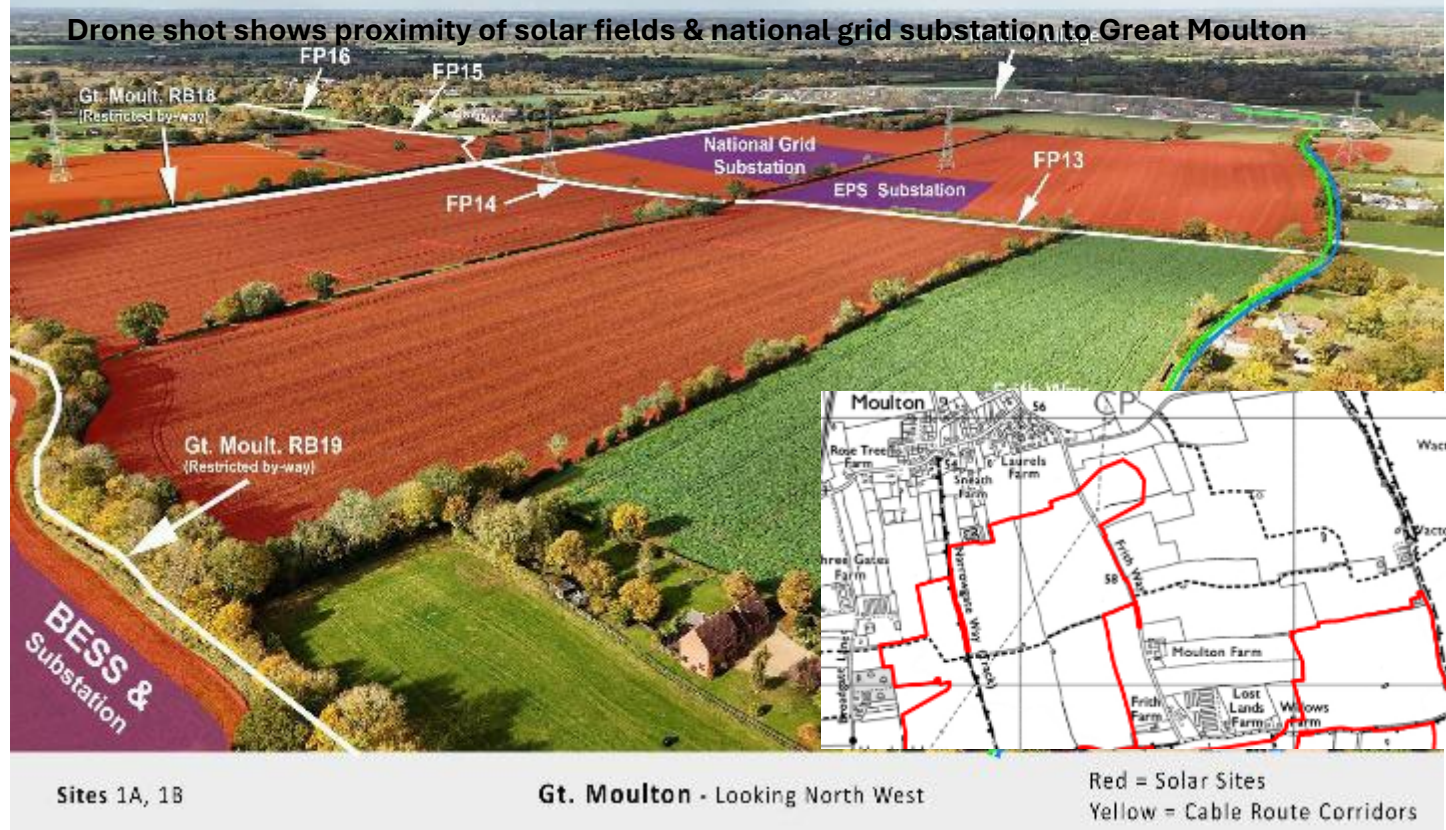
Source basis: APP-215 / APP/7.20 Site Selection Assessment, particularly sections addressing the National Grid Substation and Point of Connection alternatives, solar site-search methodology, landowner availability, Potential Development Areas and Alternative Development Zones, and the later addition of Sites 1 and 2; APP-041 / APP/6.1.5 ES Chapter 5 – Reasonable Alternatives and Design Evolution; and APP-212 / APP/7.17 Design Approach Document.

3.2 Site Location and Context

Site is Approximately 16Km+ in length(over 10 miles)

The Order Limits create a long linear scheme, but the Great Moulton objection concerns the western concentration of infrastructure. Site 1 and the BESS cannot be understood by reading individual parcels in isolation.

East East Pye are not accurate in their designation of each Site and its parish locations. It may be considered that the PEIR is not therefore representative of each parish, for example Site 2B has an incorrect Parish Identification Sub Sites & 2B The Western Section 50%-Great Moulton Parish 50% Tivetshall Parish





3.3 National Grid Connection Point

The Grid Connection Statement proposes a new National Grid Substation and associated 400 kV connection infrastructure at Site 1B. However, NGET's Relevant Representation of 10 June 2026 qualifies the certainty of that solution.

NGET states that it understands the new connection agreement will not require East Pye to secure land or consent for the proposed National Grid Substation. It also makes clear that DCO consent for that substation would not itself oblige NGET to provide the connection at that location, and that the final size, design and location of the connection solution cannot yet be confirmed while Connections Reform is being completed.

This uncertainty is now expressly before the Examination. ExQ1 Q1.2.15 asks NGET to clarify whether additional infrastructure may be required, whether the National Grid Substation might need to be located differently, and the anticipated delivery timescale.

This does not establish that Site 1B or the proposed substation is unnecessary. It does, however, require the Applicant and NGET to explain why the land, permanent infrastructure and environmental envelope proposed to be authorised through the DCO remain justified if NGET's eventual connection solution differs materially from that presently assessed.

BEPS-Great Moulton therefore asks the ExA to establish the relationship between the DCO infrastructure now sought and NGET's eventual connection solution before reaching conclusions on the necessity and justification for the permanent Site 1B works and associated land rights.

3.4 Connection status and consequences for Site 1B



APP/7.11 records different Connections Reform positions for the two principal components of the Scheme: the solar component has Gate 2 Phase 2 prioritisation, while the proposed BESS remains at Gate 1, without an equivalent confirmed indicative connection date.

This distinction does not mean that the BESS cannot ultimately progress or connect. It does, however, mean that the solar generation and BESS should not presently be assumed to have identical connection status, timing or delivery certainty.

This matters, because the Application relies upon the BESS for storage, import/export capability, flexibility and wider system benefits, while elements of the Site 1 infrastructure may have been designed on the assumption that both the solar generation and BESS will operate as proposed.

BEPS-Great Moulton therefore asks the ExA to require the Applicant to identify clearly:

- the current connection status and anticipated import and export rights of the solar generation and BESS;
- which substations, cables, land requirements, access arrangements and operational assumptions depend upon the BESS progressing from Gate 1;
- whether the BESS operating case assessed in the Application remains valid if its connection is delayed, reduced or materially altered; and
- whether any such change would affect the justification for the present Site 1/BESS land take, infrastructure envelope or environmental assessment.

This should also be considered alongside NGET's separate position that the final size, design and location of the wider connection solution are not yet confirmed. **The issue for the Examination is therefore one of robustness and flexibility: whether the DCO and its environmental assessment remain justified under credible delivery scenarios if the BESS**

connection or NGET's final connection solution differs materially from that currently assumed.

The Gate 1 position is not relied upon as evidence that the BESS cannot proceed. The question is whether the extent of land and infrastructure presently sought remains necessary, proportionate and adequately assessed across the realistic connection outcomes now before the Examination.

The Applicant should therefore demonstrate that the environmental assessment, site-selection case, land take and compulsory acquisition case remain robust if NGET's eventual connection solution differs materially from that currently shown

3.5. Consultation and Targeted Consultation - October 2025

BEPS-Great Moulton remains concerned whether the consultation process gave affected communities a sufficiently clear and informed understanding of the Scheme as it evolved.

The statutory consultation took place while important elements of the design were still developing, with later targeted consultations addressing subsequent changes. Of particular relevance is the targeted consultation commencing on 22 October 2025, which confirmed that the Applicant intended to take forward the National Grid Substation within Site 1B / Option 4B and would no longer pursue the additional southern option.

BEPS-Great Moulton does not suggest that the use of targeted consultation is, of itself, inadequate. The issue is whether the consultation material adequately conveyed the significance of that change, including the consequences of locating permanent National Grid infrastructure within Site 1B together with associated access, overhead-line works, landscape, residential and community effects. BEPS-Great Moulton concern is that significant areas and receptors were only identified at this stage and that not properly identified at the statutory stage, therefore had limited time to understand the effects of this proposal on their communities.

BEPS-Great Moulton is also concerned that consultees were required to understand these changes through a series of evolving documents and targeted updates rather than through a single consolidated account of the revised Scheme and its environmental consequences.

The ExA is therefore asked to consider whether the consultation information provided at the relevant stages was sufficiently clear and complete to allow affected residents and other consultees to understand the material changes being proposed and make informed representations upon them.

BEPS-Great Moulton considers that the adequacy and weight of the consultation evidence remain matters for the Examination, particularly in relation to the evolution of Option 4B/Site 1B and the permanent infrastructure subsequently proposed there.

3.6 Permanent National Grid infrastructure

Of major concern is that The Applicant repeatedly describes the East Pye Scheme as temporary and reversible, BEPS-Great Moulton would contradict this in that this is no longer hypothetical in relation to the National Grid Substation. East Pye's own ES Chapter 4 states that after the approximately 60-year operation and maintenance period, the National Grid Substation and Grid Connection Infrastructure will remain in situ, with relevant mitigation planting transferred to National Grid for ongoing management.

The Difference Matters.

The different matters. The BESS, solar arrays and Project Substations are proposed to be removed at decommissioning, whereas the National Grid Substation and Grid Connection Infrastructure are expressly stated to remain. The landscape assessment therefore needs to separate the temporary effects of this 60-year scheme from the permanent effects of the infrastructure left behind.

The applicant repeatedly describes the solar farm as a "temporary" development. This is materially incorrect. The scheme includes a Point of Connection (POC) substation that will be constructed as part of the proposal and will remain permanently as a new node on the electricity network. A development containing permanent grid infrastructure cannot be considered temporary under the Town and Country Planning Act 1990 or the National Planning Policy Framework (NPPF), both of which require temporary permissions to be fully reversible and to avoid creating lasting change.

A POC substation is designed for multi-decade operational life, requires permanent access, fencing, security, and easements, and cannot be removed without major civil engineering works. Its presence results in irreversible industrialisation of the landscape and a permanent alteration to the electricity network.

We submit that the applicant is therefore mischaracterising the nature of the proposal. The correct classification is a permanent energy installation with a temporary generating element, not a temporary scheme.

3.6.1 Correspondence between BEPS-Great Moulton and National Grid

POC Substation and Anticipated Development [Appendix 3](#)

3.7 Key Objection Points Arising from the Order Limits

The Order Limits material supports the argument that Site 1 is not merely a solar field. It is the location of a concentrated grid infrastructure hub. Site 1 comprises Sub-Sites 1A–1D, with the National Grid Substation and a 400kV Project Substation located in Sub-Site 1B, and underground and/or overhead lines, including new pylons between the National Grid Substation and the Point of Connection, located across Sub-Sites 1A–1D. CRC1 then links this grid hub to the BESS Site.

3.8 Nearby Residential Dwellings – Sites 1 and the BESS

The Site and Surroundings chapter also identifies nearby homes at Great Moulton, individual dwellings close to Sub-Sites 1A and 1B, the Great Eastern Main Line west of Sub-Site 1A, Tibenham Airfield west of Sub-Site 1A, listed buildings close to Sub-Site 1B, and the existing 400kV overhead line as a prominent feature cutting diagonally across Site 1. This is confirmation that the Order Limits around Site 1 create a major infrastructure cluster.

The information supplied by East Pye for residential properties who will be most affected is very minimal.

The nearest residential area to Site 1 is the village of Great Moulton, located 220m north of Sub-Site 1B, what has not been acknowledged is **that the boundaries of these properties are c.25m from the National Grid Connection Point.**

Sub site 1B - Potters Crescent & Frith Way, all properties on the South Side of High Green towards Broadgate Lane, Woodlands Farm, Gore Farm (now known Gore Farm),

Sub Site 1A - Properties on Broadgate Lane

1D - Gorelands Farm, properties on Frith Way

The BESS - Woodlands Farm, Willows Farm, Lost Lands (poultry business) Frith Farm (now Gore Farm)

We ask the planning Inspectorate to take into account in his decisions, residents who will be affected by these major infrastructures which are being proposed and request East Pye to produce an ES for Sub-Sites 1C and 1D as they deemed it unnecessary though the scheme has changed radically, with no decommissioning proposed. Also, the majority of the properties now affected by this change to the scheme, **Sub site 1B - Potters Crescent , Frith Way, all properties on the South Side of High Green towards Broadgate Lane** have not been assessed by East Pye even though they will all be affected by the re-siting of the National Grid Connection, this is critical in that it will change people's lives and the landscape of the village forever.

We would ask The Planning Inspector to request, apart from a new ES, a single, integrated assessment of residential amenity, access, safety, landscape, heritage, ecology, water, PROW and cumulative effects, not as individual components.

3.9 Grade 2 BMV Land

We submit the majority of the Site 1 and the BESS is BMV Grade 2, East Pye's ES records that **all of Site 1 north of Hundred Lane is ALC Grade 2**, including the BESS site that the **National Grid Substation would permanently remove 6.1 ha of Grade 2 land,**

We would highlight the Applicants' case that avoidance of BMV land is not adequate. APP/7.20 makes clear that commercial and land-assembly factors played an important part, the choice was influenced by the existing 400kV line, proximity to already selected solar sites, conflict with another consented solar development and willing-landowner availability..

East Pye states explicitly that the BESS site was selected on the basis of proximity to the PoC and access from Station Road.

3.10 Plateau Farmland Sensitivity to Industrialisation

Plateau Farmland is defined by open horizons, long views, and an absence of vertical or industrial structures. Its character depends on uninterrupted skylines and the legibility of historic field patterns. Introducing substations, battery compounds, tall fencing, and industrial access points would break the horizontal emphasis of the landscape and introduce forms that are visually incompatible with its simplicity. Once industrial elements are introduced into Plateau Farmland, the sense of openness and rural scale is permanently altered, and the landscape can no longer function as a coherent agricultural plateau.

The landscape around Great Moulton is defined by its long-established agricultural character, open views, historic field patterns, and the community's reliance on footpaths and quiet lanes as their only accessible green space. The proposed development would introduce industrial-scale infrastructure into a landscape that has remained largely unchanged for more than a century. This chapter assesses the impacts on agricultural land quality, historic land use, landscape character, and the community's functional use of the countryside. It demonstrates that the scheme would fundamentally alter the appearance, function, and cultural identity of Great Moulton's rural environment.

Future planting may screen elements over time but will also alter the appearance, function, and cultural identity of Great Moulton's rural environment. Screening is mitigation, not avoidance.

Views of the Proposed Substation planned close to boundary fence - no schematics or design



Views from local houses where both the 400Kv national grid substation and 400kv project substation are sited.



Chapter 4: The Scheme

Residents are deeply concerned about the scale of this development, which is difficult to comprehend from the information provided. East Pye has not produced comprehensive schematics or diagrams to help villagers understand the extent of the proposed infrastructure or the continuous noise it may generate. This could include inverter and fan noise, hums and tones from the substations and BESS, and sounds from the panels' rotating mechanisms.

This site is expected to serve as the main infrastructure hub for the East Pye scheme. It would combine solar-generation land with the proposed National Grid substation, a 400 kV substation/connection cluster, cable works, and overhead-line and pylon works. The cumulative impact must also account for the BESS site, the second 400 kV project substation, and all associated connection infrastructure.

4.1 Permanent versus Temporary Effects – Site 1 and the BESS

One of the central concerns is the repeated description of East Pye as a broadly temporary and reversible development. In the assessment of Site 1 and the BESS is the distinction between those parts of the Scheme which East Pye proposes to remove at the end of the approximately 60-year operational period (temporary) and those parts which are intended to remain.(permanent)

East Pye's own Scheme description makes clear that these are not the same.

ES Chapter 4 states that the solar generating infrastructure, BESS and Project Substations are intended to be decommissioned at the end of the Scheme's operational life. By contrast, the **National Grid Substation and Grid Connection Infrastructure are intended to remain in situ.** Landscape mitigation associated with the retained National Grid infrastructure would also pass to National Grid for continuing management.

This distinction should remain central to the assessment of landscape effects.

The Applicant should not rely generally on the proposition that the Scheme is "temporary" or "reversible" where significant elements of the development will remain beyond the 60-year solar generating period.

There is an important difference between:

- raised solar infrastructure which is ultimately removed and land which may then be returned to agricultural use; and
- major electricity transmission infrastructure which remains on the land after the solar scheme has been decommissioned.

Even for those elements intended to be removed, a period of approximately 60 years represents a very long-term, inter-generational change to the landscape. For the National Grid Substation

and Grid Connection Infrastructure, however, the issue is more fundamental because **no equivalent Year 60 removal is proposed**.

4.1.1 Hundred Lane / Great Moulton RB19

The same distinction needs to be addressed in relation to **Hundred Lane / Great Moulton RB19**.

East Pye's PRow Visual Amenity Assessment identifies a construction haul-route crossing of RB19 which is also proposed to form a **permanent maintenance access**. The assessment records vegetation loss at the crossing and assesses the effects upon users as **Major Adverse and Significant during construction and at Year 1, reducing to Moderate Adverse and Significant at Year 15**. [APP/6.3.7.9]

Those findings are important because the access is not described merely as a temporary construction feature.

Landscape planting may reduce the visibility of infrastructure over time, but **screening retained infrastructure is not the same as removing it**. Nor does mitigation planting, by itself, make a permanent access or retained transmission infrastructure temporary or reversible.

It is therefore important to establish precisely what the permanent maintenance access at RB19 is intended to serve and for how long it will be required.

4.1.2 Post-Year-60 position

The Great Moulton infrastructure cluster should therefore not be assessed simply on the basis that the wider solar scheme has an approximately 60-year operational life and is subsequently capable of decommissioning.

The Applicant expressly proposes that significant National Grid infrastructure will remain beyond that period.

The Examining Authority should therefore require the Applicant, and NGET where appropriate, to identify clearly:

1. **what infrastructure will remain after Year 60**, including the National Grid Substation and Grid Connection Infrastructure, and the anticipated duration of that retained infrastructure;
2. **what associated infrastructure must also remain**, including any access roads, crossings, drainage infrastructure, security measures, fencing and landscape mitigation required for the operation and maintenance of the retained National Grid infrastructure;
3. **what the permanent maintenance crossing of Hundred Lane/RB19 is intended to serve**, including whether it serves the BESS, Project Substations, National Grid Substation, Grid Connection Infrastructure or a combination of those elements;

4. the anticipated **frequency and type of operational and maintenance vehicles** using that crossing;
5. whether the crossing and associated access infrastructure would ultimately be removed and the affected land restored once no longer required; and
6. where within the Environmental Statement the Applicant has assessed the **post-Year-60 landscape**, when the solar arrays, BESS and Project Substations have been removed but the National Grid Substation, Grid Connection Infrastructure and any associated access, security, drainage or landscape mitigation remain.

If there is no assessment of that post-Year-60 condition, that should be made clear.

The Examination would otherwise be considering the acceptability of infrastructure which is expressly intended to remain beyond the life of the solar scheme through a landscape assessment which is substantially framed around the approximately 60-year operational life of the wider development.

This is not simply a matter of terminology. It goes directly to the assessment of **duration, reversibility and the significance of landscape and visual effects.**

4.1.3 Conclusion

The central point is straightforward.

If the National Grid Substation and Grid Connection Infrastructure remain after Year 60, the landscape does not return to its pre-development condition when the solar scheme is decommissioned.

Arguments concerning the temporary or reversible nature of raised PV arrays should therefore not be applied indiscriminately to permanent or retained infrastructure.

The Applicant should distinguish clearly between temporary, decommissionable and retained development and demonstrate that the landscape assessment reflects **what will actually remain on the ground after Year 60**, together with the access, security, drainage and landscape mitigation necessary to support it.

That distinction is particularly important at Site 1 because the National Grid Substation, Grid Connection Infrastructure and associated works form part of a much wider concentration of solar, BESS, substation, overhead-line and access infrastructure around Great Moulton. The assessment should therefore address not only how the landscape changes during the solar scheme's operational life, but also **what landscape is ultimately left behind.**

4.2 Whole-life replacement activity

The 60-year operational period should not be treated as one construction phase followed only by routine maintenance.

BEPS-Great Moulton's consolidated evidence records that the Scheme permits complete panel replacement over a period of up to 24 months, up to five BESS replacement cycles, and major transformer and electrical replacement during the operational life.

For Great Moulton, those foreseeable replacement cycles may bring renewed abnormal loads, HGV movements, lifting operations, temporary compounds, noise, waste removal and construction-type disturbance. **The environmental assessment and DCO controls should therefore show how recurring whole-life replacement activity has been assessed and controlled, rather than treating the principal construction effects as a one-off event.**

4.3 Rochdale Envelope - scenario testing

The relevant test should not be confined to whether the Applicant's preferred configuration falls within the assessed envelope. The Applicant should demonstrate that every realistically permitted implementation scenario - including solar-only operation, delayed or reduced BESS, altered National Grid connection works, different detailed substation layouts and replacement technologies - remains within the environmental effects actually assessed and secured by the DCO.

Where a permitted scenario could alter land take, access, noise, lighting, drainage, fire safety, landscape effects or compulsory acquisition requirements, the Examining Authority should be shown the assessed maximum case and the specific DCO control that prevents the detailed design from exceeding it.

4.4 Intrusion of Substation and BESS Noise into an Extremely Quiet Rural Soundscape

The proposed National Grid Substation, 400kV Project Substation and BESS would introduce industrial and electrical infrastructure noise into a recognised extremely quiet rural environment. This is not an urban or already-industrialised soundscape where a degree of continuous mechanical noise is expected. It is a countryside setting where background sound levels can fall below 25 dB, particularly during evening, night-time and early morning periods, when natural sounds, distance from major roads, and the absence of existing industrial plants are defining features of local amenity.

In such a low-background environment, even modest absolute sound levels from transformers, cooling fans, inverters, battery containers, auxiliary plant, switchgear and substation equipment can become clearly perceptible. The issue is not simply whether the predicted noise meets a generic numerical threshold. The more important issue is character, context and change. A

continuous or semi-continuous hum, tonal component, low-frequency element, fan noise, intermittent switching, alarms, reversing vehicles, maintenance activity or transformer-related noise would be distinctly out of keeping with the existing rural acoustic character.

Where the existing background level is below 25 dB, the margin between silence, natural rural sound and intrusive industrial sound is very small. A noise source that might be treated as acceptable in a busier location can become prominent, persistent and harmful in a tranquil village landscape. This is especially relevant for Great Moulton, Tivetshall and Wacton, where residents experience the surrounding countryside not merely as visual open space, but as a quiet rural environment forming part of residential amenity, recreation, sleep quality, farming life, public rights of way use and local character.

The proposed infrastructure would not be a temporary construction effect only. The substations and BESS would create operational noise for the lifetime of the development. This introduces a fundamentally different acoustic character: fixed electrical infrastructure operating day and night, including during the quietest periods when residents are most sensitive to noise intrusion. Night-time impact is particularly important because low background levels make tonal or low-frequency sound more noticeable, and because even low-level continuous noise can disturb sleep, affect the enjoyment of gardens and open windows, and alter the perceived tranquillity of the area.

The Applicant's assessment should therefore not rely solely on broad compliance with predicted decibel limits. It must demonstrate that the final equipment selection, layout, acoustic enclosures, transformer specifications, cooling systems, inverter design, BESS container design, emergency plant, maintenance arrangements and mitigation measures will avoid a material change to the existing soundscape. Where the assessment is based on example equipment, assumed locations, outline mitigation or later detailed design, residents and the Examining Authority cannot be confident that the true operational noise effects have been properly assessed.

This is particularly important for Site 1 and Site 2B, where the BESS, National Grid Substation, 400kV Project Substation, grid connection works and associated infrastructure would be experienced cumulatively. The effect would not be limited to a single noise source. It would be the combined introduction of a new energy infrastructure cluster into an area currently characterised by rural quietness, open countryside, scattered homes, public rights of way and dark/tranquil landscape conditions.

In an environment with background sound levels below 25 dB, the Applicant should be required to provide a robust, worst-case operational noise assessment based on fixed equipment specifications and finalised locations. This should include night-time assessment, tonal and low-frequency character assessment, cumulative plant noise, emergency operation, maintenance activity, transformer hum, cooling plant noise, BESS operation, and post-installation verification. It should also include enforceable noise limits and a clear requirement

for corrective action if the plant proves audible or intrusive at nearby homes, gardens, public rights of way or quiet rural receptors.

The central concern is that this development would introduce a persistent industrial acoustic signature into an area where quietness is itself a valued environmental and residential resource. In a soundscape below 25 dB, the threshold for harm is much lower. The Applicant must therefore show not only that the scheme can meet numerical standards, but that it will preserve the existing rural tranquillity and avoid imposing continuous operational noise on communities that currently experience exceptionally low background sound levels.

The evidence presently before the Examination does not justify the siting of permanent, large-scale transmission infrastructure on Grade 2 agricultural land within an exposed rural landscape close to homes, public rights of way, ecological receptors, heritage assets, and private water supplies. Nor has East Pye demonstrated that the Great Moulton location represents the least-harm or most appropriate option when compared with reasonable alternatives.

East Pye should be required to demonstrate how LOAEL and SOAEL thresholds have been applied to this rural baseline, how low-frequency and tonal noise have been assessed, how night-time impacts will be controlled, and how cumulative noise from Site 1, Site 2B, BESS and National Grid infrastructure will be prevented from causing unacceptable harm

4.5 Noise Impact Review- Oakridge Environmental Services

East Pye has not demonstrated that the evidence it has presented on the anticipated noise and vibration studies are accurate and well defined. The purpose of requesting a private study is to bring this to the attention of the ExA

APPENDIX 1 OAKRIDGE ENVIRONMENTAL SERVICES

4.6 The sound of solar: Noise in a sustainable world | New Civil Engineer

An article, regarding the issue of Noise associated with large NSIP developments.
Daniel Clare is managing director at RSK Acoustics – 2 April 2025

APPENDIX 2

4.7 Fire, Electrical Infrastructure, Emergency Response and Public Safety

Great Moulton acknowledges that East Pye have not ignored Fire Safety, but detailed fire documents relied upon is APP/7.5, but APP/7.5 itself explains that its detailed scope is the battery

component of the BESS. Transformer, inverter and switchgear risks are not addressed in the same detail.

The village's concern is that the development proposed around Great Moulton is not simply a BESS. It is a concentrated electrical infrastructure cluster comprising the new 400 kV National Grid Substation at the Point of Connection, two relevant 400 kV Project Substations, extensive solar PV arrays with distributed inverters, transformers and switchgear, underground and overhead high-voltage connections, and the BESS. Those components share local roads, access routes, drainage systems, cabling, environmental receptors and emergency-service constraints.

East Pye ES Chapter 18 expressly recognises that electrical fires and explosions can affect local residents, infrastructure, buildings, habitats and species, and also states that substations and inverters carry a risk of electrical fire. Nevertheless, Major Accidents and Disasters are scoped out as not likely to give rise to significant adverse effects. The detailed fire document relied upon is APP/7.5 for the BESS, this distinction is the core of Great Moulton's case.

The Examining Authority should be satisfied that the fire, smoke, electrical isolation, emergency access, firefighting water, pollution and public-safety consequences of the whole Great Moulton infrastructure cluster have been assessed together - not simply assumed to be controlled because individual pieces of equipment will comply with industry standards.

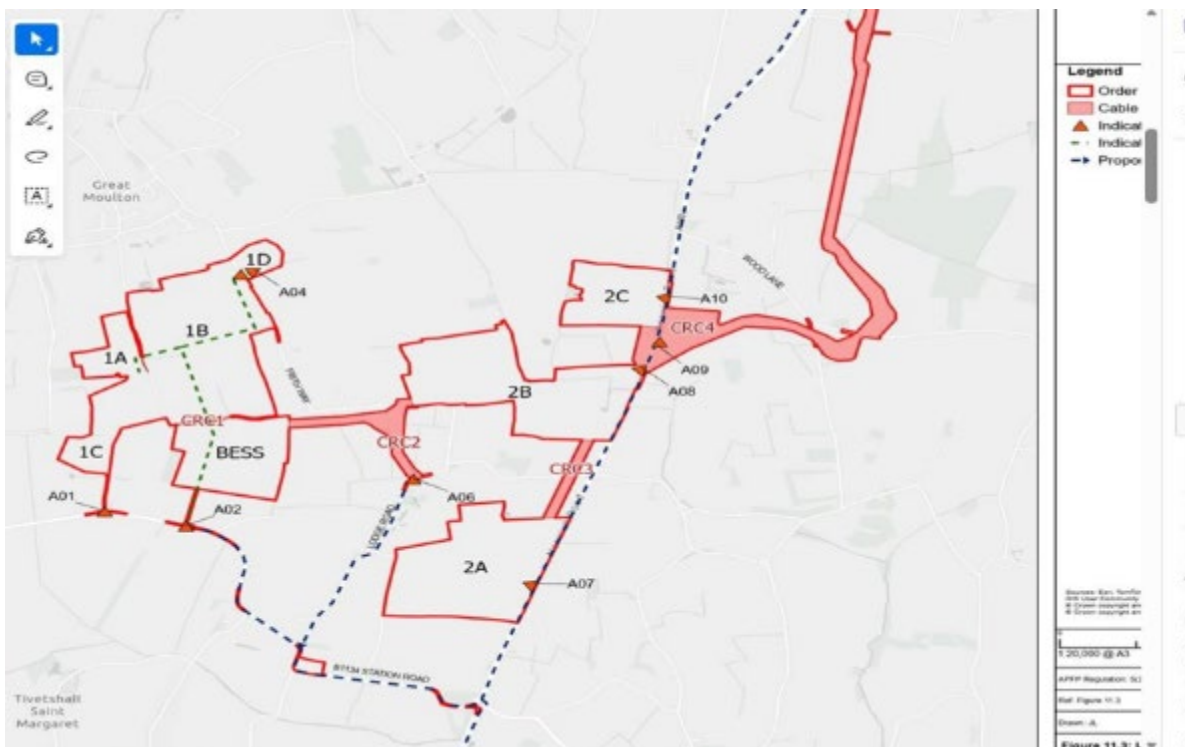
Evidence note: principal application references are normalised to the APP numbering used in the East Pye Examination Library. Current examination revisions should be read where an APP document has been superseded, including the current Works Plans, draft DCO and Commitments Register.

4.8 Temporary Construction Compounds

Construction compounds in Site 1 should be assessed for land take, traffic, noise, dust, lighting, welfare drainage, fuel storage, security and restoration.

- Chapter 15 states two construction compounds are proposed within Site 1B, both on Grade 2 agricultural land. It says almost all of Site 1 is Grade 2 so this is considered unavoidable by the Applicant.
- When the construction work complete, what is the proposed restoration for each of these

4.9 Access / HGV Route



HGV and abnormal-load routes should be shown with swept paths, structures, verge protection, traffic management, PRow controls, railway-level-crossing interaction and emergency access arrangements.

- Sites 1A-D and BESS use accesses A01 and A02 via A140/B1134 roundabout, B1134 westbound, then northbound on A01/A02. B1134
- Station Road is described as the key link for access to the National Grid Substation, Project Substation in the BESS Site and Project Substation in Sub-Site 1B.

The Applicant should clarify why document AP095, page 2 it shows Lodge Road as a 2 way Proposed Vehicle Routeing, The map also shows A02 the access point to the BESS and the Indicative 2-way.Internal Routeing. Indicative site access on the red CRC2. A09, A10, A08, A07 as access from the A140 into 2A, 2B and 2C, Route A01 from Station Road in 1C access to the pylons, A04 crossing over Frith Way. Frith Way has no indicative traffic, but the CRC2 highlights definitive use as access. The documents state the cable routes will be used for traffic movements.

4.10 Landscape Context

The landscape context includes the plateau, historic lanes, PRow, village edge and intervisibility with surrounding settlements.

- Appendix 7.2 states Sub-Site 1C spans two fields
- one directly south of 1A

- one south of Hundred Lane/Great Moulton 19, west of the BESS Site.
- Hundred Lane / Great Moulton 19 crosses its centre, and Tivetshall St Margaret FP1/FP2 run north-south.

4.11 Landscape / Prow Context

The PRow network should be assessed as a connected recreational and heritage network, not only as isolated paths.

4.12 Soils / Land Assumptions

Unsurveyed or assumed land should be treated conservatively, but the Applicant should not use assumptions to avoid field-specific restoration obligations.

- Chapter 15 records that parts of mitigation/enhancement areas in Sub-Sites 1C and 1D were not surveyed for ALC.
- Works No.5 relates to reconfiguring and installing new overhead lines
- The non-surveyed land is assumed worst-case Grade 2.
- It also says Sub-Sites 1C and 1D are areas within which pylons may be relocated.

4.13 Security / Lighting

Grid connection work areas should be controlled for temporary lighting, fencing, generator use and overnight security.

- No separate permanent security or lighting regime is described for Sub-Site 1C in the available text, beyond the scheme-wide position
- infrastructure work areas may be fenced during construction
- PV arrays, if present, would use deer fencing/CCTV.
- OHL/pylon works would not normally imply operational lighting.

4.14 Site 1 - Proposed Panel Heights

ES Chapter 4: The Scheme APP/6.1.4,

Our key concern is that East Pye does not appear, from Chapter 4, to commit to which panel type will be used on Site 2B or Sub-Sites 1A–1D. Instead, it keeps flexibility through the Rochdale Envelope and says the detailed design must stay within the assessed parameters. We would suggest this is not acceptable,

Residents and the Examining Authority are being asked to assess visual, landscape, residential amenity and ecological effects without knowing whether the affected fields will contain 3.5m fixed arrays or 4.5m tracker arrays. East Pye should be required to confirm, for each relevant field within Site 2B and Sub-Sites 1A–1D, which panel technology is proposed, the maximum

height, the direction of movement if trackers are used, and whether the visual and landscape assessments have been based on the true worst-case arrangement.

For the relevant sub-sites, the proposed solar panels could be:

Option A: single-axis tracker panels

- 4.5m above ground level at greatest inclination
- 2.5m when horizontal
- 0.4m minimum clearance above ground
- **The tracker panels** would be aligned in north-south rows and incline east or west up to 60 degrees from horizontal, returning to a 60-degree resting position overnight. East Pye expressly states that these tracker panels would have a maximum height of 4.5m.

Option B: fixed south-facing panels

- 3.5m above ground level
- 0.4m minimum clearance above ground
- **The fixed-panel** option would be aligned in east-west rows and slope south at 10 to 35 degrees from horizontal. The table of scheme parameters gives the fixed-panel maximum height as 3.5m, with the lowest part of the panel at least 0.4m above ground.

4.15 Sub-Site 1B National Grid Substation And 400kv Project Substation

Sub-Site 1B should be recognised as the principal grid hub for the western part of the Scheme. It contains the proposed National Grid Substation and 400 kV Project Substation and is functionally connected to Sites 1A–1D, the BESS, cable routes, pylon works and access infrastructure.

Our concern is that the Applicant has not yet demonstrated that the combined operational effects of this infrastructure will be acceptable for nearby residents, particularly in relation to noise.

Great Moulton has a very low rural background sound environment. The Applicant therefore needs to demonstrate clearly the cumulative effect of transformer hum, switchgear, BESS cooling equipment, inverters, fans and other electrical plant, including appropriate corrections for tonal or intermittent characteristics. The concern is not simply individual items of equipment, but their combined 24-hour operational effect, particularly at night.

The submitted material does not provide residents with a clear understanding of what this concentration of infrastructure will look and sound like once operational. There is also no single, easily understood plan or schematic showing the complete grid hub and its relationship with nearby homes.

This uncertainty is particularly important because the Scheme relies on a Rochdale Envelope. Where the final plant layout, technology, lighting, drainage, access or overhead-line works

remain flexible, the worst-case effects must be clearly assessed and secured through the DCO so that the final development cannot create greater impacts than those examined.

We therefore ask the Examining Authority to require the Applicant to demonstrate, in one clear and auditable assessment, the combined operational noise and environmental effects of the National Grid Substation, Project Substation, BESS and associated electrical infrastructure on Great Moulton residents, together with the controls that will ensure those effects cannot increase at detailed design stage.

Area and location

- Sub-Site 1B forms part of Site 1. Site 1 totals approximately 73.6ha;
- Sub-Site 1B is approximately 48.2ha, centred on NGR TM 17091 89199.

Main operational use

New National Grid Substation ([See Appendix 2](#))

- The new National Grid Substation is located within Sub-Site 1B and would be owned/operated by National Grid.
- It is required at the Point of Connection to connect the 400kV Project Substation to the National Grid.
- It monitors and manages exports of electricity.

National Grid Substation parameters

- maximum compound area 6ha
- access track up to 8m wide
- relay/control rooms up to 7m x 19m and 4.2m high
- foundations may be raft or piles to 12m with 1m pile cap
- 3m palisade fencing.

400kV Project Substation in Sub-Site 1B

- 400kV Project Substation is proposed in Sub-Site 1B,
- with electrical infrastructure to allow electricity to be exported to the National Grid Substation
- It may include control/relay rooms
- 33kV switch room
- monitoring/maintenance equipment
- welfare/office facilities

400kV Project Substation parameters

- Compound perimeter:
- 3m palisade fencing
- plus 2.5m deer-type wire mesh/wooden post fencing outside;
- access up to 6m wide;

- relay/control room
- 33kV maximum compound area 1.1ha
- maximum height 15m to top of busbars
- foundations up to 1m concrete base or piles up to 12m.

Grid connection / overhead line works

- Grid Connection Infrastructure will connect the National Grid Substation to the existing 400kV Norwich Main - Bramford overhead line.
- Chapter 4 refers to a double turn-in of both circuits into the National Grid Substation within Sub-Site 1B,
- up to four new pylons across the Scheme, up to 61m high.

Security and cameras

- National Grid Substation
- BESS
- Project Substations
- 3m palisade fencing
- Pole-mounted, internal-facing CCTV will be installed around the perimeter of the Sites; maximum CCTV/pole height is 3m generally, but 4.2m for the National Grid Substation.

Lighting

- National Grid Substation lighting is to comply with National Grid standards.
- External components are not expected to require dedicated external lighting
- If maintenance lighting is needed, temporary lighting is used.
- Control-room entrance lighting should emit no upward light.
- National Grid Substation access road will not be illuminated.

Drainage / attenuation

- National Grid Substation drainage is proposed to be lined with an impermeable membrane with controlled discharge.
- Indicative attenuation volume is 7,308-9,246m³, refined to 8,256m³.
- 400kV Project Substation in Sub-Site 1B has revised attenuation of 1,511m³.
- Localised surface-water flood risk around the National Grid Substation and 400kV Project Substation is acknowledged, with a detailed-design solution deferred.

Solar

- Solar PV array area. Chapter 5 states maximum solar PV arrays were considered at Stage 1, then reduced along the southern boundary to increase the Hundred Lane buffer, respond to PRow views and provide landscape/ecological mitigation.
- Arrays were also reduced to accommodate hedgerows, trees, field margins and a pond in the northwest corner.

Temporary construction compounds

- Chapter 15 states two construction compounds are proposed within Site 1B, both on Grade 2 agricultural land. It says almost all of Site 1 is Grade 2 so this is considered unavoidable by the Applicant.

Access / HGV route

- Sites 1A-D and BESS use accesses A01 and A02 via A140/B1134 roundabout, B1134 westbound, then northbound on A01/A02. B1134
- Station Road is described as the key link for access to the National Grid Substation, Project Substation in the BESS Site and Project Substation in Sub-Site 1B.

Landscape / PRow context

- Sub-Site 1B is divided into four arable fields.
- The National Grid Substation is in the northwest quadrant. Frith Way, Narrowgate Way and PRow Great Moulton RB13/RB19 are relevant. Appendix 7.2 says the PRow network gives the sub-site high recreational value.

4.16 Sub-Site 1C

Area & Location

- Sub-Site 1C forms part of Site 1. I
- It is approximately 13.9ha, centred on NGR TM 16676 88715.

Main Operational Use

- Unknown
- It is repeatedly identified in connection with grid connection / overhead-line works and mitigation/enhancement land.

Grid Connection / Pylon Works

- Chapter 3 states underground and/or overhead lines including new pylons between the National Grid Substation and Point of Connection will be located within Sub-Sites 1A-D. Appendix 9.1 states OHL works within Sub-Site 1C comprise
- modification and reconfiguration of the existing OHL, including new pylons
- dismantling of existing overhead lines and pylons.

Pylons

- Up to four new pylons are assessed across the Scheme,..Three are associated with repositioning existing pylons and up to one is new.
- Pylons may be up to 61m above ground level.

Soils / Land Assumptions

- Chapter 15 records that parts of mitigation/enhancement areas in Sub-Sites 1C and 1D were not surveyed for ALC.

- Works No.5 relates to reconfiguring and installing new overhead lines
- The non-surveyed land is assumed worst-case Grade 2.
- It also says Sub-Sites 1C and 1D are areas within which pylons may be relocated.

Security / Lighting

- No separate permanent security or lighting regime is described for Sub-Site 1C in the available text, beyond the scheme-wide position
- infrastructure work areas may be fenced during construction
- PV arrays, if present, would use deer fencing/CCTV.
- OHL/pylon works would not normally imply operational lighting.

Landscape Context

- Appendix 7.2 states Sub-Site 1C spans two fields
- one directly south of 1A
- one south of Hundred Lane/Great Moulton 19, west of the BESS Site.
- Hundred Lane / Great Moulton 19 crosses its centre, and Tivetshall St Margaret FP1/FP2 run north-south.

4.17 Sub-Site 1D

Area and Location

- Sub-Site 1D forms part of Site 1.
- Approximately 3.8ha, centred on NGR TM 17224 88509.

Main identified use

- Text does not identify Sub-Site 1D as a distinct solar-PV array parcel in the Chapter 5 design-evolution table.
- Identified in connection with the wider Site 1 grid-connection / pylon works and mitigation/enhancement land.

Grid Connection / Pylon Works

- As with 1C, Chapter 3 states underground and/or overhead lines including new pylons between the National Grid Substation and the Point of Connection will be located within Sub-Sites 1A-D.
- Chapter 15 specifically states Sub-Sites 1C and 1D are areas within which pylons may be relocated.

Pylons / OHL Parameters

- Up to four new pylons across the Scheme, up to 61m above ground level, are assessed.

Existing overhead-line works

- include modification
- Reconfiguration

- Construction
- Installation
- dismantling and removal of OHL/pylons/foundations.
- Security / lighting
 - No permanent operational lighting is described for Sub-Site 1D in the available text. Construction working areas may require temporary fencing and temporary task lighting subject to CEMP principles.

Landscape Context

- Appendix 7.2 describes Sub-Site 1D as a small irregular parcel spanning two medium-sized fields east of Frith Way
- divided by a pylon tower and a ditch.
- Its Frith Way boundary is largely open and defined only by a ditch.

Access / Construction Route

- The construction route grouping for Sites 1A-D and BESS applies to 1D
- via A01/A02 from the A140/B1134 roundabout and B1134.

4.18 Sub-Site 2B (50% Great Moulton)

Area and location

- Part of Site 2. Site 2 totals approximately 99.9ha;
- Sub-Site 2B is approximately 43.1ha, centred on NGR TM 18536 88946.

Main operational use

- Solar PV generating land.
- Chapter 5 states the maximum extent of Solar PV Arrays was considered for Sub-Site 2B at Stage 1
- Reduced for hedgerows, field margins, landscape/ecological mitigation and high surface-water flood-risk areas.

PV equipment

- Solar modules on mounting structures
- DC cabling and combiner boxes
- 33kV sub-distribution switch rooms
- conversion units; inverters
- Transformers
- Switchgear
- monitoring and control systems
- electrical and communications
- cabling to substations.

Security infrastructure

- PV perimeter deer fencing up to 2.5m and pole-mounted internal-facing CCTV around the perimeter of the Sites, generally up to 3m high.

Lighting

- No operational lighting is required for solar PV modules.
- Any temporary construction/decommissioning lighting is to be task-limited and controlled through the CEMP/DEMP principles.

Construction compound

- Chapter 15 states that a construction compound of up to 1.7ha is proposed in connection with Sub-Site 2B.
- The text says the selected location lies on Grade 2 land and was chosen despite consideration of subgrade 3a land to the south because of access and landscaping reasons.

Access / HGV route

- Sites 2A-C use accesses A07?, A08? and A10?. Vehicles from the south use the A140 northbound and existing laybys; vehicles from the north route southbound on A140, then turn via the A140/B1134 roundabout to approach northbound. Departures travel northbound on A140.
- Cable links
- CRC2 links the north-east of the BESS Site to the south-west corner of Sub-Site 2B
- CRC3 links the north-east of Sub-Site 2A to the south-east corner of Sub-Site 2B and runs parallel to the A14

Landscape and setting features

- Sub-Site 2B is subdivided by Tivetshall St Margaret RB6, bounded by hedgerows/tree belts. It is described as having a high degree of recreational value due to the PRow network. Appendix 7.2 also records that Sub-Site 2B lies within an area of the darkest night skies.
- Drainage / flood-risk design evolution
- Solar PV array extent was scaled back to reflect high surface-water flood risk. Solar arrays are raised above ground and designed to allow flow beneath, but access tracks, conversion units and construction areas introduce localised ground works and surfacing.

Scheme Specific Issues For Great Moulton

1. The Great Moulton Infrastructure Cluster Must Be Assessed as One Safety System

The proposed development in and around Great Moulton brings together multiple sources of high-voltage electrical infrastructure within the same rural area. APP/7.18 identifies solar conversion units containing inverters, transformers and switchgear; 400 kV Project Substations with transformer bays and switchgear; the new 400 kV National Grid AIS Substation; high-voltage interconnecting cables; and the BESS with its own inverters, transformers and switchgear.

These elements are physically and operationally connected. Electricity generated by the solar PV arrays and/or stored by the BESS is exported through Project Substations and 400 kV grid connection cables to the National Grid Substation. **The safety consequences therefore cannot sensibly be understood only by looking at individual compounds in isolation.**

For Great Moulton residents, the relevant question is cumulative and practical: if an electrical fire, transformer incident, BESS event or other emergency occurred within this cluster,

- can: emergency services approach safely;
- can the relevant equipment be isolated;
- is adequate firefighting water available at the location of the incident;
- can contaminated runoff be contained;
- can smoke or gas affect homes or PRoWs;
- and can simultaneous or consequential effects on adjoining electrical infrastructure be safely managed?

Sources: APP/7.18 (Works Nos. 1-4); APP/6.1.18 Chapter 18; APP/6.1.4 Chapter 4 - The Scheme.

2. East Pye Recognises Electrical Fire Risk - Justification For Scoping Out All Elements Apart From Bess-Led Assessment

The Applicant's iES Chapter 18 relies on APP/7.5 which reinforces the distinction between the BESS and all other elements. It acknowledges that transformers, inverters and switchgear can carry fire risks, but because those technologies are considered better understood and regulated, “only the battery component of the BESS is addressed” in the Outline BSMP.

Great Moulton therefore asks the Examining Authority to identify following two areas:

1. The Applicants equivalent location-specific evidence for the National Grid Substation, the two Project Substations and distributed solar conversion equipment, which is clustered around the village of Great Moulton?

2. East Pye to justify the scoping out of Electrical fires and explosions” for the additional infrastructure such as the POC substation, project substations and inverters which also are at risk of electrical fire” even highlighting them as a potential major accident or disaster, expressly identifying local residents, infrastructure and buildings, habitats and species as potential receptors and then. How did they reach the decision that “Major Accidents and Disasters are not likely to result in significant adverse effects and scopes them out of the ES”. As these elements are all part of one cluster why has there been no cumulative assessment of how a major incident involving one or more of these additional infrastructures will be managed?

Sources: APP/6.1.18 Table 18.2; APP/7.5 paragraphs 1.3.4 and 4.4; APP/7.2 Outline OEMP.

3. Point of Connection / National Grid Substation

APP/7.18 defines Work No. 4A as a new 400 kV air-insulated National Grid Substation comprising feeder bays, coupler and section bays, reactive power units, the Applicant's generation bay, relay/control facilities and monitoring/control systems. The maximum compound area is up to 6 ha and busbars may be up to 15 m high. The design envelope applies a minimum 15 m offset from PROWs and a minimum 50 m offset from residential curtilages, subject to case-by-case consideration.

The Examining Authority should request from both The Applicant and Nation Grid the following::

1. why the Great Moulton location is being authorised within a broad design envelope while the submitted major-accident discussion does not provide the same consequence-led fire analysis that has been undertaken for the BESS?.
2. identify the design basis and emergency arrangements for credible substation fire scenarios at this specific location, as a transformer or switchgear incident at the National Grid Substation can raise different questions from a BESS event, including electrical isolation, transformer oil or insulating-fluid containment, smoke, heat, firefighting tactics, access around live high-voltage equipment and contaminated runoff.

Particular attention should be given to the relationship between the substation, nearby residents and the local PROW network. **A general statement that equipment will meet required safety standards does not by itself show how a Great Moulton incident would be managed at receptor level.**

3. To identify that if access is blocked, congested or affected by an incident at one part of the cluster, what should be understood are the consequences for reaching another part of the cluster

4. Solar PV Arrays, Inverters, Transformers, Switchgear and Cabling

The solar development should not be treated as electrically passive. APP/7.18 defines Work No. 1 as including solar modules, DC cabling and combiner boxes, 33 kV sub-distribution switch rooms, conversion units containing inverters, transformers and switchgear, monitoring/control systems and electrical/communications cabling linking the solar generating areas to the substations.

Solar panels are subject to minimum offsets including 15 m from PRowS and generally 50 m from residential curtilages. Conversion units may be distributed across large rural fields and their precise final locations remain part of detailed design within the approved parameters. High-voltage cables may be routed alongside access tracks, while joint bays can occur at intervals along underground routes.

Great Moulton is aware that electrical faults can occur at equipment, joints, terminations and interfaces, and that the distributed nature of the Scheme creates multiple potential incident locations. The final design should therefore show how alarm, monitoring, isolation, access and vegetation management work across the whole solar electrical system. This is particularly relevant in a rural landscape of field margins, hedgerows and seasonal vegetation.

The Examining Authority should be satisfied that the final positioning of conversion equipment cannot create a materially worse fire or emergency-response relationship with homes or PRowS than the environmental assessment has considered.

Sources: APP/7.18 Work No.1, Table 4.1; APP/6.1.18; APP/7.2; APP/7.4.

5. BESS - Significant Safety Work Has Been Undertaken, but Important Final Matters Remain

The BESS framework is important to the Great Moulton representation. APP/7.5 provides an Outline Battery Safety Management Plan, while APP/7.18 requires at least 200 m separation from residential properties and validation of the final design through Large Scale Fire Testing and consequence modelling. It includes emergency stop and monitoring systems, two NFRS access points avoiding smoke or gas plumes, at least two 230,000-litre firefighting water tanks with hydrants, and impermeable or bunded firewater containment, subject to final hydraulic design.

The examination issue is not lack of provision but deferral: battery technology and chemistry, enclosure layout and spacing, system-specific testing and modelling, firefighting strategy, the Risk Management Plan and the Emergency Response Plan remain to be finalised with NFRS.

As these matters may alter residential separation, smoke and toxic-gas effects, emergency tactics, water demand and containment, the DCO must keep the final design within the reasonable worst-case environmental and safety envelope examined.

Sources: APP/7.5; APP/7.18 Work No.2; APP/6.1.18; APP/6.3.9.1.

6. Public Rights of Way Are Emergency Safety Receptors

Public rights of way around Great Moulton and the BESS area are not only valued for their landscape and recreational importance. East Pye's own BESS emissions assessment also shows that these routes may be affected during an emergency

The Outline BSMP recommends that the Emergency Response Plan considers temporary restriction of Tivetshall St Margaret Footpath 3, Great Moulton Restricted Bridleway 18 and Great Moulton Restricted Bridleway 19 in the event of a BESS fire, subject to detailed-design evidence and emergency-service advice., this evidence from the Applicants own modelling that smoke and toxic products can affect public access routes.

The Examining Authority should request that The Applicant apply for the Village of Great Molton the same principles across the wider electrical cluster. The final Scheme-wide Emergency Response Plan should identify every PRow potentially affected by a credible fire or electrical incident, the authority and mechanism for restriction or closure, public warning arrangements, safe diversion where appropriate, and the criteria for reopening.

7. Great Moulton FP13 and the POC Area

Great Moulton has separately raised concerns about the treatment of FP13 in the POC / National Grid Substation area. The Examining Authority should require the Applicant to reconcile the definitive PRow position with the current Streets Plan and access plans and then demonstrate how any route running through or close to the substation works would be protected, diverted or restricted during construction and during an operational emergency and how the emergency plan will be instigated from the offset..

Sources: APP/7.5 BESS Fire - Emissions to Air Risk Assessment; APP/7.8 Outline Public Rights of Way and Permissive Paths Management Plan; APP/7.18; current Streets Plan / access plans.

8. Residents - Separation, Smoke, Cordon and Emergency Communication

Residents are expressly identified in ES Chapter 18 as potential receptors to electrical fires and explosions. Great Moulton therefore asks for a receptor-specific explanation of how nearby households would be protected during a substation, transformer, inverter or BESS incident.

The BESS has a secured 200 m residential separation. In contrast, APP/7.18 gives solar panels, 400 kV Project Substations and the National Grid Substation a minimum residential-curtilage

offset of 50 m, subject to case-by-case consideration. Those figures do not prove that the Scheme is unsafe, but they do demonstrate why the BESS safety case cannot simply stand in for the rest of the infrastructure.

The village asks the Applicant to identify, for the closest Great Moulton receptors, the credible incident scenarios, expected smoke/heat or other off-site consequences where relevant, safe cordon assumptions, shelter/evacuation principles, emergency notification arrangements and access routes for NFRS. Any final siting flexibility should be constrained so that equipment cannot move closer to residents, or into a worse emergency-response position, than the assessment supports.

Sources: APP/6.1.18; APP/7.18; APP/7.5.

9. Emergency Access Must Work for the Whole Cluster

East Pye has given particular attention to BESS emergency access, including two NFRS access points, still to be resolved. The wider cluster, however, depends on a network of local roads and internal access routes serving the National Grid Substation, both Project Substations, BESS and solar electrical equipment.

The Transport Assessment identifies the B1134 Station Road as a key access route for the National Grid Substation, the Project Substation in the BESS Site and the Project Substation in Sub-Site 1B. It also anticipates abnormal-load movements for major transformers. Great Moulton therefore considers emergency access and highway resilience to be part of the operational safety case, not merely a construction-traffic issue.

A Scheme-wide emergency access plan should demonstrate: alternative approaches where available; gate and key arrangements; track widths and load-bearing capacity; turning and appliance standing areas; safe approach relative to smoke/wind; electrical isolation points; access during maintenance or other works; and the consequences of an incident blocking the principal approach to more than one compound.

Sources: APP/6.3.11.1 Transport Assessment; APP/7.5; APP/7.7; APP/7.18.

10. Firefighting Water, Firewater and Groundwater Protection

Great Moulton again acknowledges that East Pye has committed substantial firefighting water and contaminated-firewater containment Flood Risk Assessment and Water Environment material also provide outline drainage and containment principles for the BESS. National Grid Substation and Project Substations, are subject to “detailed design to follow.”

The Great Moulton question is whether the water and pollution-control arrangements have been demonstrated as one coherent emergency system. Each of the infrastructures will require different strategies. The application should show what firefighting-water source is available for each major electrical compound, how runoff is isolated, how transformer oils or other

contaminants are contained, and how an incident is prevented from affecting groundwater, ditches, soils or private water-supply pathways and more importantly moving from one infrastructure to another..

This is particularly important because the Water Environment assessment treats private water supplies as highly sensitive receptors and because final foundation, drainage and containment details remain relevant to the performance of the pollution-control system.

Sources: APP/6.1.9; APP/6.3.9.1; APP/6.3.9.3; APP/7.5; APP/7.18; APP/7.2.

11. Vegetation, Rural Fire Spread and Climate Resilience

The Great Moulton development sits within an agricultural landscape of fields, hedgerows, field margins and vegetation that changes seasonally. Fire spread through vegetation is therefore a legitimate resilience consideration even though the electrical plant itself is designed to modern safety standards. Again the BESS specific separation and vegetation management is contained within APP/7.5

The Examining Authority should request The Applicant to provide for Great Moulton an equivalent and auditable Scheme-wide standard to apply around distributed conversion equipment, substations and other electrical ignition sources. The objective should be proportionate defensible space and vegetation management based on the actual equipment and site conditions, rather than an unsupported universal distance.

The final Operational Environmental Management Plan and Landscape and Ecology Management Plan should be mutually consistent: vegetation retained or planted for screening and biodiversity must not compromise safe emergency access or create unmanaged combustible continuity immediately around safety-critical electrical equipment.

Sources: APP/7.5; APP/7.2; APP/7.4; APP/6.1.18 climate/extreme-weather and major-accident material.

12. The Rochdale Envelope and Post-Consent Design

Great Moulton accepts that a DCO can lawfully retain design flexibility. APP/7.18 expressly states that its parameters and commitments form the basis of the Environmental Impact Assessment under the Rochdale Envelope approach.

The important safeguard is that later detailed design must remain within the environmental effects already assessed. Where final battery technology, equipment spacing, conversion-unit locations, detailed drainage, firewater design or emergency planning can alter the consequences for homes, PRoWs or environmental receptors, the DCO must contain objective controls capable of preventing a materially worse outcome and that all safety-critical assumptions relied upon in reaching the “not significant” conclusions are identified, tested as a reasonable worst case and secured so that they cannot be weakened at detailed design.

1. A single integrated Fire and Emergency Response Strategy covering the National Grid Substation / Point of Connection, both relevant 400 kV Project Substations, BESS, solar conversion units, transformers, inverters, switchgear and connecting electrical infrastructure.
2. A clear schedule of credible fire/electrical incident scenarios for each major component, identifying the relevant receptors, isolation strategy, emergency-service role, firefighting approach, water source, pollution controls and residual off-site consequences.
3. Location-specific justification for the residential and PRow separation parameters applying to the National Grid Substation and 400 kV Project Substations, including explanation of why those minimum distances are appropriate in the Great Moulton setting.
4. Scheme-wide alarm, monitoring, fault detection and remote/local isolation arrangements for non-BESS electrical infrastructure as well as the BESS.
5. A whole-cluster emergency access plan showing fire-appliance routes, alternative access where reasonably practicable, gates, turning/standing areas, load-bearing capability, safe approach relative to smoke/wind and arrangements where an incident blocks a shared access route.
6. Identification of firefighting-water provision for the National Grid Substation and both Project Substations, expressly distinguishing those arrangements from the BESS water tanks and hydrant network.
7. Integrated firewater, oil and contaminated-runoff containment for the BESS, Project Substations and National Grid Substation, demonstrating protection of groundwater, ditches, soils and private water supplies under the reasonable worst-case incident.
8. A PRow emergency schedule covering the three routes identified in APP/7.5 and any additional Great Moulton routes potentially affected by substation, solar-conversion or other electrical incidents; the schedule should identify warning, restriction/closure, diversion and reopening arrangements.
9. Receptor-specific emergency planning for nearby Great Moulton residents, including cordon assumptions, smoke/plume or heat consequences where credible, shelter/evacuation principles, communication arrangements and emergency access.
10. A proportionate Scheme-wide defensible-space and vegetation-management standard around safety-critical electrical plants, coordinated with landscape/ecology mitigation.
11. An enforceable requirement that the final technology and detailed layout cannot produce fire, smoke, emergency-access, firefighting-water or pollution effects materially

worse than those assessed at examination, with any material departure requiring further assessment and approval before implementation.

14. Conclusion

The village concern is that the most detailed safety case is concentrated on the battery component on which The Applicant has done substantial work. Great Moulton is also being asked to accommodate the new National Grid Point of Connection, two 400 kV Project Substations, distributed solar electrical equipment and extensive high-voltage connections with East Pye itself recognising electrical-fire risk from substations and inverters and identifies local residents as potential receptors.

The Examining Authority should therefore test the Great Moulton cluster as a single emergency-response system. It should not be sufficient to say that non-BESS equipment is familiar technology and will comply with standards if the application does not clearly show how credible incidents would be managed at this particular location, in relation to these particular homes, PRowS, local roads and water receptors.

Consent should only be recommended if the Examining Authority is satisfied that the final detailed design will remain within a clearly assessed and enforceable fire, public-safety and environmental envelope for the whole Great Moulton infrastructure cluster.

Due to the complexity of the scheme, and the extent to which East Pye relies on maximum design parameters, outline assumptions and later detailed design, with detailed access layouts deferred, concerned residents ask the Planning Inspectorate to ensure that East Pye is required to provide the following information:

1. Provide a full operational noise assessment for Site 1, Site 2B, the BESS, the National Grid Substation and the 400kV Project Substations, based on the final or current assumed equipment layout, equipment specifications, transformer locations, inverter and cooling plant locations, BESS container positions, acoustic enclosures, tonal characteristics, low-frequency noise, night-time operation and cumulative plant noise. This should explain how operational noise would affect an extremely quiet rural soundscape where background sound levels may fall below 25 dB, and should include clear, enforceable limits, post-installation monitoring and corrective-action requirements if noise proves audible, tonal or intrusive at residential receptors, gardens, public rights of way or other quiet rural receptors.
2. Provide a single parcel-by-parcel infrastructure schedule for Sub-Sites 1A, 1B, 1C, 1D and the BESS Site, identifying every permanent and temporary component by Work Number, maximum dimensions, likely location and whether it is temporary or permanent including anticipated noise elements

3. Confirm whether any solar PV arrays are proposed in Sub-Sites 1C and/or 1D, or whether those parcels are limited to overhead line, pylon, cabling, mitigation, access or ancillary works.
4. Provide the final or current assumed number and location of CCTV cameras for Site 1A–1D, the Project Substations and the National Grid Substation, including pole heights and whether infrared lighting is proposed.
5. Provide a lighting plan showing operational lighting columns, emergency lighting, motion-sensor zones, switching arrangements and bat/ecology buffers for the BESS, National Grid Substation and 400kV Project Substations.
6. Provide a combined plan showing the National Grid Substation, 400kV Project Substations in Sub-Site 1B, pylon works, cable trenches, drainage infrastructure, access roads, palisade fencing and deer fencing.
7. Provide a construction-phase plan for Site 1A–1D showing construction compounds, laydown areas, temporary fencing, haul routes, welfare/office areas, lighting locations, vegetation removals and visibility-splay works.
8. Provide a clear drainage and firewater-containment note explaining how firewater from Site 1A–1D, the BESS, the National Grid Substation and the 400kV Project Substations would be contained, tested and removed, and how failures of penstock, shut-off or containment systems would be prevented.
9. Demonstrate how these infrastructure elements have been assessed together for residential amenity, public rights of way, landscape, dark skies, tranquillity, ecology, traffic, drainage, agricultural land and cumulative effects, rather than considered only as separate topic elements.



Chapter 5: Reasonable Alternatives and Design Evolution

5.1 Core Issue

BEPS-Great Moulton does not contend that East Pye failed to undertake a site-selection exercise. The Applicant has submitted a Site Selection Assessment, an Environmental Statement chapter addressing reasonable alternatives and design evolution, a Design Approach Document and a substantial suite of environmental assessments.

The issue is more specific: **whether those documents, read together, provide a clear and auditable explanation of why the Site 1 / BESS configuration now before the Examination remains a reasonably practicable and robust solution as a whole, and why Site 1B ultimately emerged as the preferred location when compared on a consistent basis with the other National Grid Substation alternatives.**

In particular, BEPS-Great Moulton has not identified a clear, contemporaneous, like-for-like comparison of National Grid Substation Options 1, 2, 3, 4A and 4B from which the Examination can readily understand the evidence available at each decision stage and the relative reasons for selecting Site 1B.

The present configuration did not emerge from a single site-selection exercise undertaken at one point in time. The original solar land search was undertaken while Norwich Main was being considered as the proposed grid connection point. When that solution was found to be unviable, the connection strategy moved south to the Bramford–Norwich 400 kV overhead line and Great Moulton. Sites 1 and 2 were subsequently added, the National Grid Substation options evolved, and the final location within Site 1B became the focus of the western grid infrastructure cluster.

That chronology matters because the environmental question is not simply whether the final layout can now be mitigated. It is whether, as the Scheme changed, the environmental and community constraints identified through survey, consultation and design development were fed back into the alternatives and site-selection process, and whether the selected Great Moulton configuration continued to be justified when considered against reasonable alternatives.

The wider alternatives evidence also indicates that Site 1B was not the only technically feasible location considered. The Applicant records, for example, that parts of Siting Zone 3 could represent a feasible area for a National Grid Substation, while identifying considerations such as proximity to the solar sites, connection length, engineering requirements, access, competing development constraints and land availability in explaining the evolution of the preferred location. Those are legitimate considerations, but the Examination also needs to understand how they were balanced against environmental and community effects.

This issue is now closely reflected in the Examining Authority's First Written Questions.

ExQ1 Q1.3.1 asks the Applicant to explain why the Scheme remains a reasonably practicable and robust solution following the transition to the Great Moulton point of connection and what evidence demonstrates that a fresh site-selection exercise centred upon Great Moulton would not have resulted in a materially different scheme.

ExQ1 Q1.3.2 further asks the Applicant to explain the relative influence of environmental assessment, engineering considerations, grid connection requirements, landowner willingness and land availability.

BEPS-Great Moulton considers that these questions provide the appropriate organising framework for the examination of Site 1 and the BESS.

The evidence should demonstrate a clear chain of reasoning:

connection strategy → reasonable alternative locations → environmental constraints → design evolution → reconsideration of alternatives → final site selection.

Where later assessment identified constraints relating to landscape, residential amenity, water, ecology, heritage, public rights of way, agricultural land, access, noise or the concentration of grid infrastructure, the Applicant should therefore be able to demonstrate whether those findings caused the underlying site-selection decision to be reconsidered, rather than merely producing additional mitigation within land that had already been selected.

This distinction is particularly important for Site 1 because the final configuration brings together the National Grid Substation, Project Substation infrastructure, BESS, overhead-line works, cable connections, access infrastructure and adjoining solar development within the same Great Moulton area.

The relevant question is therefore not simply:

“Can the effects of the selected location be mitigated?”

It is also:

“Having identified those effects, did the Applicant reconsider whether the selected configuration remained appropriate when compared with reasonable alternatives?”

Unless that chain of reasoning can be demonstrated, there remains an important distinction between showing that the Scheme has undergone **design evolution** and demonstrating that the **underlying site-selection decision itself remained justified as the Scheme evolved**.

Source note: APP/7.20 Site Selection Assessment; APP/6.1.5 ES Chapter 5 – Reasonable Alternatives and Design Evolution; APP/7.17 Design Approach Document; EIA Scoping Report; ExQ1 Q1.3.1 and Q1.3.2.

5.2 National Policy on Site Selection and the Point of Connection

The 2025 EN-1, EN-3 and EN-5 policy suite came into force on 6 January 2026. EN-5 recognises the urgent need for electricity network infrastructure, but still requires The Applicant to justify the siting, design and mitigation of associated infrastructure such as substations.

National Policy EN-5 2.2.5-2.2.9 states The identification of a grid connection does not remove the Applicant's responsibility to justify the particular land selected for the associated electricity infrastructure. The Applicant should transparently compare each reasonable alternative against topography, existing screening, community, environmental constraints, land use, BMV land quality, access, safety and alternatives.

The 400kV transmission network constrained the general area in which East Pye could connect, but it did not dictate that the National Grid Substation had to be located specifically within Sub-Site 1B. East Pye considered more than one possible substation location before selecting Option 4B (subsite 1B). The selection of Sub-Site 1B was therefore a separate decision which the Applicant must justify on the grounds within the National Policy. The policy question is not merely whether the effects of Site 1B can be mitigated, but whether another site could have avoided or reduced them.

EN-5 recognises that the initiating and terminating points of network infrastructure may be constrained, but paragraphs 2.2.5–2.2.9 also make clear that applicants retain control over routing and site selection within the development zone, are not exempt from balancing site-selection considerations, and should carefully consider the location and design of substations, including local topography and opportunities for screening. The question is therefore not whether a grid connection constrained the broad search area, but how the Applicant selected the particular land within that area.”

In ExQ1 Q1.3.1 the ExA asks why the Scheme remains a reasonably practicable and robust solution following the transition to the Great Moulton point of connection and what evidence shows that a fresh site-selection exercise centred on Great Moulton would not have produced a materially different scheme. Q1.3.2 separately asks the Applicant to explain the relative influence of environmental assessment, engineering requirements, grid connection considerations, landowner willingness and land availability. Chapter 5 addresses those two questions.”

The Applicant should therefore show how the topographical and screening of Options 1, 2, 3, 4A & 4B were compared before selecting Option 4B (subsite 1B) was selected. East Pye EIA scoping describes Site 1 topography as predominantly level, We would submit this is not an accurate description as described by Broadland District Council, South Norfolk - South Norfolk

landscape character assessments describes it in detail **“The particular topographical and screening implications of the Great Moulton Plateau are addressed in Chapters 6 and 8.”**

Did East Pye demonstrate why Site 1B was the appropriate location for the grid infrastructure after environmental, community, agricultural, access and technical considerations were compared with reasonable alternatives?

5.3 National Grid Substation Alternatives - Options 1,2,3,4A &4B

The chronology matters because the Scheme was not selected in its present form at one point in time. The Applicant’s Site Selection Assessment records that the earlier solar-site search was undertaken while Norwich Main was being considered and that Sites 1 and 2 were subsequently added after the Point of Connection was identified south of Great Moulton. The National Grid Substation search also evolved: the initial alternatives were followed by a Great Moulton option south of the village and a further alternative within Sub-Site 1B. By EIA Scoping both Great Moulton locations were still under consideration.

The Examination therefore needs to be able to follow not only the final reasons given for Site 1B, but the evidence available when each successive decision was made.

APP/7.20 states that Options 4A and 4B were subjected to the “same RAG rating” using the identified site-selection criteria. However, BEPS-Great Moulton has been unable to identify sufficient evidence to establish whether the later options were subjected, at the relevant decision-making stage, to the same depth of option-specific scrutiny and supporting technical investigation as Options 1–3.

For example, APP/7.20 expressly refers to swept-path analysis in the consideration of Options 1 and 3 and provides detailed reasoning concerning highway constraints. The assessment of Option 4 and subsequently Options 4A/4B is described principally as a desk-based review. It is therefore unclear whether equivalent highway, abnormal-load, landscape, heritage, flood-risk, ecology, PRow and other technical work had been undertaken for 4A/4B at the point at which those options were compared and the preferred location selected.

BEPS-Great Moulton therefore respectfully requests that the Applicant be asked to provide the contemporaneous audit trail for the National Grid Substation site-selection exercise, including:

- The date on which each of Options 1, 2, 3, 4A and 4B was first identified, assessed, refined and rejected or selected; the option-appraisal matrices, RAG worksheets and decision records which existed at those respective dates; the technical studies and specialist advice relied upon for each option; clarification of whether the assessment now presented in Tables 3.1 and 3.2 of APP/7.20 was prepared contemporaneously with the decisions or subsequently consolidated for the DCO application; and an explanation of how comparability between the earlier and later options was maintained where the evidence available at the respective assessment stages differed.

- BEPS-Great Moulton also asks the Applicant to identify any option-specific swept-path or abnormal-indivisible-load assessment undertaken for Options 4A and 4B, or, if none was undertaken before the preferred location was selected, to explain why that level of highway assessment was considered necessary for some of the earlier options but not for the later alternatives.
- It would additionally assist if the Applicant provided a single side-by-side comparison of Options 1, 2, 3, 4A and 4B against a common set of criteria, identifying the evidence available at the date each decision was made rather than relying solely upon the later summary contained in APP/7.20.
- Finally, BEPS-Great Moulton asks for confirmation of the relationship between Options 4A/4B in APP/7.20 and the locations subsequently described during consultation as the National Grid Substation “Option 1” and “Option 2”, so that the complete site-selection chronology can be followed without ambiguity.

BEPS-Great Moulton is not asserting that the later options were necessarily inadequately assessed. The concern is that the submitted evidence does not presently allow Interested Parties, or potentially the Examining Authority, to verify whether the alternatives considered at different stages were subjected to a consistent and reasonably comparable level of scrutiny before the preferred Great Moulton location was selected.

The submitted material shows a process driven heavily by grid availability, proximity to the Bramford to Norwich 400kV overhead line, access, landowner willingness, commercial deliverability and the need to accommodate a very large 500MW export/import scheme. This may explain why East Pye prefers the chosen land. East Pye have not proven that the Great Moulton and Tivetshall locations are environmentally, socially or agriculturally acceptable, or that less harmful alternatives were properly examined.

5.4 Design Evolution - Site 1 B

Norwich Main chronology, NGET capacity advice, the requirement for a new substation, the Bramford to Norwich 400kV overhead line and the 500MW export/import connection offer.

Norwich Main was discounted on NGET capacity advice and East Pye was advised to look for a new site on the Bramford/Norwich Line. Three options were originally reviewed during October/November 2024, Option 1 – Newton Flotman, Option 2 – Tharston/Tasburgh, Option 3 – Long Stratton. In Late 2024 but prior to 15 January 2025 Option 4A (formerly option 4) - Great Moulton was included. In January 2025 a further option was added, namely Option 4B - Great Moulton APP/7.20 paragraphs 3.2.3-3.2.9:

The January 2025 Scoping material treats Site 1 as one of the locations for solar PV arrays, separately identifying the BESS and National Grid Substation. Current ES/LVIA material records solar arrays, National Grid Substation, 400kV Project Substation and grid connection works within/around Site 1

APP/7.20 records Sites 1 and 2 being added under the Applicant's assessment of suitable solar development sites. The Applicants documents show an evolution from Site 1 being introduced as solar-generating land to Site 1B subsequently becoming the principal location of a substantial electrical infrastructure

East Pye's documentation shows the commercial and technical pathway by which it arrived at the present scheme.

The ExA must establish whether land availability narrowed the pool before environmental comparisons were sufficiently complete

Source note: APP/7.20 sections 4.6 and 4.7, and the solar site assessment material, show that land availability and willingness to participate were material to the filtering of potential development areas and alternative development zones.

5.5 Parcel-specific justification for Sub-Sites 1A–1D

The Applicant's documents clearly identify Site 1 as comprising four separate sub-sites, 1A, 1B, 1C and 1D [APP/6.1.3; APP/6.3.7.2]. They are therefore not unexplained parcels of land, and each has an identified function within the Scheme.

Sub-Site 1A accommodates solar PV arrays and associated infrastructure. Sub-Site 1B accommodates solar PV arrays together with the principal grid infrastructure, including the National Grid Substation and 400kV Project Substation. Sub-Sites 1C and 1D have a particular role in accommodating the Grid Connection Infrastructure and Overhead Line Works associated with connecting the Scheme to the existing 400kV network. APP/6.3.7.4 expressly explains that 1C and 1D are included to represent the Overhead Line Works, while APP/6.3.7.7 identifies Grid Connection Infrastructure within Sub-Site 1C and assesses views in which the BESS, Site 1B and National Grid Substation would be experienced together.

There is also evidence of design evolution and mitigation within Site 1. For example, the Applicant identifies changes affecting Sub-Site 1A arising from access, PRow, landscape and planting considerations, and the visual assessment records solar arrays within 1A and 1B together with associated mitigation. The National Grid Substation within 1B was also reorientated and its relationship with the Project Substation changed during design development.

The issue for BEPS-Great Moulton is therefore not whether Sites 1A–1D have a stated purpose, but whether the Applicant has provided a sufficiently clear parcel-specific justification for why each was originally selected and subsequently retained. Design evolution demonstrates how impacts have been mitigated after the land entered the Scheme, but it does not necessarily explain why that particular parcel was preferable to reasonable alternatives.

For each of Sites 1A–1D, the Examination should therefore be able to identify clearly: its purpose within the Scheme, the reasonable alternatives considered, the reasons for its selection and retention, the design changes subsequently made, and the residual environmental and

community effects. This would enable the ExA to have confidence that the overall selection and continued use of Site 1 has been robustly justified.

Source note: The reviewed APP/6.1.5 / APP/7.20 material provides more detail for 1B and some design-evolution material for 1A, but much less parcel-specific explanation for 1C and no clear equivalent design-evolution entry for 1D in the material reviewed.

5.6 The BESS Site Selection & Risk Specific Alternatives

APP/7.20 states that the BESS Site was selected principally because of its proximity to the Point of Connection and access from Station Road, with landscape, visual, heritage and noise effects also considered. It also identifies operational advantages from locating the BESS close to the National Grid Substation. Those are relevant considerations.

East Pye also identifies distances to residential property, a listed building and PRow, a site may be convenient for electrical efficiency and still be inappropriate when judged against residential proximity, fire safety, rural road capacity, private water supplies, emergency response and cumulative infrastructure impacts.

The alternatives question is nevertheless wider. A BESS brings a different risk and operational profile from solar arrays. A site may be convenient for electrical efficiency and still be inappropriate the site-selection record should therefore show how residential separation, emergency access, fire and thermal-event response, firefighting and contaminated runoff, groundwater and private water supplies, noise, lighting, landscape, ecology and cumulative interaction with the substations were considered when the BESS location was selected and retained. The remaining question is whether the BESS's distinct safety, drainage, emergency-access, noise, lighting and residential considerations were given sufficient weight when the location was selected and retained, rather than being addressed principally through later mitigation

BEPS-Great Moulton is not suggesting that the BESS must be remote from the Point of Connection. The request is for a transparent record showing how network efficiency was balanced against the site-specific environmental and safety consequences of concentrating the BESS next to the principal grid hub.

Source note: APP/7.20 Site Selection Assessment; APP/7.5 Outline Battery Safety Management Plan; APP/6.1.18 Other Environmental Topics; relevant water, noise and transport assessments

5.7 Great Moulton - Site 2B

The design-evolution material for Site 2B records that the maximum extent of solar arrays was first considered, then reduced to accommodate hedgerows, field margins, landscape and ecological mitigation, and an area at high risk of surface-water flooding.

That is not a proper alternative case. It shows that constraints were identified after the parcel had been selected and that the layout was then adjusted. It does not explain why Site 2B was selected and retained despite those constraints, nor does it provide a clear comparison with less harmful alternatives.

Site 2B should therefore be treated as inadequately justified until East Pye provides a parcel-specific explanation covering landscape, PRow, residential amenity, water, ecology, heritage, access, glint and glare, aviation and cumulative effects with Site 1.

Source note: Reasonable Alternatives and Design Evolution note, drawing from APP/6.1.5 ES Chapter 5.

5.8 Design Evolution – Mitigation After Selection versus Avoidance Through Selection

The Applicant's site-selection material refers to willing landowners, voluntary agreements and the availability of land as relevant considerations. BEPS-Great Moulton does not object in principle to those factors forming part of a site-selection exercise. The question is whether they were balanced alongside a sufficiently broad and comparative consideration of the environmental, planning and technical effects of the reasonable alternatives.

This distinction is important when considering subsequent design evolution. Mitigation can reduce an effect after a location has been selected, but successful mitigation does not, by itself, demonstrate why that location was preferable to another reasonable location where the effect might have been avoided or reduced at the outset.

Site 1 and Sub-Site 1B contain a substantial concentration of infrastructure and are subject to a number of identified constraints, including landscape and visual effects, nearby residential receptors, public rights of way, rural highway access, ecological and heritage considerations, Grade 2 Best and Most Versatile agricultural land, water-environment considerations and interaction with the BESS and associated grid infrastructure. The Applicant's documents show that the design has evolved in response to constraints, including changes to infrastructure locations, setbacks, access arrangements and environmental mitigation. Those changes are relevant and should be recognised. However, they also raise a separate site-selection question: **were the constraints that required those changes sufficiently considered when the reasonable alternatives were compared and when the Site 1/Site 1B configuration was subsequently retained?**

The relevant distinction is therefore between **mitigating effects within the selected site** and **avoiding or reducing effects through the choice of site itself**. The Applicant should demonstrate not merely that individual effects can be mitigated, but that the environmental consequences identified through design evolution were taken into account when deciding whether the selected location remained justified when compared with reasonable alternatives.

Detailed consideration of the individual effects is addressed in the relevant BEPS-Great Moulton topic chapters. The Chapter 5 issue is whether those identified constraints and effects are fed back into the alternatives and site-selection process.

“Mitigation can reduce an effect after a location has been selected, but successful mitigation does not, by itself, demonstrate why that location was preferable to another

reasonable location where the effect might have been avoided or reduced at the outset.” Do these changes demonstrate successful design evolution, or do they also show that significant constraints existed in the selected land which should have been considered when alternatives were compared?

5.9 Later BMV Evidence and Reconsideration of Site Selection

The discovery of higher-quality land than assumed at early stages should trigger a clear explanation of whether and how the alternatives appraisal was revisited. If not revisited, the Applicant should justify that position.

The Applicants documents show that early provisional ALC mapping suggested mostly undifferentiated Grade 3 land, but the later detailed ALC survey found the land quality was generally higher than expected, including substantial Grade 2 and Grade 3a Best and Most Versatile land. A subsequent detailed ALC survey confirmed much of the land was BMV.

This is especially important for Site 1. East Pye states that all of Site 1 north of Hundred Lane is Grade 2 land. It also accepts that the National Grid Substation would be located on Grade 2 land, that project substation infrastructure would be on Grade 2 land, and that the BESS would also be located on Grade 2 land. The National Grid Substation would cause permanent loss of Grade 2 land, and East Pye accepts that if deep piling is required for the BESS, restoration to comparable ALC grade is unlikely to be achievable.

That is not a minor issue. BMV Grade 2 land forms part of the nationally important Best and Most Versatile resource. The later ALC evidence raises a clear question as to whether and how the earlier selection was reconsidered. The current case appears to be that Grade 2 land cannot be avoided because of the chosen grid connection location. That is circular reasoning. East Pye relies on the chosen location to justify the harm, rather than proving that the chosen location remains justified despite the harm.

5.10 Private Water Supplies

East Pye has undertaken assessment of private water supplies and existing lawful water users in the Ground Conditions Assessment and Water Resources Assessment. The Chapter 5 issue is therefore not the absence of any PWS assessment. It is whether the receptor-specific information obtained through those later assessments was capable of affecting the selection or retention of Site 1/BESS and, if so, whether that feedback into the alternatives/design-evolution process is documented.

The detailed source–pathway–receptor and mitigation issues are addressed in the Water Environment and Human Health chapters.”

The Examining Authority should require East Pye to identify precisely what is proposed, how it interacts with private water supplies, and why this land is necessary. Without that information, the assessment remains incomplete.

The same principle applies to later ecological, landscape, heritage, noise, access and safety information. An alternative case remains credible only if material information emerging during EIA and design evolution is capable of triggering reconsideration rather than being treated solely as a matter for mitigation within the already selected site.

5.11 Cumulative Site 1/BESS Infrastructure Cluster

When choosing between reasonable locations, the Applicant should consider the consequences of concentrating the principal infrastructure elements within the same Site 1/BESS cluster. Residents will not experience the National Grid Substation, Project Substation, BESS, overhead-line works, pylons, cable corridors, access, lighting, drainage and security as separate technical chapters. They will experience them as one local grid-infrastructure cluster

East Pye has undertaken topic-specific and cumulative assessments which identify a range of effects arising from the BESS, National Grid Substation, Project Substations, overhead-line works, cabling, access, lighting and associated infrastructure. The relevant question for site selection is whether the significance of those combined effects was taken into account when the Site 1/BESS location was selected and subsequently retained.

The issue is therefore not simply whether the effects of each individual component can be mitigated. It is whether, having regard to the combined environmental and community effects identified through the Applicant's own assessments, the continued concentration of this infrastructure in this location was reconsidered and remains justified.

These effects are considered in more detail in the relevant BEPS-Great Moulton topic chapters, including landscape and visual effects, noise, water environment, transport and access, human health and residential amenity.

5.12 National Grid Infrastructure and Delivery Uncertainty

The relationship between the promoted National Grid Substation and NGET's final connection solution is now expressly before the Examination. ExQ1 Q1.2.15 asks NGET to clarify why its relevant representation states that the new connection agreement will not require the Applicant to secure land or consent for the National Grid Substation, whether significant additional NGET infrastructure may be required, whether the substation might need to be located differently, and the expected delivery timescale. APP/7.11 also records different Connections Reform positions for the two components of the Scheme: the solar component has Gate 2 Phase 2 prioritisation, while the BESS has Gate 1 prioritisation and no confirmed indicative connection date. These matters do not of themselves determine the acceptability of Site 1B, but they are relevant to whether the land, infrastructure envelope and environmental assessment now promoted remain appropriately justified."

Source note: NGET Relevant Representation/grid-connection material; Planning Act 2008, s.122.

5.13 Conclusion

The cumulative effect of placing the following within and around a village environment is wholly incompatible with maintaining residential amenity, tranquillity and rural character unless it is fully justified and assessed. BEPS-Great Moulton does not contend that East Pye failed to undertake a site-selection exercise. The Applicant has provided the Site Selection Assessment [APP/7.20], the Environmental Statement chapter addressing reasonable alternatives and design evolution [APP/6.1.5], the Design Approach Document [APP/7.17] and associated environmental assessments and plans.

The issue is whether that evidence provides a clear and auditable explanation of why the Site 1/BESS configuration now before the Examination remains justified as a whole.

APP/7.20 records that the original solar land was identified while a connection at Norwich Main was being considered and that Sites 1 and 2 were subsequently added after the Point of Connection moved south of Great Moulton. It also records that the solar-site search focused upon larger landholdings identified through land agents and landowners willing to make land available.

The Applicant subsequently compared Options 4A and 4B for the National Grid Substation and selected Option 4B within Sub-Site 1B. The BESS was also located principally by reference to proximity to the Point of Connection and access from Station Road, alongside environmental considerations.

Those explanations are relevant, but the Examination should be able to understand how the individual decisions came together to produce the wider Site 1/BESS infrastructure cluster and whether later environmental, technical and grid information caused the Applicant to reconsider its earlier conclusions.

In particular, the outstanding matters can be grouped as follows:

- Site-selection chronology and comparison: how the move from Norwich Main to Great Moulton altered the site-selection exercise; what changed between Scoping, PEIR, targeted consultation and the DCO application; and whether reasonable alternatives were reconsidered as the Scheme evolved.
- Site 1 and the Sub-Sites: why Sites 1A–1D remain required in their present form and how changes to the National Grid Substation, Project Substations, cabling, overhead-line works, access and associated infrastructure affected that justification.
- BESS and the combined infrastructure cluster: why the BESS remains appropriately located alongside the substations and other grid infrastructure, and whether the significance of the identified BESS-specific and combined effects informed the selection and subsequent retention of that location.
- Later evidence and design evolution: whether later information, including the detailed identification of substantial Grade 2 and Grade 3a BMV agricultural land and other

environmental constraints, caused the earlier site-selection conclusions to be revisited. Mitigation introduced after selection may reduce an effect, but does not by itself explain why the selected location remained preferable to another reasonable location.

- Grid connection and delivery: whether the National Grid Substation and connection solution are sufficiently defined for the Examination to understand the infrastructure actually required within Site 1B, and whether any material change in the connection arrangements could affect the layout, land take or environmental assessment.
- Land, rights and retained infrastructure: which land and rights are required for the Scheme now proposed, which infrastructure is temporary or permanent, and whether those requirements remain consistent with the final configuration and connection solution.

These matters closely reflect the issues already raised by the ExA in ExQ1 Q1.3.1 and Q1.3.2: whether the Scheme remains robust following the change to a Great Moulton-centred solution, and the relative influence of environmental assessment, engineering considerations, grid connection, landowner willingness and land availability upon the Scheme that ultimately emerged.

“BEPS-Great Moulton therefore asks that the Examination obtain the evidence identified above before reaching conclusions on whether the Site 1/BESS configuration, the associated grid infrastructure and the related land and rights sought are adequately justified in the form proposed.”

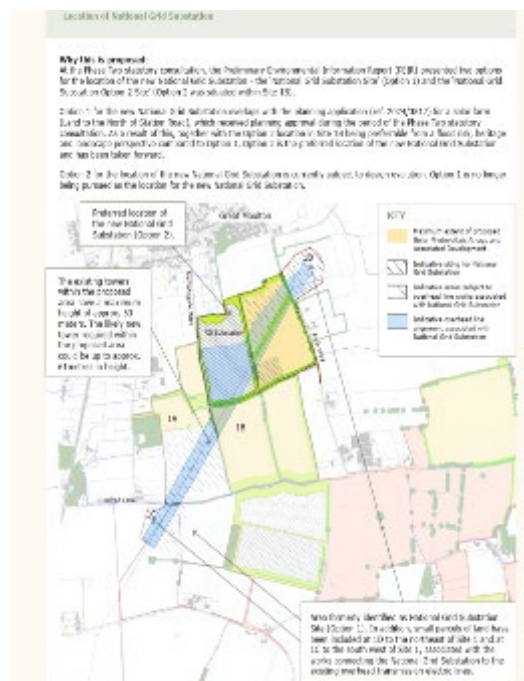
Note: “The Botley West EN010147 Secretary of State request is useful because it demonstrates the importance of a clear audit trail where a solar NSIP has changed or evolved around grid-connection options. It is not relied upon as binding precedent, but it is a persuasive comparator. In Botley West, the Secretary of State requested additional information on alternatives and site selection, including grid-connection options, search radius, environmental/social/economic considerations, technical and financial feasibility, BMV land, flood zones and grid infrastructure timing.”

Chapter 6: Site Selection Audit Trail, Horlock Compliance and Grid Hub Design

BEPS-Great Moulton does not suggest that East Pye failed to undertake a site-selection exercise. The Applicant has provided a Site Selection Assessment [APP/7.20], an Environmental Statement chapter dealing with alternatives and design evolution [APP/6.1.5], the Design Approach Document [APP/7.17] and a substantial range of environmental assessments.

Our concern is more specific.

The Examination needs to be able to follow a clear audit trail showing how the National Grid Substation location developed, why Site 1B was ultimately selected, when land availability and landowner willingness entered that process, how environmental constraints were applied between competing locations, and whether the final grid-hub design reflects the Horlock Rules.



This is particularly important because Site 1B is no longer simply part of a solar site. It has become the main grid-infrastructure hub for the western part of the Scheme, containing or directly associated with the National Grid Substation, the 400kV Project Substation, overhead-line and pylon works, cable connections, access infrastructure and the adjoining BESS and 4.5m high tracking solar panels.

The site-selection evidence should therefore be capable of explaining the choice of this location as a combined infrastructure cluster, rather than only explaining the location of individual components.

6.2 Audit trail - Options 1, 2, 3, 4A and 4B (numbering applied to site locations for a new POC connection

The Applicant's documents show that the National Grid Substation site-selection process developed over time. The original options did not include the final Site 1B location in the form now proposed. A further Great Moulton option was subsequently identified and the process developed into Options 4A and 4B.

APP/7.20 records that due to another solar planning and the loss of site 4A, Option 4B within Sub-Site 1B was ultimately targeted. We submit that the site was simply the easiest choice, undertaken by a desktop analysis, We would suggest no site visits were made, **BEPS-Great Moulton have requested a site visit but this was refused.**

A Great Moulton option was introduced later and was then refined into Options 4A and 4B. Option 4B within Sub-Site 1B was subsequently taken forward and the October-November 2025 targeted consultation confirmed the decision to pursue the Site 1B location rather than the southern alternative.

The difficulty for residents and, we suggest, for the Examination is that the assessments of the different options were undertaken at different stages and are spread across several documents.

BEPS-Great Moulton therefore considers that a clearer audit trail is required showing:

- when each National Grid Substation option was first identified;
- what environmental and technical information was available when each option was considered;
- what criteria were applied to Options 1, 2 and 3;
- whether the same criteria and level of scrutiny were subsequently applied to Options 4A and 4B;
- when Option 4A was introduced and when Option 4B was first identified;
- when NGET became involved in assessing the Great Moulton alternatives;
- when the decision was made to prefer Option 4B and relevant site visits undertaken;
- what role land availability and landowner willingness played at each stage; and
- whether any environmental assessment undertaken before the final Site 1B configuration remained appropriate after the design changed.

The purpose of this request is not to reopen the entire site-selection exercise. It is to allow the Examination to understand and test the reasoning that led to the particular grid-hub configuration now before it.

6.3 Land availability and willing landowners - transparency rather than assumption

APP/7.20 expressly records that the Applicant identified suitable land with landowners willing to participate in the Scheme while discussions concerning the grid connection were taking place. It also explains that land agents were used to identify larger landholdings with potentially willing landowners. [APP/7.20, including paragraph 6.1.3 onwards].

Realistically a scheme cannot be developed without considering whether land can be secured.

The important question is how much influence land availability had on the alternatives that were actually examined.

There is a difference between:

- first identifying technically and environmentally reasonable alternatives and then considering their deliverability, and
- allowing the availability of particular land to determine the alternatives that receive detailed environmental consideration.

The Applicant's Policy Compliance Document itself recognises landowner willingness and commercial and technical feasibility as part of its approach to alternatives. [APP/7.15]

BEPS-Great Moulton therefore asks for clarification rather than making an assumption about the process.

- The Applicant should explain whether potentially suitable locations were excluded because land was not voluntarily available and, if so, at what stage. Where this occurred, it should distinguish clearly between an option being rejected because it was environmentally or technically unsuitable and an option not being pursued because of land ownership or commercial deliverability.

That distinction matters because Site 1B itself contains significant constraints which have subsequently required assessment and mitigation:

- These include landscape and visual effects, nearby residential receptors, public rights of way, agricultural land, water and drainage issues, ecology, heritage, rural access and the cumulative effects of concentrating the National Grid Substation, Project Substation, BESS, cables, overhead-line works and associated development in this part of the Scheme.

The ExA should therefore be able to see that comparable constraints were considered consistently when the competing locations were assessed.

6.4 Horlock Rules and Site 1B

The Horlock principles are particularly important because the National Grid Substation is a permanent infrastructure, the current NPS EN-5 states that environmental considerations should be addressed from the earliest stage of substation development and that technical and capital-cost requirements should be balanced against environmental effects so as to keep adverse effects to a reasonably practicable minimum.

The principles include protecting local amenity, important habitats and landscape features, historic hedgerows and surface and groundwater sources; taking advantage of existing landform and screening; minimising visual, noise and other environmental effects; considering land-use effects; and considering the form of equipment, buildings and ancillary development appropriate to the individual location.

National Grid similarly describes its substation siting process as considering matters including proximity to transmission infrastructure, access, topography, distance from residential areas and environmental, cultural and visual constraints.

Those principles are directly relevant to Site 1B.

The location is within a rural landscape and the final proposal represents a substantial concentration of electrical infrastructure. Although planting, hedgerow reinforcement and other mitigation are proposed, the Horlock approach places considerable importance on the initial choice and design of the site itself, including use of landform, existing screening, layout and levels.

The issue is therefore not simply whether Option 4B performed better than Option 4A in relation to flood risk or the public right of way.

The wider question is:

Has the Applicant demonstrated that the siting and design of the complete Site 1B grid hub keeps the resulting environmental effects to a reasonably practicable minimum?

BEPS-Great Moulton considers that this would be much easier for the Examination to determine if the Applicant and NGET provided a simple Horlock Compliance Schedule for Site 1B.

That schedule should identify each relevant Horlock principle and explain:

- how it influenced site selection;
- what alternatives were considered;
- what environmental constraints were identified;
- what design response followed;
- where effects could not be avoided;
- what mitigation is relied upon; and
- why the final location and design were considered preferable.

Particular attention should be given to the open rural setting, proximity to homes, landscape and visual effects, noise, public rights of way, BMV agricultural land, groundwater and private water supplies, access requirements and the cumulative presence of the associated BESS and Project Substations.

Source note: NPS EN-5 (2025); APP/7.20 Horlock/Holford assessment; APP/6.1.7 Landscape and Visual; APP/6.1.9 Water Environment; APP/6.1.15 Soils and Agriculture; transport and noise material. APP/7.20 expressly records that the Applicant identified suitable land with landowners willing to participate in the Scheme while discussions concerning the grid connection were taking place. It also explains that land agents were used to identify larger landholdings with potentially willing landowners. [APP/7.20, including paragraph 6.1.3 onwards]

6.5 Lower-impact design alternatives - AIS, GIS and layout

The ExA has already determined that alternative lower-impact designs should be reviewed.

BEPS-Great Moulton also considers that the Applicant should explain the technology and design alternatives considered for the 400kV infrastructure.

The present proposal appears to be based upon air-insulated switchgear (AIS). National Grid describes AIS as its standard arrangement for new substations, while GIS can be used in particular circumstances and has the advantage of being more compact, although generally more expensive.

BEPS-Great Moulton does not suggest that GIS must automatically be used at Site 1B, or that GIS would necessarily have lower environmental effects in every respect.

The question is whether a more compact arrangement could materially reduce some of the particular effects experienced at this location.

The Infrastructure Planning (Environmental Impact Assessment) Regulations require the Environmental Statement to describe reasonable alternatives studied by the developer, which can include alternatives relating to design, technology, location, size and scale, together with the main reasons for choosing the preferred option.

EN-1 similarly requires information about reasonable alternatives actually studied by the Applicant, while recognising technical and commercial feasibility.

The Applicant and NGET should therefore explain:

- whether GIS was considered for any part of the National Grid or Project Substation infrastructure;
- whether hybrid AIS/GIS arrangements or other compact layouts were considered;
- whether those alternatives could reduce footprint, equipment spread, agricultural land take or visual exposure;
- what technical, safety, operational, maintenance or future-expansion disadvantages would arise;
- the comparative implications for construction and cost; and
- why the configuration permitted by the current Rochdale Envelope is the appropriate design for this rural location.

If a compact alternative was considered and rejected, a short explanation would give perspective to this issue.

If it was not considered, BEPS-Great Moulton asks the Applicant to explain why it was not regarded as a reasonable design alternative for Site 1B.

6.6 Consistency in the treatment of constraints

A recurring concern throughout the site-selection evidence is whether constraints were applied consistently

APP/7.20 records that various options were discounting various locations including access, highway constraints, flood risk, PRowS, heritage, environmental constraints, interaction with other development, land ownership and deliverability. Many of the same type of constraints, land availability and interaction with other development.

Many of those same types of constraint are also present to some degree around Site 1B.

That does not mean Site 1B should necessarily have been rejected. It does mean that the ExA should be able to understand why a constraint regarded as important at one location was considered capable of mitigation at another.

BEPS-Great Moulton asks for a comparison schedule, showing the principal criteria applied to Options 1, 2, 3, 4A and 4B, the principal criteria, and the supporting evidence, the Applicants assessment date and the reason for the final decision. This would be more useful than requiring the Examination to reconstruct the comparison from narrative spread across several documents.

6.7 Site 1B Grid Hub Site-Selection and Design Audit Statement

BEPS-Great Moulton considers that the remaining uncertainty could be addressed through one consolidated response rather than further material being scattered across separate submissions.

We ask the ExA to consider requiring a Site 1B Grid Hub Site-Selection and Design Audit Statement, prepared by the Applicant with NGET input where appropriate.

The statement should contain:

- a dated chronology of Options 1, 2, 3, 4A and 4B, including when each was identified, assessed and discounted or selected;
- a common comparison table showing the environmental, technical, access, land, residential and planning criteria applied to each option;
- a land-availability statement explaining when willing-landowner considerations entered the process and whether any otherwise reasonable alternatives were excluded because land was unavailable;
- a record of NGET involvement in the assessment of the Great Moulton alternatives;
- a Horlock Compliance Schedule for the final Site 1B location and design;
- an AIS/GIS and design-options statement explaining whether more compact technology or layouts were considered and why the proposed arrangement was selected;
- confirmation of the current grid-hub configuration, including the National Grid Substation, Project Substation, BESS relationship, overhead-line/pylon works, cable connections, access and infrastructure intended to remain permanently;
- confirmation that the environmental baseline and assessment remain applicable to the final configuration; and

- Confirmation that the environmental baseline remains applicable to the final configuration. If material elements of the layout, access arrangements, cable routes, substation design or associated works change, the Applicant should identify which environmental assessments and plans require updating.

The purpose would not be to create another large body of evidence. It would provide a single document through which the Examination, Interested Parties and local residents can follow the development of the Site 1B decision from the early alternatives through to the final proposal.

6.8 Site 1A, Site 1C, Site 1D and Site 2B Site Selection, Retention and Design Evolution

The detailed Horlock analysis in this Chapter is properly focused on Sub-Site 1B because that is the location of the proposed National Grid Substation and the principal grid-hub infrastructure. The remaining western parcels raise a different but related examination issue: whether the Applicant's documents provide a sufficiently clear, parcel-specific audit trail explaining why Sub-Sites 1A, 1C, 1D and 2B were selected, retained and refined as the Scheme and Point of Connection evolved.

BEPS-Great Moulton does not suggest that these parcels have been left wholly unassessed. East Pye has submitted the Site Selection Assessment [APP/7.20], ES Chapter 5 - Reasonable Alternatives and Design Evolution [APP/6.1.5], the Design Approach Document [APP/7.17], the Scheme description [APP/6.1.4], Works and Access Plans, and topic assessments covering landscape, ecology, water, heritage, transport, noise, soils and cumulative effects. The concern is that the reasoning relevant to each parcel is dispersed across that material and is not brought together in a single auditable explanation of why each parcel remained necessary after its constraints were known.

The distinction is important because the four parcels did not all enter the Scheme at the same stage and do not perform the same function. **The June 2025 PEIR described Site 1 as comprising only Sub-Sites 1A and 1B.** Sub-Sites 1C and 1D therefore represent later additions to the Site 1 geography now before the Examination.

Site 2B, by contrast, was already a defined solar parcel at PEIR stage. The Examination should therefore be able to see when each later change occurred, what need it addressed, what alternatives were considered at that point, and whether the environmental and consultation evidence was updated to reflect the final configuration.

6.8.1 Sub-Site 1A

Sub-Site 1A formed part of Site 1 by the PEIR stage and was therefore within the western scheme before Sub-Sites 1C and 1D were added. East Pye's PEIR records individual residential dwellings within approximately 75 m of Sub-Site 1A and identifies the existing 400 kV overhead line as a prominent feature across Site 1. The final application also places Sub-Site 1A within the wider Site 1 system of solar generation, grid-connection works, access, cabling and overhead-line infrastructure.

The outstanding Chapter 6 question is not whether 1A was assessed at all, but whether the Applicant has provided a clear record of why this parcel continued to be required after the Point of Connection strategy, Site 1B grid hub and wider Site 1 configuration had materially evolved. The Applicant should identify the function now assigned to each part of 1A, the constraints that influenced the final layout, the extent to which solar arrays or other development were reduced or moved, and whether deletion or further reduction of the parcel was considered once the final grid arrangement was established.

This is particularly relevant where the parcel is close to residential receptors and contributes to the same cumulative landscape, access, construction and operational environment as the **Site 1B hub**. **Parcel retention should therefore be explained by reference to the final Scheme, not only the earlier PEIR layout.**

6.8.2 Sub-Sites 1C and 1D - Later Additions Require a Clearer Audit Trail

Sub-Sites 1C and 1D warrant particular scrutiny because the June 2025 PEIR description of Site 1 did not include them. In the final application, however, both parcels form part of Site 1 and are identified in connection with Grid Connection Infrastructure and overhead-line/pylon works. East Pye's final material describes Sub-Sites 1C and 1D as areas within which pylons may be relocated and where existing overhead lines may be modified, reconfigured, dismantled or replaced. Parts of these parcels also perform mitigation or enhancement functions.

BEPS-Great Moulton would submit that this is a materially different planning history from a parcel that was part of the original solar layout throughout. **The Examination should therefore be able to identify the date and reason for adding 1C and 1D,** the specific electrical or engineering requirement each parcel was intended to meet, the alternative overhead-line, pylon, cable or access configurations considered before expanding Site 1 into those fields, and the environmental information available when that decision was taken.

The need for that explanation is reinforced by the Applicant's own evidence. Sub-Site 1C spans fields around Hundred Lane / Great Moulton RB19 and is crossed or influenced by the local PRow network. Sub-Site 1D is a small irregular parcel east of Frith Way, with an open boundary relationship to the lane. The Soils and Agricultural Land assessment also records that parts of the mitigation/enhancement land in 1C and 1D were not surveyed for Agricultural Land Classification and were treated on a worst-case Grade 2 basis. **These are not reasons why development is automatically unacceptable, but they are constraints that should be visible in the parcel-selection and retention audit trail.**

For 1C and 1D, the Applicant should therefore distinguish clearly between land required for permanent or long-term grid connection works, land required only during construction, land required for solar generation (if any), and land included principally for mitigation or enhancement. Without that distinction, it is difficult to test whether the final Order Limits and rights sought are no more extensive than reasonably necessary and whether the environmental assessment corresponds to what may actually be constructed in each parcel.

6.8.3 Sub-Site 2B - Retention After Identified Constraints

Sub-Site 2B is different again. It was already identified as a solar PV parcel at PEIR stage. East Pye's own design-evolution material records that the initial design considered the maximum extent of solar arrays and that the developable area was subsequently reduced to

accommodate hedgerows and field margins, landscape/ecological mitigation and an area of high surface-water flood risk.

The PEIR also records that Sub-Site 2B is crossed by Tivetshall St Margaret RB6, contains multiple unnamed watercourses, lies within a Drinking Water Safeguard Zone and Source Protection Zone III, and has individual residential dwellings in the surrounding area. In the final application the parcel remains substantial solar-generating land and is connected into the wider Scheme by cable infrastructure and construction access arrangements.

Those design changes demonstrate that 2B was not unconstrained. The Chapter 6 issue is therefore whether the Applicant has explained why the parcel remained part of the Scheme at its final scale once flood risk, PRow, water, landscape, ecological, agricultural and access constraints were established. The fact that mitigation and setbacks were introduced is relevant, but mitigation does not by itself answer the alternatives question. The ExA should be able to see whether further reduction, whole-field removal, relocation of equipment or use of other reasonably available land was considered and, if so, why those options were rejected.

This is particularly important for the western part of Sub-Site 2B that relates directly to the Great Moulton/Tivetshall landscape and to the cable and access system linking Site 2 to the BESS and Site 1 infrastructure cluster. The cumulative role of 2B should therefore be addressed as part of the western scheme rather than treated only as an isolated solar field.

6.8.4 Common Audit Questions for 1A, 1C, 1D and 2B

BEPS-Great Moulton asks the Examining Authority to require one concise parcel schedule covering these four sub-sites. For each parcel it should identify:

- the date and reason the parcel first entered the Scheme and, where relevant, the date on which its function materially changed;
- the present function of the land, distinguishing solar arrays, conversion equipment, cables, overhead-line/pylon works, access, construction land, drainage and mitigation/enhancement;
- the principal environmental and technical constraints known when the parcel was selected and those identified later through survey, consultation or design evolution;
- the design changes made in response to those constraints;
- the reasonable parcel-level alternatives actually considered after the constraints became known, including further reduction, field deletion, relocation of works or alternative cable/OHL arrangements;
- the role of land availability and willing-landowner considerations, clearly distinguished from environmental or technical suitability;

- the relationship between the final parcel and the Site 1B/BESS/grid-connection system, including any dependence on the final Point of Connection arrangement; and
- the current Works Plan, access plan, design parameter or DCO control that secures the final assessed use and prevents materially more harmful development from being introduced at detailed design stage.

6.8.5 Why This Matters to Chapter 6

The Site 1B/Horlock analysis asks whether the permanent grid hub was appropriately sited and designed. The related question for 1A, 1C, 1D and 2B is whether the land around that hub has also been justified through a transparent and consistent process as the Scheme expanded and changed.

A clear audit trail is especially important for 1C and 1D because they were not part of Site 1 in the June 2025 PEIR description, and for 2B because East Pye's own design evolution identifies flood-risk, hedgerow, field-margin and mitigation constraints that reduced the original maximum solar layout. The final decision should not require the ExA to reconstruct, from multiple topic documents, why these parcels entered or remained in the Scheme and why the final extent of development is considered necessary.

BEPS-Great Moulton therefore submits that the existing Site 1B Grid Hub Site-Selection and Design Audit Statement proposed at section 6.7 should be expanded, or accompanied by a Site 1 / Site 2B Parcel Selection and Retention Schedule, so that the same principles of transparency, consistency and auditable decision-making apply to the rest of the western scheme.

6.8.6 Proposed Requested Action

BEPS-Great Moulton asks the ExA to require the Applicant to provide a consolidated, dated explanation for Sub-Sites 1A, 1C, 1D and 2B, drawing together the information already dispersed across the application documents. The response should identify when each parcel was selected or added, its final function, the constraints identified, the alternatives and reductions considered, the role of land availability, and the DCO mechanism that secures the assessed final use.

This request does not assume that every parcel must be removed or that the Applicant was required to identify a theoretical 'best' site. It asks for the evidence necessary to understand the Applicant's actual decision-making process and to test whether the final western layout is a proportionate and environmentally justified outcome of that process.

Principal East Pye sources, including APP/6.1.3, APP/6.1.4, APP/6.1.5, APP/6.1.7, APP/6.1.8, APP/6.1.9, APP/6.1.11, APP/6.1.15, APP/6.1.19, APP/7.17, APP/7.18, APP/7.20 and APP/7.26, together with the Works and Access Plans and the June 2025 PEIR.

6.9 Conclusion

The concern is that the route from the earlier alternatives to the present Site 1B grid hub is difficult to follow because the process evolved over time, the evidence is spread between different documents, land availability formed part of the selection process, and the scale and role of Site 1B itself developed substantially.

The National Grid Substation is permanent infrastructure and Site 1B now forms the centre of a much wider cluster involving the Project Substation, BESS, overhead-line works, cables, access and associated development.

For a decision of that importance, the Examination should be able to follow a clear evidence trail showing:

- why this location was selected;
- what alternatives were genuinely considered;
- how landowner willingness affected that process;
- whether the same constraints were applied consistently;
- how the Horlock Rules influenced the decision; and
- whether a less extensive or less intrusive substation design was reasonably available.

BEPS-Great Moulton therefore asks the ExA to require the Applicant, with NGET where appropriate, to provide the consolidated audit information identified above before the close of Examination. This would allow the final Site 1B grid-hub proposal to be considered on the basis of a clear and transparent site selection and design record, rather than requiring the reasoning to be reconstructed from a number of separate documents.

.6.10 Drone Images Showing overview of Site 1 and The BESS

FROM Great Moulton Village across to Station Road, Tivetshall



6.13 Misrepresentation of Images

Clarification of where this image was taken?

- It say Great Moulton in the documents, **but its not**

View Location Reference: Site 1/National Grid Sub Station - VL2 (b)



This panorama is not to scale. For contextual information only.

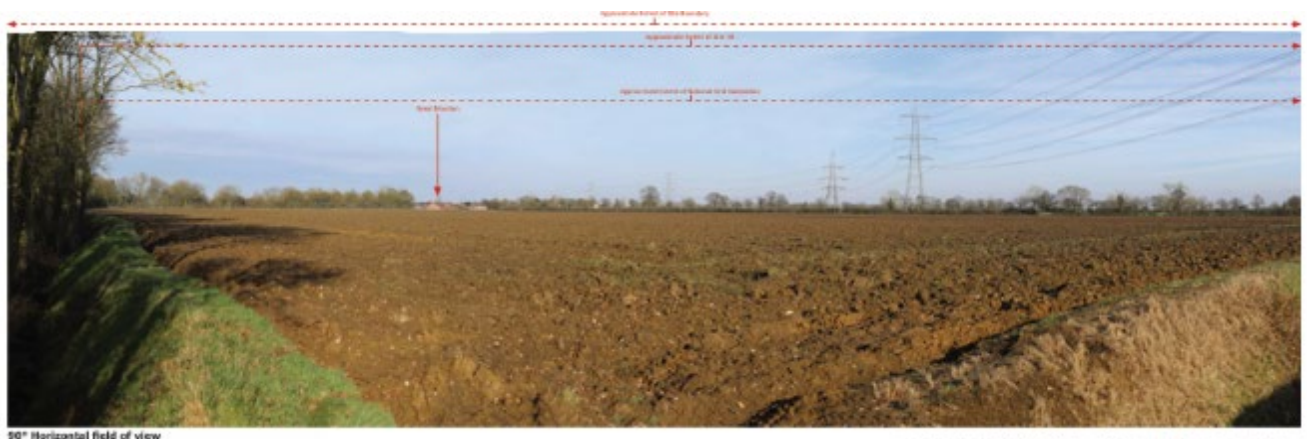


We have come across so many, even images being joined to the wrong image??

Site 1 - Distortion of site 1B looking towards Village Boundary

The panoramic photo creates a huge distortion of the actual distance between the properties and field boundaries of Oak Farm and Laburnham Farm and even Potters Crescent

EAST PYES WIDE ANGLE LENS



Photographic Image taken from same location using normal lens

The Boundary to beginning of Village Boundary



This Image shows the National Grid positioning, but it doesn't show that the measurement is only c.25m from residents home. The field that they show is off of Frith Way and towards the



back of Potters Crescent (250m) But what they don't explain is that other properties are on the boundary of this substation.

Chapter 7: Climate Change

See [2.5 Climate Change](#)

Included below are specific issues for Great Moulton Sites 1A-1D, 2B and the BESS, Tivetshall and East Pye should undertake the relevant modelling and tasks before the scheme moves forward for a decision.

1. Extreme Rainfall, Runoff and Surface-Water Risk

East Pye should be required to provide a field-by-field climate-adjusted surface-water model for Site 1A–1D, the BESS, substations, cable routes, access tracks and temporary construction areas, including future rainfall intensity, soil compaction, ditch capacity, exceedance routes and downstream receptors.

2. Soil Compaction, Drought and Changing Infiltration

East Pye should not be allowed to defer soil protection, drainage, compaction control and restoration to later management plans without showing how those controls will perform under future drought and extreme-rainfall cycles.

3. BESS, Substation and Fire-Safety Resilience Covered by NFCC and Gov.UK

East Pye should be required to show how the BESS and substations would remain safe during extreme heat, prolonged dry periods, intense rainfall, restricted access, firewater containment failure, drainage exceedance and simultaneous grid/fire/emergency events. This cannot be left as a post-consent detail.

4. Local Microclimate, Heat and Ecological Stress ([ScienceDirect](#))

East Pye should provide a site-specific assessment of whether panels, fencing, substations, hardstanding and the BESS would alter heat, wind, soil moisture or vegetation stress across Great Moulton, Site 1A–1D and adjacent farmland and hedgerows.

5. Cumulative Climate Vulnerability

East Pye should be required to assess the Site 1 / Great Moulton / BESS cluster as one climate-risk system.

Chapter 8: Landscape and Visual

The landscape around Great Moulton is defined by its long-established agricultural character, open views, historic field patterns, and the community's reliance on footpaths and quiet lanes as their only accessible green space. The proposed development would introduce industrial-scale infrastructure into a landscape that has remained largely unchanged for more than a century. This chapter assesses the impacts on agricultural land quality, historic land use, landscape character, and the community's functional use of the countryside. It demonstrates that the scheme would fundamentally alter the appearance, function, and cultural identity of Great Moulton's rural environment.

E2: GREAT MOULTON PLATEAU FARMLAND DESCRIPTION 17.1. Location and Boundaries:

The Great Moulton Plateau Farmland character area comprises an area of elevated plateau above the 50m contour in the southern part of South Norfolk District. To the north, south and west lower lying Tributary Farmland slopes away from the plateau towards the rivers of the Tas and Waveney. Its western edge is formed by the boundary of South Norfolk District, although the plateau character extends into Breckland District.

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The simplicity of the Plateau Farmland landform is a reflection of the uniformity of the underlying geology comprising a thick layer of chalky glacial till (Lowestoft Till). Landform, Topography. The flatness of the plateau landform and lack of enclosure affords a strong sense of openness with expansive skies and distant views, both internally within the plateau and across the adjacent landscapes from the plateau edge. Land Cover and Biodiversity This is a simple and uniform landscape, dominated by arable farmland with largescale, regular, geometric fields. There has been wide-scale removal of boundary vegetation to accommodate modern farm machinery and the scarcity of hedgerows accentuates the scale and openness of the plateau. Where hedgerows do occur as field boundaries they tend to be fragmented

<https://www.southnorfolkandbroadland.gov.uk/planning/future-development/supplementary-planning-documents/south-norfolk-landscape-character-assessments>

Some of the diverse fungi found bordering the scheme specifically for Sites 1a-1d and 2B and the BESS Tivetshall



Paxillus involutus, also known as the brown roll-rim, is a widely distributed, highly toxic mushroom that forms symbiotic relationships with trees.



Macrolepiota procera, commonly known as the parasol mushroom, is a large, edible fungus prized for its culinary versatility and distinctive appearance.



Cantharellus cibarius, commonly known as the golden chanterelle, is a highly prized edible mushroom known for its vibrant color, culinary versatility, and numerous health benefits.



Chlorophyllum molybdites, also known as the false parasol or green-spored parasol, is highly poisonous mushroom commonly found in lawns and meadows, causing severe gastrointestinal distress if ingested.

8.1 8.1 Landscape Character Type (Landscape Typology (England))

Great Moulton sits within the **Tributary Farmlands** landscape type, part of the wider **South Norfolk and High Suffolk Claylands**. This is a gently rolling, predominantly agricultural landscape shaped by centuries of farming. It's defined by its clay soils, mixed arable fields, hedgerows, small tributary valleys, and scattered farmsteads and villages.

What matters for decision-making is that this is a **long-established rural landscape** with strong historic continuity. Its character comes from traditional farming patterns, intact field boundaries, and a sense of openness and tranquillity. Because of this, the area is **sensitive to large-scale or industrial-type development**, which can quickly erode the qualities that make it recognisably rural. [Luc-2001-rpa-e2-great-moulton-plateau.pdf](#)

8.1.1 Natural England Classification

Natural England classifies this area under National Character Area 83 - South Norfolk and High Suffolk Claylands with the following characteristics:

- Large plateau area of chalky glacial till that is generally flat or only gently undulating, but can be locally concave. The edges of the plateau have been dissected by watercourses that form greater slopes, especially along the tributaries of the Waveney.
- Views are frequently open, only sometimes confined by hedges and trees, with some woodland present. The small valleys support quite confined landscapes with intimate views.
- Chalk bedrock is overlain by glacial till, gravels and sands. Heavy, seasonally waterlogged chalky clay soils occur on the plateau, with small areas of better soils at the edges. The valley bottoms contain areas of glacial outwash deposits as well as some areas of deep peat.
- Scattered areas of ancient woodland, game crops, shelterbelts, valley floor plantation and carr woodland as well as hedgerow trees provide a treed landscape character, despite much boundary loss.
- A mix of remnant medieval ancient countryside, some of it with a decidedly coaxial character, although irregular field patterns and large modern amalgamated open fields dominate.
- Sinuous field boundaries are formed by deep ditches, some with hedgerows and hedgerow trees.
- Extensive areas of arable land dominated by cereals with breakcropping of sugar beet and oilseed rape, and some pastures along valley floors. Intensive pig and poultry production is common.

- Remnant parkland, ancient woodlands, commons and greens with a diverse grassland flora. River valleys support areas of ecologically rich unenclosed ‘semi-wild’ fenland and remnant dry heaths dominated by poor dry grassland.
- Small slow-flowing rivers and streams and the River Waveney drain the clay plateau. The River Waveney has a relatively large-scale open valley landscape compared with the other river valleys which have narrow valley bottoms. High density of isolated farm ponds in the southern half of the NCA.
- Historic features include Palaeolithic archaeology, evidence of Roman enclosures, bronze- age and iron-age activity, remnant medieval and Tudor deer parks, scattered small parkland estates and Second World War airfields. Round-towered Saxo-Norman and medieval churches and 19th-century windmills are prominent historic landscape features

8.2 Plateau Farmland Sensitivity to Industrialisation

Plateau Farmland is defined by open horizons, long views, and an absence of vertical or industrial structures. Its character depends on uninterrupted skylines and the legibility of historic field patterns. Introducing substations, battery compounds, tall fencing, and industrial access points would break the horizontal emphasis of the landscape and introduce forms that are visually incompatible with its simplicity. Once industrial elements are introduced into Plateau Farmland, the sense of openness and rural scale is permanently altered, and the landscape can no longer function as a coherent agricultural plateau.

The landscape around Great Moulton is defined by its long-established agricultural character, open views, historic field patterns, and the community’s reliance on footpaths and quiet lanes as their only accessible green space. The proposed development would introduce industrial-scale infrastructure into a landscape that has remained largely unchanged for more than a century. This chapter assesses the impacts on agricultural land quality, historic land use, landscape character, and the community’s functional use of the countryside. It demonstrates that the scheme would fundamentally alter the appearance, function, and cultural identity of Great Moulton’s rural environment.

8.3 Visual Receptors

The development would be visible to:

- residents living along the lanes and farmsteads
- walkers using the parish’s only green-space network
- road users on narrow rural lanes
- heritage settings including churches and historic farms
- neighbouring parishes with open views across the site

The scale and height of the infrastructure mean it cannot be screened without fundamentally altering the landscape

8.4 Footpaths, Byways and Bridleways Severely Affected

The southern edge of Great Moulton is threaded with a network of public rights of way—footpaths, byways, and bridleways—that run alongside or through Field Parcels 1A, 1B and 1D.

These routes are used daily by residents, dog walkers and horse riders, and form an important part of the village’s rural character. Field Parcels 1B and 1D are among the least appropriate locations in the entire area due to their proximity to homes, rights of way, and PWS.

The proposed substation would fundamentally change this environment.

- remove the open, rural setting that makes these paths valued
- introduce noise, lighting, and large industrial structures into what is currently peaceful countryside
- diminish the safety, comfort, and enjoyment of walkers and riders
- permanently alter the character and experience of these routes.



Public rights of way are legally protected, and their setting is a material planning consideration. This proposal would undermine both.

Enclosing these routes within a landscape of substations, inverters, 4.5-metre tracker panels, lighting columns, fencing, and security cameras creates a significant psychological barrier for local people who rely on these paths for recreation.

Over time, restricted access and unmanaged hedging will inevitably lead to overgrown, little-used footpaths and bridleways—effectively turning the south side of the village into a no-go area.

Residents are also deeply concerned about long-term stewardship. The experience of Thames Water under Macquarie ownership has shown how quickly essential infrastructure can be neglected once sold on. Villagers fear that, regardless of who ultimately owns this development,

the community will be left to deal with the consequences if maintenance declines or responsibilities are abandoned. This, combined with the fact that the National Grid substation will remain permanently even if the solar infrastructure is removed, raises a fundamental question:

If the solar farm is temporary, why is a permanent National Grid substation required in this location?

8.5 Community Use of Footpaths and Lanes as Functional Green Space



Great Moulton has no formal park, playground, village green, or designated public open space. The parish therefore relies entirely on its network of footpaths, quiet lanes, and surrounding countryside for everyday recreation, exercise, children's play, dog walking, and informal social interaction. These routes function as the village's only accessible green space and are used in the same way that urban communities use parks.

The landscape is not simply a visual backdrop; it is an essential part of daily life

and community wellbeing. Residents use the footpaths and lanes for walking, running, cycling, and accessing nature, and these routes provide the only safe and tranquil outdoor environment available to the parish. Any reduction in safety, tranquillity, or accessibility along these routes represents a direct loss of recreational space for the community.

Increased construction traffic, industrial noise, and visual intrusion from large-scale energy infrastructure would diminish the quality and usability of these paths and lanes. This would reduce opportunities for outdoor activity, affect mental and physical wellbeing, and undermine the rural character that defines Great Moulton. Because the parish has no alternative recreational provision, the impact on these routes carries greater weight than in settlements with parks or formal green spaces. The proposal would fundamentally alter the character and function of the parish's only green space, resulting in disproportionate harm to the community.

8.6 Loss of Rural Tranquillity and Dark Skies

The introduction of substations, BESS compounds, fencing, and security lighting would erode the parish's dark-sky quality and rural quiet. These sensory changes are significant in a landscape where tranquillity is a defining characteristic.

8.7 Cumulative Landscape Industrialisation

Energy infrastructure has a well-documented tendency to cluster around established grid nodes. Once a substation and BESS compound are introduced, the landscape becomes a focal point for future grid reinforcement, cable routes, and additional energy schemes. This cumulative industrialisation erodes rural character over time, replacing agricultural land with a long-term infrastructure corridor. East Pye has not assessed this risk, despite the permanent nature of the proposed National Grid cluster.

8.8 Residential Amenity and Village-Boundary Incompatibility

National Policy Statements EN-1 and EN-5 require applicants to protect residential amenity, avoid unacceptable noise and visual impacts, and demonstrate that infrastructure has been sited to minimise harm. The proposal to place a National Grid Transmission substation and an additional 400 kV substation directly on the village boundary does not meet these requirements and has not been justified.

Residents of a long-established rural village have a reasonable expectation of tranquillity, dark-sky conditions, and low-impact surroundings. The relocation of major transmission infrastructure into Sites 1B and 1D would fundamentally alter these conditions.

8.9 Residential Amenity and Village-Boundary Incompatibility



The proposal to place a National Grid Transmission substation and an additional 400 kV substation directly on the village boundary is fundamentally incompatible with the residential character, amenity, and rural setting of Great Moulton. The proximity of Sites 1B and 1D to homes, gardens, and public rights of way with no meaningful separation distance or mitigation

strategy, creates an unacceptable level of noise, visual intrusion, lighting impact, and construction disturbance.



The Applicant's own transport baseline identifies Lodge Road / Frith Way as a single-track, single carriageway route with varying road widths. That is a material constraint. Any proposed access, exit, construction interface, temporary works, visibility splay, road-edge improvement or traffic-management measure affecting Frith Way must therefore be assessed as a combined highways, heritage, landscape, ecological, residential amenity and public-access impact.

Originally East Pye's originally demonstrated in the APP/7.20 records, at the PEIR stage, access to Option 4B would be from the BESS site via the A140/B1134 roundabout, westbound on Station Road and northbound on Lodge Road and Frith Way. APP/7.20 also recorded that the option within Sub-Site 1B was taken forward in the DCO application, and that a public right of way crosses Sub-Site 1B between Narrowgate Way and Frith Way.

At present, the application does not provide a sufficiently clear or site-specific assessment of the consequences of creating or using access points associated with Frith Way. The unanswered issues include HGV turning, swept paths, visibility, verge and ditch failure, damage to road edges, loss or cutting back of hedgerows and banks, conflict with walkers, cyclists, horse-riders and residents, noise, dust, vibration, and the effect on the tranquillity and rural character of Great Moulton.

National Policy Statements EN-1 and EN-5 require applicants to demonstrate that major energy infrastructure has been sited to minimise harm to residential amenity and to protect the setting of public rights of way. No such justification has been provided. Instead, the proposal would replace open agricultural land with permanent industrial structures, enclosing valued footpaths and bridleways within a landscape of substations, fencing, lighting columns, and security equipment.

The long-term stewardship concerns raised by residents further highlight the risks of placing permanent infrastructure in such a sensitive location. Even if the solar elements are removed in

future, the National Grid substation will remain indefinitely, leaving the community with lasting impacts that have not been assessed or justified.

For these reasons, the proposed siting of the substations within Sites 1B and 1D cannot be considered appropriate, proportionate, or compliant with national policy. The impacts on residential amenity, rural character, protected species and public rights of way are significant, long-term, and avoidable, and must be fully reconsidered.

From our research we understand National Grid's own practice elsewhere typically places substations 100's of metres from dwellings to manage noise, visual intrusion, and amenity impacts. Here, the proposal pushes industrial equipment right up against the edge of a settled village, with no justification for why Great Moulton should be treated differently.

8.10 400kV Project Substation

Resident would be exposed to the cumulative impacts of a National Grid Transmission substation & the replacement of a 132kV substation to an additional 400kV substation, East Pye records in Chapter 5 the design evolution table thereby acknowledging a material voltage and location change, and says the general BESS location and co-location of the **400kV Project Substation** were identified **"in order to be in close proximity to the PoC."**, this supports our argument this was grid-led and not demonstrably least-harm-led

East Pye's reason is given as "efficient use of land and maximising grid connection capacity,". we would assert that this is a narrow technical/commercial explanation. Where is the full environmental reassessment of the consequences of moving and uprating the substation? including landscape, noise, EMF, drainage, fire risk, access, abnormal loads, residential amenity, PRow, heritage, private water supplies, or cumulative effects as listed:

- switching noise and the continuous transformer hum
- tall gantries and steel structures
- lighting columns visible from bedrooms and gardens
- cable corridors,
- construction compounds, and undefined "associated works" which would include heavy construction traffic and disturbance

Cities and towns have designated green areas for recreation and sport, in Great Moulton we have no designated green areas for children and adults alike, apart from a football club! Consideration should be given to the fact that the footpaths, byways, bridle ways are our green areas where we can walk and undertake relevant sports. We assert that all will be lost with the introduction of these substations. The decision to move this Transmission substation and to increase the substation to 400kV are wholly incompatible with maintaining the residential amenity, rural character, and the reasonable expectations of village residents.

8.11 National Grid Infrastructure Cluster Great Moulton – Post-Consultation Design Change, Cumulative Effects and Permanence

The evolution of the grid infrastructure at Great Moulton raises an important question which the Applicant must answer clearly during the Examination. The issue is not simply that the National Grid Substation was moved. The PEIR presented two possible locations, including an option within Sub-Site 1B. **The more significant point is what happened after the Phase Two statutory consultation.**

East Pye's own Design Approach Document confirms that the National Grid Substation within Site 1B was subsequently reorientated and that the separate Project Substation within Sub-Site 1B was increased from 132 kV to 400 kV and moved east to accommodate the National Grid Substation. **These were substantive changes to the scale and configuration of the electrical infrastructure being placed immediately south of Great Moulton.** [APP/7.17, paras 5.1.7–5.1.10]

Residents were therefore consulted at Phase Two on a configuration which was not the configuration ultimately submitted in the DCO application. Although East Pye subsequently undertook a targeted consultation **between 22 October and 26 November 2025, this was in the form of a leaflet, with very little information.** No formal consultation was undertaken. BEPS-Great Moulton considers that the fundamental examination question remains:

Has the Applicant demonstrated, in a clear and auditable manner, that every relevant environmental assessment was updated to reflect the final combined configuration of the National Grid Substation, the enlarged 400 kV Project Substation, the BESS, the overhead-line diversion and new pylons, access infrastructure and the remainder of Site 1?

The Applicant has submitted a final Environmental Statement.. Our concern is more specific. **The Great Moulton infrastructure should not be understood or assessed as a collection of unrelated individual components. It will operate as a single concentrated electrical-infrastructure cluster,** experienced by the same residents, roads, public rights of way, agricultural landscape and environmental receptors.

The Examination should therefore be satisfied that the submitted assessments properly address the **combined effects** of:

- the new National Grid Substation;
- the 400 kV Project Substation within Site 1B;
- the BESS and its 400 kV Project Substation;
- the diverted 400 kV overhead line, new and replacement pylons;
- Site 1 solar and associated electrical infrastructure;
- construction and permanent access arrangements;
- operational transformers and other noise-generating equipment;

- drainage and pollution-control infrastructure;
- effects upon groundwater and private water supplies;
- landscape, visual, heritage, ecological and agricultural receptors; and
- the cumulative experience of residents during construction, operation and after solar decommissioning.

Where the existing topic chapters do not provide that integrated assessment, BEPS-Great Moulton asks the Examining Authority to require the Applicant to provide supplementary information sufficient to demonstrate it.

This is particularly important because the consequences at Great Moulton do not end after 60 years.

East Pye expressly confirms in ES Chapter 4 that, when the generating station is decommissioned, **the National Grid Substation and Grid Connection Infrastructure will remain in situ.** The mitigation planting required for the National Grid Substation is also intended to pass to National Grid for continuing management. [APP/6.1.4, paras 4.6.3–4.6.5]

That distinction is fundamental.

The solar panels, BESS and Project Substations may ultimately be removed, but the National Grid Substation and associated grid-connection infrastructure are proposed to become part of the national transmission network. They cannot therefore properly be characterised in the same way as temporary solar infrastructure which is removed and the land restored.

The Examination must consider the permanent residual landscape and environmental condition at Great Moulton after the solar generating station has gone.

National Policy Statement EN-5 expressly recognises that new substations and associated above-ground electricity infrastructure can create adverse landscape and visual effects, including cumulative effects where overhead lines, substations and generating infrastructure occur together. It also requires visual, noise and other environmental effects to be kept to a reasonably practicable minimum. EN-1 requires the environmental effects of nationally significant energy infrastructure to be assessed comprehensively and cumulatively.

For Great Moulton, that means considering the infrastructure **as a whole and over its true lifetime**, not simply component by component or against the 60-year life of the solar generating station.

Residents would experience the consequences on the ground: prolonged construction activity; construction traffic and abnormal-load movements on the local road network; significant changes to public-rights-of-way views; operational electrical noise; disturbance and loss of agricultural land; potential pathways affecting groundwater and highly sensitive private water supplies; new pylons and overhead-line infrastructure; and a major transformation of the rural landscape surrounding the village.

Indeed, East Pye's own PRow Visual Amenity Assessment **identifies Major Adverse significant construction effects and continuing Moderate Adverse significant effects for Great Moulton FP13, and significant effects for FP14 associated with the substation and related infrastructure.** [APP/6.3.7.9]

This is therefore not an abstract concern about terminology. It is about the actual environmental condition which residents will experience and which, in the case of the National Grid infrastructure, will remain after the solar farm and BESS have ceased operating.

We therefore ask the Examining Authority to require the Applicant to demonstrate explicitly that the final post-consultation Great Moulton configuration has been assessed as one integrated infrastructure cluster; that all affected receptors have been identified; that construction, operational and cumulative effects have been assessed against the final design parameters; and that the permanent effects of the retained National Grid infrastructure have been distinguished from the temporary and reversible elements of the solar scheme.

If the Applicant cannot demonstrate that from the existing Environmental Statement, then further environmental information should be required before those effects are treated as adequately assessed.

Without that evidence, the Examining Authority cannot safely assume that the environmental consequences of the Great Moulton cluster have been fully understood.

What is already clear, however, is that the National Grid element is not **temporary**. It would leave nationally significant transmission infrastructure permanently embedded within what is presently an agricultural rural landscape.

That permanent change must be acknowledged, assessed and weighed as such.

8.12 Misrepresentation of Images

Clarification of where this image was taken?

- It say Great Moulton in the documents, **but its not**

View Location Reference: Site 1/National Grid Sub Station - VL2 (b)



Site Context Photograph (2 of 2)

This panorama is not to scale. For contextual information only



We have come across so many, even images being joined to the wrong image??

Site 1 - Distortion of site 1B looking towards Village Boundary

The panoramic photo creates a huge distortion of the actual distance between the properties and field boundaries of Oak Farm and Laburnham Farm and even Potters Crescent

EAST PYES WIDE ANGLE LENS



Photographic Image taken from same location using normal lens

The Boundary to beginning of Village Boundary



This Image shows the National Grid positioning, but it doesn't show that the measurement is only c.25m from residents home. The field that they show is off of Frith Way and towards the



back of Potters Crescent (250m) But what they don't explain is that other properties are on the boundary of this substation.

8.12 Conclusion

The Relevance of Oxford EN010

The Secretary of State request for further information in the Botley West Solar Farm Case, Oxford EN010147, request provides a useful model for challenging the adequacy of landscape and residential visual assessment. It asked whether visualisations were representative and verified, required explanation of viewpoint selection and methodology, and raised property-by-property residential visual amenity assessment for dwellings within 250m of operational solar arrays.

East Pye should not rely on selected photomontages if they do not show the real experience from homes, public rights of way, village edges and rural lanes. In a plateau landscape with long views and expansive skies, the question is not only whether a single viewpoint changes, but whether the rural setting of Great Moulton and Tivetshall is industrialised by the combined presence of panels, substations, pylons, lighting, fencing and access works.

The proposal would permanently alter the agricultural, visual, and cultural landscape of Great Moulton. It conflicts with national policy protections for high-quality farmland, disrupts historic land-use continuity, industrialises a tranquil rural environment, and removes the parish's only functional green space. The landscape harm is significant, long-term, and cannot be mitigated. The whole of this area of Great Moulton would become an industrial wasteland. Walkers, riders, cyclists, bird-watchers alike would not use this area of the village which has been used in this way for 100's of years.

Chapter 9: Ecology and Biodiversity

9.1 Ecological and Bat Habitat Impacts

9.1.1 BATS - European Protected Species – Non-Grantable Licensing Risk

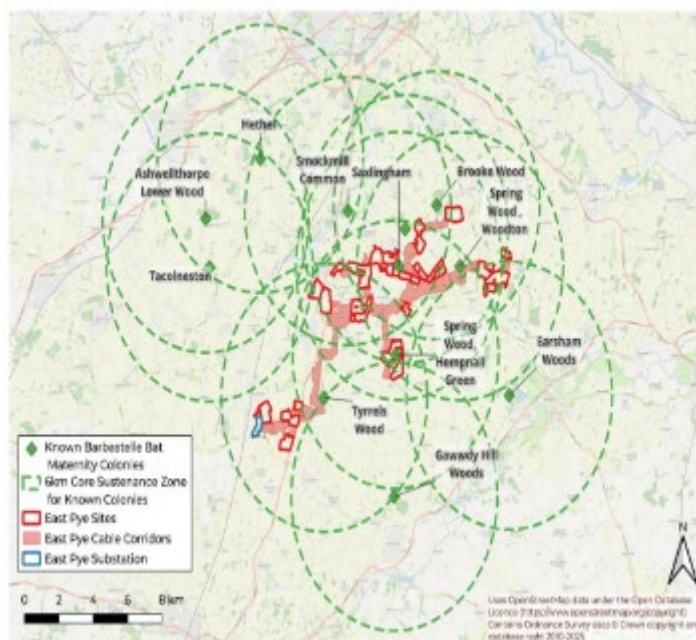
The parcel lies entirely within **overlapping Core Sustenance Zones of multiple Barbastelle Bat maternity colonies**. Disturbance and damage to functionally linked breeding habitat **cannot be ruled out** given the scale and permanence of the proposed substation, lighting, noise, excavation and access works. An EPS licence would therefore be required, yet the application provides **no evidence that the statutory tests (IROPI, no satisfactory alternative, favourable conservation status) could be met**. This is a **front-loaded legal impediment** that cannot be deferred and is, on the evidence, unlikely to be licensable.

9.1.2 Barbastelle Bats

Where a proposed NSIP is located wholly within overlapping Core Sustenance Zones for Barbastelle bats and directly adjacent to multiple ancient woodlands supporting maternity colonies, the impacts of construction disturbance, habitat fragmentation, lighting, noise and long-term landscape disruption are **intrinsic to the scheme** and **cannot be reduced to a level that avoids adverse effects on the local Barbastelle population's favourable conservation status**.

As such, the effects are **not capable of mitigation**, and the scheme is fundamentally incompatible with the Habitats Regulations.

Attached are copies of reports undertaken that show the numbers of Bats, particularly Barbastelle that are in the areas surrounding Site 1.



During the study **bats and solar farms** led by **Elizabeth Tinsley**, carried out through the School of Biological Sciences, University of Bristol, entitled “Renewable Energies and Biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity. conservation research network and published in June 2023, where it proved Ground-mounted solar farms **significantly reduce bat activity across multiple species**, especially where panels fragment open foraging areas or disrupt boundary habitats such as hedgerows. This effect was demonstrated across **19 solar farms in southwest England**, using paired control sites and static detectors.

BAT population recovery and status are important, not just because of their intrinsic value as unique mammals and their ecological vulnerability, but also because bats are bio-indicator species. This means a healthy bat population in an area indicates a properly functioning ecosystem for the species within it, which includes humans. Healthy ecosystems provide and regulate our environment and are critical in supporting our economy, as well as meeting our wider societal needs. Coupled with the historical losses of bat numbers, this is why all of our bats are fully protected under the law [Bat Vulnerability](#)

We expect the Planning Inspectorate to assess these findings as particularly relevant due to the whole of these cumulative structures being planned for Great Moulton,

The bat report states that bat survey data is valid for only 12–18 months unless habitats significantly change. The habitat survey also notes validity limits and that some areas, including highway works areas, were surveyed outside the optimal season.. Due to the invalidity of some of the surveys East Pye should be required to identify which ecological surveys will expire before commencement and how refreshed surveys will be secured. This is especially important for bats, barbastelle CSZs, highway works, hedgerows, watercourses and protected species licensing

Plot 1 (including 1A, 1B, 1C, 1 D and the cumulative effect of the BESS site) is a uniquely sensitive and high-risk severance point for bat commuting routes, it sits at the **junction of multiple hedgerow corridors** that bats use to move between foraging fields north–south and east–west. The Cambridge study shows that solar infrastructure reduces activity **not only within panel fields**, but also where **infrastructure fragments or interrupts boundary vegetation**, with the following **Implications**:

- The **substations, compounds, fencing and lighting** proposed here create a **hard barrier** across a previously open, connected landscape.
- The study’s mechanism of impact—**loss of open foraging space + fragmentation of linear features**—is directly triggered by Plot 1’s infrastructure cluster.
- Because Plot 1 is the **gateway** to the entire scheme, construction traffic, lighting, and noise further depress bat activity along these corridors.
- The Cambridge findings show that even if species richness remains, **activity collapses**, meaning bats will still be present but **avoid using Plot 1** for commuting or feeding.

Therefore the Planning Inspectorate must and cannot treat Plot 1 (including 1A, 1B, 1C,1D) and the Bess as “low ecological value” simply because it is being used for infrastructure. The research shows that **infrastructure placed at a corridor junction has disproportionate landscape-scale effects**, it would therefore be necessary that updated **surveys are required** due to these major layouts change.

Great Moulton have also commissioned Independent BAT Reports on bat colonies in Great Moulton.

The first report commissioned for Laburnham Farm, High Green, this property is directly affected by the proposed siting of the National Grid Transmission Substation.

The second report commission for Merryfield Stud which is sited to the north-east of the village. This report was created specifically for South Norfolk CC against a proposed Battery Storage, but the information contained is relevant relating to the Barbastelle Bats together with 7 other species and Botanical species recorded on this small parcel of land (See Appendix for full report) [Appendix 1: Merryfield Stud Appendix](#)

9.1.3 Other Species of Bats

BATS shown on the Magic Map Survey records

- Barbastelle
- Common Pipistrelle
- Daubenton's Bat
- Noctule
- Serotine
- Soprano Pipistrelle
- Leisler
- Brown Long Eared Bat
- Natterer's Bat

9.2 Additional Protected Species Burden

The parcel lies within a Great Crested Newt strategic area, introducing further EPS offence risk and licensing complexity. When combined with Barbastelle constraints, this creates licence stacking that materially undermines any realistic prospect of lawful delivery.

It is essential that East Pye provide all surveys under the Wildlife and Countryside Act 1981 and to ensure that all Protected Species are held accountable to ensure that all ecological surveys are undertaken in accordance with the regulations covering the following:

It is not clear whether East Pye have undertaken the necessary Protected Species Surveys. We understand these surveys are NOT an option, it is a statutory requirement and fundamental to a

legally robust NSIP application and that without this the Examining Authority cannot conclude that protected species have been safeguarded or the project meets national environmental obligations. According to local residents there were no ecological surveys completed in the



village of Great Moulton with the only request being made outside of the correct timelines for recording these various species.

It is essential that East Pye provide all surveys under the Wildlife and Countryside Action 1981 and to ensure that all Protected Species are held accountable to ensure that all ecological surveys are undertaken in accordance with the regulations covering the following:

9.2.1 Great Crested Newts

Great Crested Newts are identified within the Strategic Opportunity Area (Unique Identifier 138), meaning the East Pye landscape is recognised as a priority zone for habitat protection and connectivity. The pond surveys already submitted show suitable terrestrial habitat on and around the site, with a Habitat Suitability Score indicating potential use by newts. As a European Protected Species, any disturbance or habitat loss here requires strict avoidance and mitigation under the Habitats Regulations. The proposal does not address these constraints, despite the site’s elevated sensitivity within the Strategic Opportunity Area.

Photographic evidence from local wildlife enthusiasts showing Great Crested Newts in Narrowgate Way which runs through the whole of Plot 1 (incorporates Sites 1A, 1B, 1C and 1D)



9.2.2 Local Pond Surveys for Great Crested Newts

Great Crested Newts are part of the Strategic Opportunity Areas (England), listed under the Unique identifier138. Habitat Suitability Score 2

9.3 Birds

Priority Species for CS Targeting - Red List

Unique Living England

segment identifier 8044244

Primary habitat prediction Arable and Horticultural

Woodlands On Boundary of Plot 1 (incorporates Sites 1A, 1B, 1C

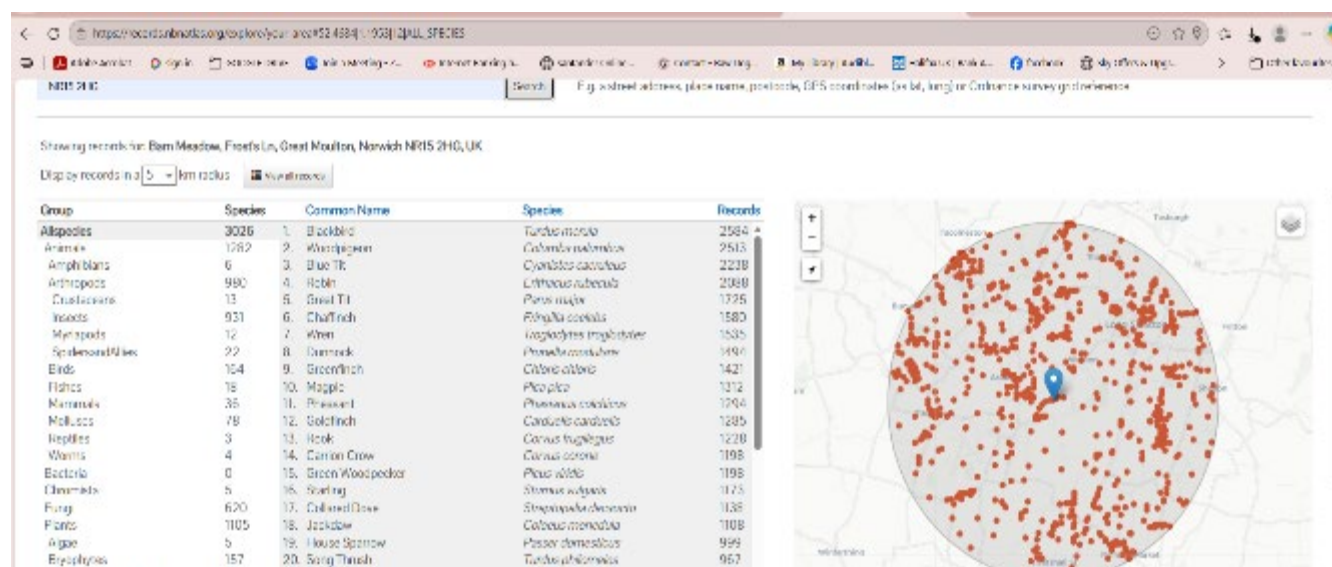
and 1D) in 2 locations - Ancient Woodlands Priority Habitat Inventory

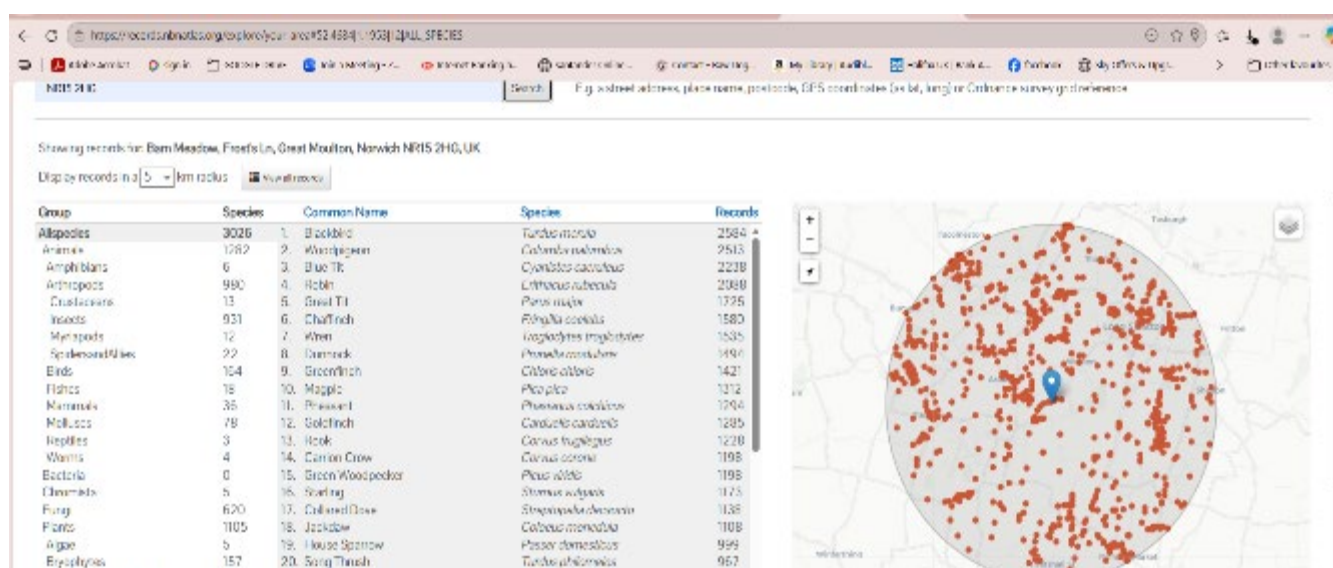
Deciduous Woodland (England)

- Lapwing
- Grey Partridge
- Turtle Dove
- Swifts
- Sky Larks

9.3.1. Bird Species

[NBN Atlas - UK's largest collection of biodiversity information](https://nbnatlas.org/topics/your-area/524884/1938/ALL_SPECIES) [bocc-5-a5-4pp-single-pages.pdf \(bto.org\)](https://nbnatlas.org/topics/your-area/524884/1938/ALL_SPECIES)





[consolidated-red-list-extract-20231206.xlsx \(live.com\)](https://www.inaturalist.org/explorer?area=5248841033104444&SPECIES=)

1.	Blackbird	Turdus merula	2584
2.	Woodpigeon	Columba palumbus	2513
3.	Blue Tit	Cyanistes caeruleus	2238
4.	Robin	Erithacus rubecula	2088
5.	Great Tit	Parus major	1725
6.	Chaffinch	Fringilla coelebs	1580
7.	Wren	Troglodytes troglodytes	1535
8.	Dunnock	Prunella modularis	1494
9.	Greenfinch	Chloris chloris	1421
10.	Magpie	Pica pica	1312
11.	Pheasant	Phasianus colchicus	1294
12.	Goldfinch	Carduelis carduelis	1285
13.	Rook	Corvus frugilegus	1228
14.	Carrion Crow	Corvus corone	1198
15.	Green Woodpecker	Picus viridis	1198
16.	Starling	Sturnus vulgaris	1173
17.	Collared Dove	Streptopelia decaocto	1138
18.	Jackdaw	Coloeus monedula	1108
19.	House Sparrow	Passer domesticus	999
20.	Song Thrush	Turdus philomelos	967
21.	Long-tailed Tit	Aegithalos caudatus	919
23.	Skylark	Alauda arvensis	770
24.	Great Spotted Woodpecker	Dendrocopos major	689
25.	Bullfinch	Pyrrhula pyrrhula	679
26.	Coal Tit	Parus ater	624

27. Jay	Garrulus glandarius	611
28. Yellowhammer	Emberiza citrinella	578
29. Blackcap	Sylvia atricapilla	503
30. Swift	Apus apus	450
31. Sparrowhawk	Accipiter nisus	418
32. Buzzard	Buteo buteo	412
33. Meadow Brown	Maniola jurtina	390
34. Kestrel	Falco tinnunculus	382
35. Fieldfare	Turdus pilaris	381
36. Large White	Pieris brassicae	371
37. Swallow	Hirundo rustica	365
38. Small White	Pieris rapae	361
39. Goldcrest	Regulus regulus	337
40. Linnet	Linaria cannabina	329
41. Whitethroat	Curruca communis	326
42. Mallard	Anas platyrhynchos	320
43. Black-headed Gull	Chroicocephalus ridibundus	317
44. Barn Owl	Tyto alba	313
45. Mistle Thrush	Turdus viscivorus	285
46. Red-legged Partridge	Alectoris rufa	282
47. Moorhen	Gallinula chloropus	281
48. Pied Wagtail	Motacilla alba	276
49. Stock Dove	Columba oenas	264
50. Tawny Owl	Strix aluco	230

9.3.2 Bird Song - Identification Records for 2025

Priority species All recorded at Great Moulton During 2025 by A Weston (see recorded Information)

- | | |
|----------------|--------------|
| 1. Lapwing | 2. Sky Larks |
| 3. Turtle Dove | 4. Swifts |

The following is a record of bird species identified by their songs in High Green, Great Moulton, throughout the year 2025. The use of Merlin recordings suggests a focus on accurate identification through audio.

Monthly Breakdown of Bird Species

The records are structured to show bird song identification on a month-by-month basis.

- Each month has a dedicated table for tracking bird songs.
- Each table lists the same set of bird species for consistency in tracking.

Bird Species Included in the Records

The records encompass a wide variety of bird species commonly found in the area.

Notable species included on the Red & Amber Lists include:

- Lapwing
- Turtle Dove
- Swifts
- Sky Larks
- Bullfinch
- Cuckoo
- Herring Gull
- House Martin
- House Sparrow
- Marsh Tit
- Redwing
- Skylark
- Spotted Flycatcher
- Lapwing
- Starling
- Tree Sparrow
- Turtle Dove
- Yellowhammer
- Lesser Black-backed Gull

February

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

[illegible]

March

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

[illegible]

April

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

April	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Robin																														
Dunnoek																														
Blue Tit																														
Great Tit																														
Blackbird																														
Songthrush																														
Carrian Crow																														
Magpie																														
Collared Dove																														
Wood Pigeon																														
Sparrow																														
Jackdaw																														
Starling																														
Greenfinch																														
Long Tailed Tit																														
Black cap																														
Chaffinch																														
Wren																														
Canada Goose																														
Marsh Tit																														
Rook																														
Great Spotted woodpecker																														
Goldfinch																														
Nuthatch																														
Rock pigeon																														
Tawny Owl																														
Stock Dove																														
Ring necked pheasant																														
Lesser black backed gull																														
Moorhen																														
Little Owl																														
Buzzard																														
Coal Tit																														
Chiff Chaff																														
Redwing																														
Linnet																														
Goldcrest																														
Skylark																														
Garden Warbler																														
Greater Whitethroat																														
House Martin																														

May

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

[illegible]

June

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Robin																														
Duncock																														
Blue Tit																														
Great Tit																														
Blackbird																														
Songthrush																														
Carriion Crow																														
Magpie																														
Collared Dove																														
Wood Pigeon																														
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Coal Tit																														
Chiff Chaff																														
Redwing																														
Linnet																														
Goldcrest																														
Skylark																														
Garden Warbler																														
Greater Whitethroat																														
House Martin																														
Raven																														
Greylag Goose																														
Treecreeper																														
Swallow																														
Firecrest																														
Yellowhammer																														
Tree Sparrow																														
Swift																														
Spotted Flycatcher																														
Mistle Thrush																														
Cuckoo																														
Kestrel																														
Grey Wagtail																														
Oyster Catcher																														
Reed Bunting																														
Pied Wagtail																														
Mallard																														
Kingfisher																														
Reed Warbler																														

June(continued)[illegible]

July

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Robin																															
Duncock																															
Blue Tit																															
Great Tit																															
Blackbird																															
Songthrush																															
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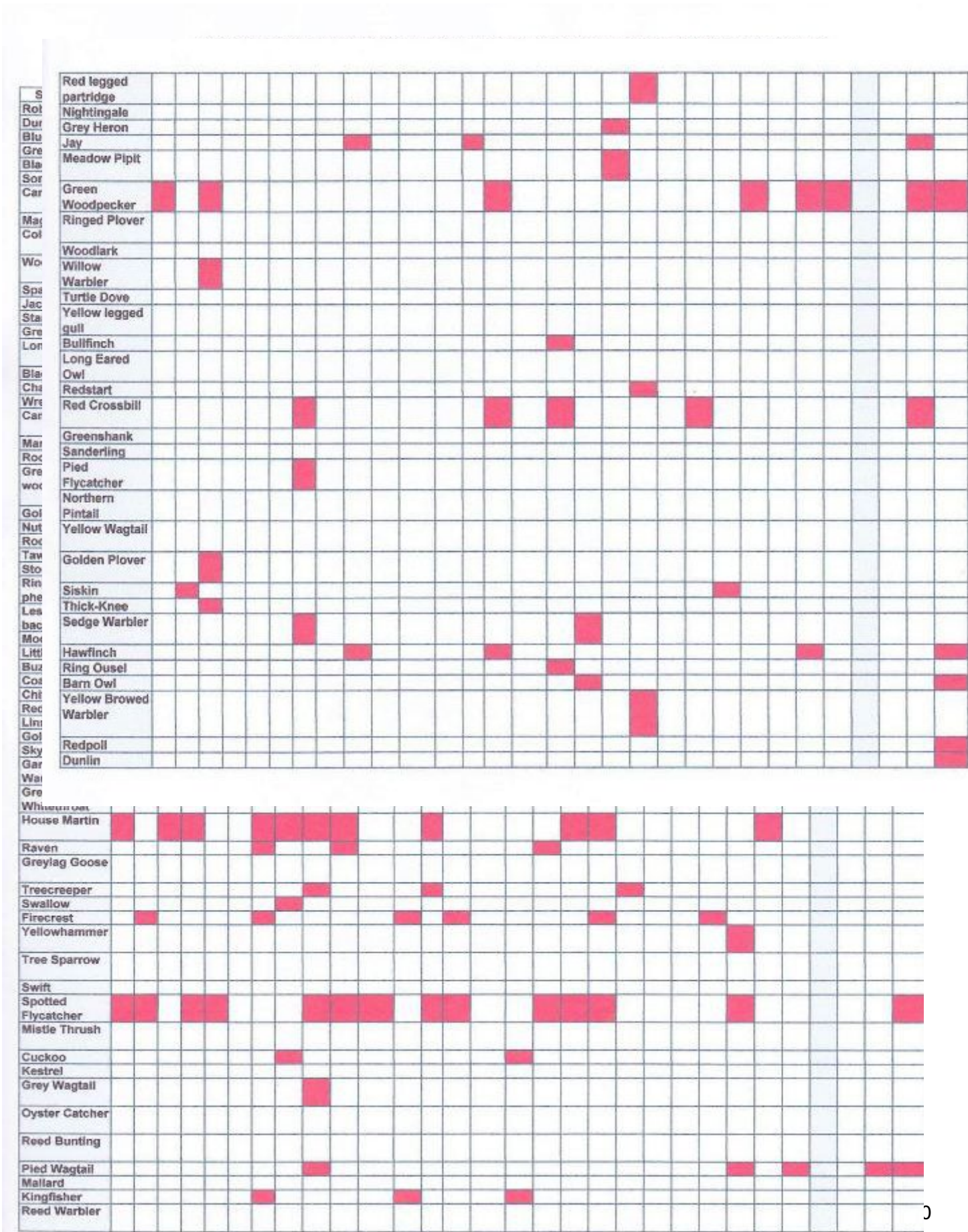
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August (continued)[illegible]

September



October

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November

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December

RECORD OF BIRDS IDENTIFIED BY THEIR SONG (MERLIN RECORDINGS) HIGH GREEN, GREAT MOULTON 2025

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December (continued)[illegible]

9.4 Inadequate Mitigation for Common Species

The East Pye PEIR provides no meaningful mitigation for common species that are known to be present in Great Moulton. Government MAGIC Map data, local records, and direct observations confirm that the farmland, hedgerows, and field margins around East Pye support shrews, brown hares, hedgehogs, roe deer, and red deer. These species are part of the everyday ecology of Great Moulton and rely on the parish's intact network of hedgerows, ditches, and open fields for feeding, nesting, shelter, and movement.

Although often described as “common”, these mammals are still protected under the Wildlife and Countryside Act 1981, and several — including hedgehogs and brown hares — are recognised as Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act 2006. Local authorities have a legal duty to consider these species when determining planning applications.

The omission of mitigation is particularly concerning in Great Moulton because the parish's landscape is highly permeable and interconnected. Mammals move freely between the fields, the lanes around Hundred Farm, the hedgerow corridors leading toward Starston, and the open farmland toward Aslacton and Wacton. Construction activities such as trenching, piling, vegetation clearance, and heavy-vehicle movements pose direct risks of injury and displacement. Operational impacts — including fencing, lighting, and long-term habitat fragmentation — would sever movement routes that these species depend on.

The PEIR does not assess how these mammals use the East Pye site, does not identify their movement corridors, and does not propose any measures to avoid harm during construction or operation. This is a clear gap in the ecological assessment and fails to meet national planning policy, local biodiversity strategy, and statutory duties under the NERC Act.

The absence of mitigation for common species is therefore a significant ecological deficiency, particularly in a parish like Great Moulton where farmland mammals form an integral part of the local landscape and where development at East Pye would disrupt well-established wildlife routes across the village.

Defined by the Government Magic Map Survey Data

- Shrews
- Hares
- Hedgehogs
- Deer

9.5 Ecological Severance from Fencing

The proposed fencing around solar arrays, substations, and battery compounds creates impermeable barriers across a previously open landscape. These barriers sever movement routes for mammals, amphibians, and reptiles, fragmenting habitat and reducing ecological connectivity between hedgerows, ditches, and woodland edges. Species that rely on wide

territories or seasonal movement routes would be displaced, and East Pye has not assessed the long-term ecological consequences of this severance.

9.6 Hedgerows and Significant Trees

This list represents 37 mature Oak trees and 2 mature Ash trees which stand majestically on the verges of Frith Way and Lodge Road in Great Moulton. These are the roads that East Pye are intending to use as vehicular access for large lorries and therefore are intending to widen the roads potentially at expense of trees.

We have photographs of every tree but have included a few as an indication.

Tree	Whst 3 words Location	M'ment	Approx Age
Approx age of oaks based on Royal Forestry Society and Hungerford Virtual Museum advice.			
1 Oak	Drill.Obstinate.Laminate	3.5m -	185 yrs



2&3 Oaks	Stuffing.Essays.Published	(2) 2.6m, -	135yrs
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4,5&6 Oaks

Fishnet.Things.Pushover



13 Oak

Parked.Shared.Cubs



7 Oak

Pizzeria.Reason.Gloves



14 Not recorded

15 Oak

Shapeless.Shout.Destiny



8 Oak

Working.Royally.Segmented



16 Oak

Stubborn.Frown.Trek



28 Oak

Wasps.Hunter.Market



29 Oak

Motivates.Puncture.Tougher

1.90. -

100yrs



A row of 10 trees edging Lodge Road – trees 29-39.

39

Dabble.Expiring.Rainy



9.7 Rare Flora

Other significant features along these verges include a Roadside Nature Reserve (NRR187) which spans some one third of a mile, which includes 15 mature Oaks and a mature Ash. It is also the home to Sulphur Clover, and numerous species of wildlife. There is also a pond located very close to What Three Words ///Happening.Moving.Drama which would also be at risk

Hundred Lane especially is known as an area where there are very important areas of rare botany. A Level 6 botanist familiar with the area wrote to East Pye Solar prior to submission saying that full botanical surveys needed to be carried out by, at minimum, a Level 5 Botanist. However East Pye solar has not acknowledged this in its submission nor has it undertaken any botany surveys in the area.

Lodge Road/Hundred Lane/Carpenter's Walk/Prangle Lane area of tracks contains the best colony of Dyer's Greenweed in Norfolk, and IS THE ONLY spot where the notable trio of Dyer's Greenweed, Sulphur Clover and Spiny Restharrow, *Ononis spinosa* grow (TM1788/1888).

- Sulphur clover is a scarce plant in GB, and on the Red Lists for GB (Endangered) and England (vulnerable). Road verges are the major habitat for this plant (perhaps 95% of cases), and **South Norfolk** is one of its strongholds, supporting around 20% of the national population
- It often grows in narrow strips along a verge, perhaps 50cm in width, which makes it particularly vulnerable to road widening or pressure from large vehicles.
- The area is also home to Norfolk's major communities of the locally scarce
- *Greenweed/Petty Whin*, *Genista tinctoria*, a strikingly beautiful low-growing broom, which is categorised as Endangered on the GB Red List.

It is essential that full botanical surveys are undertaken prior to any DCO decision

Other noteworthy verge species include:

- Pepper saxifrage, *Silene silaus*, which is Endangered on the GB Red List, at Lodge Road/Hundred Lane/Carpenter's Walk/Prangle Lane area,
- Crosswort, *Cruciatella laevipes*, which is Near-threatened on the England Red List, at Wood Lane/Tyrrell's Wood (TM2089)
- Bussey's Loke/Fylands Road/Saxlingham Green/Wash Lane area, Wood Lane /Tyrrell's Wood, Woodton Road, Market Land

In some cases the designation Roadside Nature Reserve protects specific verge stretches, but in our opinion the area is under-designated and a wider area **should be protected in the Hundred Lane/Prangle Lane area**). These unploughed verges and their adjoining ditches and hedges are a vital living heritage, as some of the last remaining links back to the pre-industrialised and even medieval/prehistoric agriculture once practiced in the East of England, and to the rich natural tapestry which it supported and jostled with in a pre-chemical age.

Field edges are also sites of concern, and as they are currently less well documented than verges there is an equally pressing need for survey before any irreversible changes take place. For example, Prangle Lane track, which looks like it may be affected by the scheme, is in effect a field edge of great importance, while the field entrance at Market Lane RNR is a highly valuable and irreplaceable habitat. *Report Attached as part of full BEPS-Great Moulton Representation*

9.8 Roadside Nature Reserves

Located on Frith Way, Great Moulton - this has not been surveyed by East Pye and not mentioned in their targeted consultation regarding the removal of flora and fauna from Frith Way

9.9 Biodiversity Net Gain (BNG)

BNG metrics routinely undervalue the biodiversity already present on working farmland, treating complex ecological systems as if they begin from a low baseline. This approach fails to reflect the real ecological richness of the East Pye landscape, where protected species, hedgerows, ponds, and priority habitats are already established.

The application provides no BNG baseline, metric, or evidence of how ecological enhancement would be achieved. In a sensitive area containing protected species and priority habitats, this omission creates a clear risk of net biodiversity loss and does not meet national expectations for measurable ecological improvement.

9.10 Conclusion

The Oxford EN010147 request did not accept broad ecological assurances at face value. It asked for species-specific survey methodology, monitoring protocols, compensation strategies, LEMP updates, remedial-action triggers, consultees and tree protections. East Pye should provide the same level of specificity for the ecological receptors around Land Parcel 1 and the wider Great Moulton/Tivetshall/Wacton cluster.

East Pye should provide a receptor-led ecological assessment showing how bats, birds, great crested newts, hedgerows, trees, ditches, dark corridors and field-edge habitats would be affected by the combined infrastructure package: substations, BESS-related infrastructure, fencing, access routes, lighting, noise, drainage, cable trenching, construction compounds and maintenance activity.

For barbastelle and other light-sensitive bats, the issue is whether the functional network of commuting routes, foraging corridors, dark skies and roost-supporting habitat remains intact. If East Pye relies on mitigation or licensing, it must demonstrate that there is no satisfactory alternative to the selected location and that favourable conservation status would not be undermined.

Chapter 10: Water Environment

10.0 Introduction

Great Moulton sits within a sensitive rural water environment, with shallow groundwater, permeable superficial deposits in places, agricultural ditches, drains, small watercourses and private water supplies that may depend on local recharge and groundwater movement. In this context, the protection of groundwater, surface water, private drinking water supplies and downstream watercourses is a critical planning consideration.

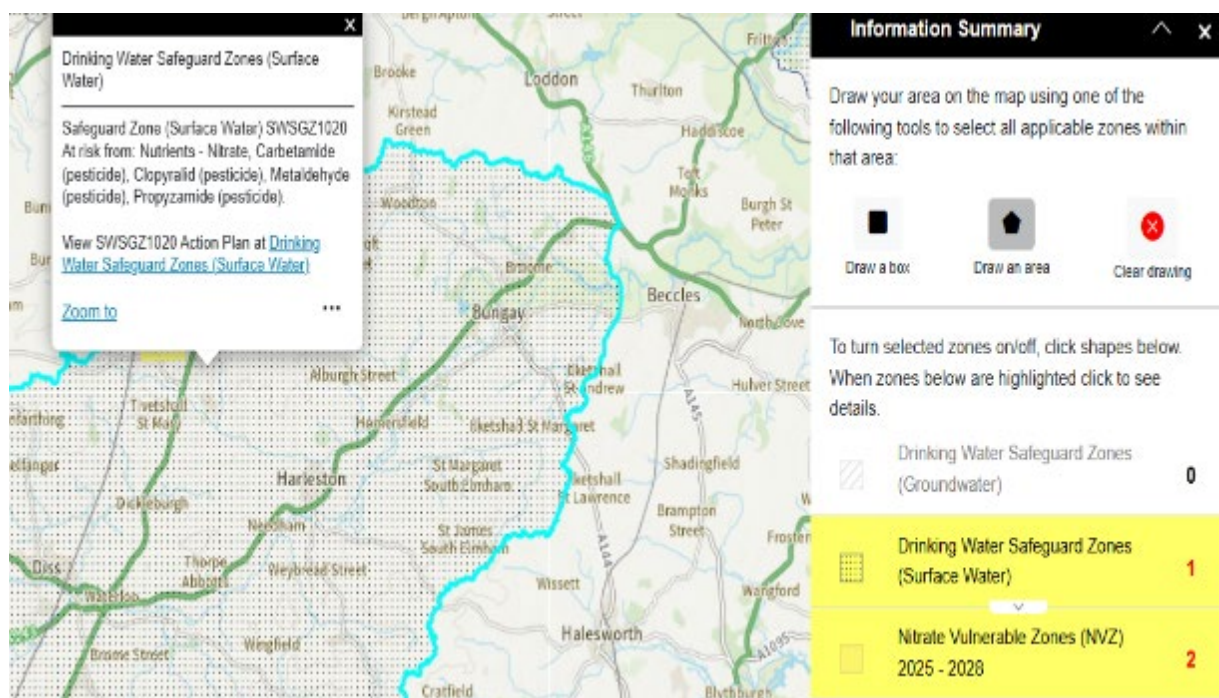
The proposed East Pye development would introduce large-scale ground disturbance, trenching, cabling, access tracks, foundations, hardstanding, substations and associated drainage infrastructure. These works have the potential to alter surface-water runoff, change infiltration patterns, increase sediment mobilisation and create pollution pathways unless they are assessed and controlled with site-specific evidence. This is particularly important where homes and farms rely on private wells or boreholes and where local drainage features connect into wider catchments.

East Pye has prepared an Environmental Statement Chapter 9 on the Water Environment and a Water Resource Assessment. However, the issue is not simply whether water has been mentioned. The key question is whether the assessment provides sufficient property-specific, site-specific and enforceable evidence to demonstrate that private water supplies, groundwater, ditches, watercourses and downstream receptors will not be harmed during construction, operation, maintenance or decommissioning.

10.1 Water Protection Must Be Demonstrable

Water protection is not a minor technical matter to be left to later design. The Water Resources Act 1991 makes it an offence to cause or knowingly permit polluting matter or solid waste to enter controlled waters. The Water Framework Directive framework and related domestic water policy require water bodies to be protected against deterioration. Environment Agency guidance also recognises the importance of groundwater source protection zones, aquifers and risk-based controls where activities may create pollution pathways.

South Norfolk policy also recognises that parts of the district contain groundwater source protection zones and principal and secondary aquifers, and that developers must be mindful of changes in Environment Agency definitions and seek appropriate advice. It is therefore not enough for East Pye to rely on generic construction management measures. The DCO examination should require clear evidence that the scheme will avoid deterioration, protect groundwater and surface water, and secure effective pollution-prevention controls before works begin.



10.2 Rivers, Streams, Ditches, Culverts and Local Drainage Pathways

Great Moulton's local landscape contains a network of ditches, drains, culverts, springs and small watercourses, the eastern side of the parish, including the East Pye site, forms part of the headwaters of the Starston Brook (also known as Starston Beck). Based on local drainage evidence, parts of the parish appear to drain towards different catchments, including watercourses associated with the Waveney a major river system forming the Norfolk–Suffolk border. and the Tas system which flows south of Norwich and eventually joins the River Yare. This means the parish contributes to two distinct hydrological systems. That means pollution, sediment release, altered runoff or drainage failure at the development site could have consequences beyond the immediate field parcels

This network flows eastwards through Starston and Harleston before joining the River Waveney, The upper reaches around East Pye have very low dilution capacity, meaning any contaminants introduced here travel quickly into the Waveney catchment.

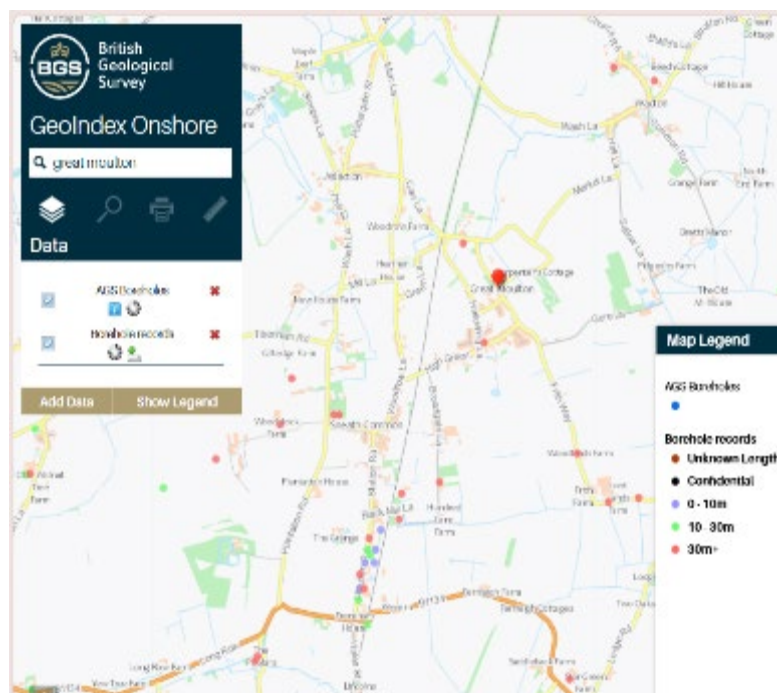
The western side of Great Moulton drains into small tributaries that feed the River Tas, which flows south of Norwich and eventually joins the River Yare. This means the parish contributes to two distinct hydrological systems, both of which rely on clean headwaters and natural infiltration through permeable soils.

East Pye's assessment should therefore demonstrate how trenching, piling cable, soil compaction, hard standing and operational drainage would affect these local flow paths. Explanations of how culverts, ordinary watercourses, field drains and ditches will be protected, maintained and monitored.

If these details are deferred to later management plans without fixed standards, the Examining Authority cannot be confident that the water environment has been properly assessed or that harm will be prevented.

10.3 Flood Risk, Runoff and Soil Compaction

The concern is not that flooding will automatically occur, but that East Pye must demonstrate, through site-specific hydrological and drainage evidence, that the development will not increase flood risk to nearby homes, farmland, ditches, culverts, private water supplies or downstream watercourses. The proposal may alter how rainfall moves across the land. Solar panels can concentrate rainfall along drip lines, while construction traffic, storage areas, haul routes and heavy plants can compact soils and reduce infiltration. Hardstanding, substations, battery infrastructure, access tracks and temporary construction compounds can also increase localised runoff if drainage design is not properly evidenced.



The assessment should address the combined effect of solar arrays, grid infrastructure, substations, cabling, construction routes and any BESS-related drainage, rather than treating each element in isolation.

10.4 Public Water Supplies, Aquifers and Groundwater Protection

Public water resources in the region rely in part on groundwater bodies and aquifers. Where chalk, sand or gravel deposits are present Contaminants introduced may move more readily than in less permeable ground, particularly where construction creates new preferential pathways. Pollution risks may arise from fuels, oils, concrete washout, sediment, firewater, transformer oils, drainage failures or failures in bunding and containment systems.

East Pye should therefore provide clear evidence that the development will not create unacceptable risks to groundwater quality or water-resource protection, including details of pollution-prevention measures, drainage design, emergency containment, monitoring, and controls for construction, operation and decommissioning.

We propose that where these plans are left to later, the DCO should include enforceable requirements that set clear standards, triggers, inspection duties and approval mechanisms.

*Anglian Water: The region's **chalk, sand, and gravel aquifers** have **high permeability***

10.5 Private Drinking Water Supplies

Private water supplies are a central concern for Great Moulton. Many rural homes and farms rely on wells, boreholes or other private sources for drinking water, livestock, domestic use and agricultural activity. Such supplies can be shallow, unmapped in public records, variable in construction quality and vulnerable to changes in groundwater flow, recharge, contamination pathways and construction disturbance.

East Pye, although submitting a water resource assessment, what the assessment does not appear to provide is a sufficiently transparent, property-specific and verifiable assessment of each potentially affected private supply. East Pye should be required to identify the location, type, depth, use, dependency and vulnerability of relevant private water supplies. Assessment of possible impacts from trenching, piling, cabling, foundations, compaction, drainage changes and pollution events; and secure baseline testing, construction monitoring, emergency response measures and post-construction monitoring.

This is particularly important where residents have identified private supplies such as wells in the area of The Maltings, Frith Way and Lodge Lane. These examples should be treated as local evidence requiring investigation, not as a complete or final list. Without this level of assessment, residents and the Examining Authority cannot know whether private water supplies may be affected, whether mitigation is adequate, or who would be responsible if supply quality or quantity changed during or after construction.

10.6 Foul Drainage, Welfare Facilities and Pollution Prevention

East Pye should also explain how foul drainage, welfare facilities and temporary construction drainage will be managed. If connection to a public sewer is not available or capacity is uncertain, sealed systems, licensed removal and robust pollution-prevention controls must be secured. Any reliance on later agreement should be supported by clear requirements so that foul drainage cannot become an unmanaged risk to groundwater or nearby ditches.

10.7 Overview

Oxford EN010147 asked for further data evidencing the effectiveness of drainage mitigation. East Pye should be tested even more rigorously because Land Parcel 1 combines substations, BESS-related infrastructure, access routes, cable trenches, construction compounds, solar arrays, private water supplies, shallow groundwater concerns and possible firewater runoff pathways.

East Pye should not split water, ground conditions, drainage, fire safety and private supplies across separate chapters without a single source-pathway-receptor assessment. The Environmental Statement should show how construction, operation and decommissioning could affect the same receptors through excavation, compaction, piling, trenching, altered

runoff, field drains, contaminated sediment, transformer oils, firewater, maintenance activity and extreme rainfall. East Pye should provide a cumulative groundwater, private water supply and contamination risk assessment before consent. It should include baseline testing, identified private supplies and abstractions, hydrogeological pathways, drainage design, oil containment, firewater containment, emergency response, alternative water supply commitments, monitoring and a comparison with alternative locations that would reduce risk

Chapter 11: Cultural Heritage

11.0 Introduction

Great Moulton's cultural heritage reflects continuous settlement and land use from prehistoric period to the present. Its significance lies in the intact rural setting, historic routeways, and field patterns that preserve the medieval footprint of Little Moulton. The East Pye proposal would introduce large-scale industrial infrastructure into this sensitive landscape, causing substantial harm to the historic environment and diminishing the community's ability to understand and value its heritage.

11.1 Dark Skies and Tranquillity

Great Moulton currently sits at approximately Bortle 4.5, "meaning our night-time environment retains meaningful rural darkness but is already under pressure from surrounding settlements."

East Pye have used the Use the CPRE Tranquillity Map & CPRE Light Pollution and Dark Skies Plan, with the following outcomes:

- Site 1 is towards the middle of the tranquillity spectrum, within a relatively dim area,
- Site 2B lies within one of the darkest night-sky areas and this northern field has higher tranquillity than much of Site 2.
- BESS Site is towards the middle of the tranquillity spectrum to be relatively dim.

Accepting that Site 1 and 2 both have a rural perceptual value, open views, expansive skies and relative darkness, the introduction of industrial lighting associated with the proposed solar/BESS compound would significantly increase skyglow, erode tranquillity, and shift the area toward a suburban night-time character. We would submit that this represents a material harm to rural amenity, landscape sensitivity, and wildlife behaviour, and is inconsistent with policy protections for rural tranquillity."

We conclude, the issue is not whether the area is completely untouched; it is whether placing the National Grid Substation, Project Substations, BESS-linked infrastructure, grid connection infrastructure, access tracks, fencing, cameras and lighting into this landscape would therefore not be a neutral addition to an already urbanised landscape, but a material intrusion into an area whose darkness, openness and tranquillity are expressly recognised in the baseline material. Until receptor-specific skyglow modelling, cumulative lighting assessment and

enforceable lighting limits are secured, the assessment of effects on dark skies, tranquillity, rural amenity and recreational experience should be treated as incomplete and the harm should carry significant weight in the Examination.

11.2 Great Ellingham Dark Sky Discovery Attleborough

Great Ellingham Dark Sky Discovery Site directly, its designation and sensitivity are publicly documented. The ES has not assessed it, therefore no skyglow modelling would have been undertaken. This scheme introduces regional skyglow and night-time industrial activity into the same low-light landscape, reducing horizon darkness and tranquillity essential to the Dark Sky Discovery designation. The Planning Inspectorate should consider that a night-time baseline evidence, lighting plans, receptor-specific modelling, cumulative assessment with substations and BESS infrastructure, and enforceable lighting limits be secured through the DCO. Until that is provided, the conclusions of acceptable landscape and visual impact should be treated as incomplete.

11.3 Landscape Sensitivity to Development

South Norfolk's Landscape Sensitivity and Susceptibility evidence identifies Plateau Farmland as highly vulnerable to large-scale energy and industrial development. The openness, long views, and lack of natural screening mean that even modest infrastructure can be visually intrusive. In areas like Great Moulton and Tivetshall, where the landscape has remained largely unchanged for centuries, these sensitivities are particularly pronounced.

For further guidance, refer to the South Norfolk District Council's Supplementary Planning Document on landscape susceptibility in relation to energy generation, storage, and transmission: <https://southnorfolkandbroadland.oc2.uk/document/37>. [South Norfolk District Council - Landscape Susceptibility in relation to Energy Generation, Storage and Transmission - SPD](#)

The lanes that surround the site, together with the footpaths and bridleways that run through it, form fundamental historic elements of both Tivetshall, Great Moulton and Wacton, they belong equally to the medieval landscape and to the present-day. It is vital that the DCO understands the importance of the characteristics of all villages as they should be addressed together in holistic way due to their unique positioning on the Great Moulton Plateau, the parish sits within the South Norfolk Claylands and is one of only three recognised Plateau Farmland areas in the district, alongside Ashwellthorpe and Hingham. This makes its landscape character unusually distinctive and highly sensitive.

11.4 Impacts to Conservation Area & Nearby Conservation Areas

Although Great Moulton lacks a formal Conservation Area, its network of historic farmsteads, cottages, and medieval landscape features forms a de facto conservation landscape. The setting of nearby Conservation Areas, including Aslacton and Wacton, relies on the integrity of the intervening rural landscape. The Great Moulton plateau forms part of the wider visual context that allows these historic settlements to be recognised as rural villages with deep agricultural origins,

Industrial-scale energy infrastructure would intrude upon this setting, introducing movement and lighting that conflict with the established character and tranquillity of the area and disrupt its wider historic character

11.5 Impacts to Grade 1 Listed Churches

St Michael and All Angels (Great Moulton) and St Mary's (Aslacton) derive significance from their visibility from within open farmland, the towers and churchyards were historically intended to be seen across long distances, acting as visual anchors for dispersed rural communities. The proposed development would interrupt historic sightlines and diminish appreciation of their architectural and communal value.

11.6 Impacts to Grade II Listed Buildings

Listed Buildings* Grade II* farmhouses and dwellings depend on their agricultural surroundings to convey historic function. Industrial infrastructure would sever this relationship, replacing a working landscape with a mechanised one, wholly at odds with their character.

11.7 Impacts to Grade II Listed Buildings

Numerous Grade II assets—farmhouses, barns, and cottages—are defined by open farmland and historic lanes. The East Pye scheme's of large-scale built form, fencing, lighting, and security infrastructure into this landscape, introducing fencing, lighting, and built form would harm their setting and obscure their historic context.

11.8 Impacts to Pre-Modern Agricultural Landscape

The Great Moulton Plateau retains an exceptionally intact medieval layout, Its ancient field boundaries, ridge-top alignment, and historic routeways preserve the footprint of the the vanished village of Little Moulton and its church site, All Saints' and the landscape's legibility allows direct interpretation of medieval origins. Frith Way, Narrowgate Way, and Hundred Lane are not merely transport routes; they are surviving components of the medieval settlement pattern of Little Moulton. Their narrow form, enclosed banks, and historic hedgerows preserve the structure of the pre-modern landscape. Altering these lanes for industrial access would damage heritage assets that contribute to the time-depth and identity of the parish. Their preservation is essential to maintaining the historic character of Great Moulton.

The proposed Industrial development would fragment this coherence and obscure features that embody centuries of continuity. For Great Moulton, the loss of this legibility represents a profound and irreversible impact on the historic environment.

11.9 Archaeology

Archaeological deposits from the Mesolithic to post-medieval periods, including the site of All Saints' Church, lies within the parish boundary are highly sensitive. As with most medieval churches, burials would have extended beyond the formal churchyard, and the wider area is likely to contain human remains, grave cuts, and associated ecclesiastical features.

Without prior investigation, groundworks risk disturbing burials and artefacts, causing irreversible harm to the parish's archaeological and cultural heritage. Listed below are views of the archaeology finds:

- NHER 28832 Roman brooch
- NHER 29017 Iron Age mirror handle
- NHER 34600 Medieval to post medieval chafing dish
- NHER 34601 Medieval and post medieval finds
- NHER 35527 Undated curvilinear feature
- NHER 35663 Late Saxon pottery and medieval coin
- NHER 35685 Medieval coin
- NHER 36608 Medieval finger ring
- NHER 39873 Roman and medieval to post-medieval finds
- NHER 40239 Roman coin
- NHER 40899 Roman coins
- NHER 49031 Iron Age silver coin
- NHER 54904 Post-medieval and Roman coin
- NHER 54788 Medieval buckle frame
- NHER 55575 Post-medieval jetton
- NHER 56289 Mesolithic to Early Bronze Age hammer/macehead

11.10 Community Identity and Well-Being

The landscape reflects the relationship between people and place, and the part it plays in forming the setting to our everyday lives. It is a product of the interaction of the natural and cultural components of our environment, preserving the medieval footprint of the villages with rare integrity. For this reason, the setting is sacrosanct in heritage terms and the overall strategy must be to conserve the Great Moulton Plateau Plateau Farmland with its expansive skies, created by its elevated landform, dominance of arable farming and lack of settlement and to preserve this landscape as set out in South Norfolk and Broadlands Document :

[LUC_2001_RPA_E2_Great_Moulton_Plateau](#) and the [Landscape - GOV.UK](#)

The East Pye proposal would impose an industrial presence on a countryside that has long retained its tranquillity and continuity, undermining both heritage and community well-being.

11.11 Human Rights Cross-Reference

The cultural and landscape changes described above also engage rights protected under the Human Rights Act 1998, notably Article 8 (right to respect for private and family life) and Article 1 of Protocol 1 (right to peaceful enjoyment of possessions).

These impacts on community identity, heritage setting, and rural character form part of the wider rights considerations discussed in **Section 18.2 – Human Rights and Proportionality**, where all residents requests a formal proportionality assessment before any conclusion on acceptability is reached.

Chapter 12: Transport and Access , Public Rights of Way and Glint/ Glare

Great Moulton, Tivetshall St Margaret and the surrounding villages are served by a predominantly rural road network, including narrow lanes, limited passing opportunities and routes with little or no dedicated pedestrian infrastructure. These roads and adjoining public rights of way are used by residents, agricultural traffic, walkers, cyclists, equestrians, service vehicles and visitors.



BHS (British Horse Society guidance) for traffic routes

“The impact on residents and traffic flow or delays for motorists will be considered but not on other road users, such as equestrians. This is a point of highway safety which is a Material Planning Consideration. Unfortunately, alternative roads for either the construction or the riders rarely exist, but an off-road route, most commonly using a field edge alongside the road, may be negotiated for non-motorised users and compensation paid by the developer to the owners of the land over which it passes, for the duration of the unusual traffic period. This is only likely to occur where there is a high number of local riders to justify it, perhaps between a large livery yard and a bridleway. Alternatively, where verges are adequate, mowing and flattening them may provide a refuge strip for equestrians.

Drivers should be reminded of the highway code and BHS guidance to pass horses at 10mph, by at least 2m.

In summary, a Traffic Management Plan should include the safety of users of rights of way both on and adjacent to the site and on roads used in the locality. It may be appropriate for construction traffic to be restricted to:

- *Limited hours and / or days of the week so that equestrians have options to avoid increased traffic*
- *Limited routes, so roads most important to equestrians are avoided.”*

East Pye has assessed construction and decommissioning traffic in ES Chapter 11 and has submitted outline management plans addressing construction, operational traffic and public rights of way. The Transport Assessment identifies the strategic abnormal-load approach via the A140/B1134 Station Road corridor and provides assumptions for construction traffic movements. Lodge Road is expressly assessed as **Link 16**.

BEPS-Great Moulton therefore does not contend that transport assessment or strategic routing information is absent. The issue for the Examination is whether the submitted assumptions and

outline controls provide sufficient certainty for the most constrained local roads, individual work areas and sensitive road and PRow users.

In particular, further clarity is required regarding:

- final vehicle numbers and routing by work area;
- the relationship between the strategic AIL route and local construction access;
- swept-path requirements and protection of verges, structures and road edges;
- interaction with the railway and any level-crossing constraints;
- temporary road or PRow closures and traffic-management controls;
- construction-worker traffic;
- continued access for residents, farms, deliveries and emergency services; and
- the relationship between Station Road, Lodge Road, Frith Way and the proposed permanent crossing of Hundred Lane / Great Moulton RB19.

The concern is therefore not that East Pye has failed to identify a transport strategy, but whether the final local implementation of that strategy is sufficiently defined and secured for the rural roads and rights of way most directly affected.

12.1 Frith Way, Lodge Road and Station Road

Station Road, Lodge Road and Frith Way form part of the local access network serving Great Moulton, Site 1 and the adjoining BESS area.



East Pye's Transport and Access assessment includes Lodge Road as **Link 16**. The baseline data identify relatively low traffic flows on this link compared with the B1134 and other principal routes, reflecting its rural character [APP/6.1.11; APP/6.3.11.1].

The Applicant's transport material also identifies the **A140/B1134 Station Road corridor as the principal strategic approach for abnormal indivisible**

loads and construction access to the western part of the Scheme. This is an important clarification and should be acknowledged.

However, identification of the strategic approach route does not by itself explain how traffic will be distributed once vehicles leave the principal highway network and enter the more constrained local road system serving the individual work areas.

The application documents show that Site 1, the BESS and associated grid infrastructure interact with local roads, construction accesses and public rights of way in this area. Great Moulton FP12, FP13, FP14, RB18 and RB19 are among the routes identified within or adjoining Site 1 and the BESS area [APP/7.8; APP/2.7].

Earlier site-selection material also refers to access considerations involving Station Road, Lodge Road and Frith Way during the evolution of the Great Moulton substation options [APP/7.20]. The final Scheme additionally introduces a crossing of Hundred Lane / Great Moulton RB19, which the Applicant's PRow evidence identifies as both a haul-route crossing and permanent maintenance access.

This makes it important to distinguish between:

- roads forming part of the principal construction or AIL route;
- roads used for access to particular work areas;
- roads affected by temporary traffic management or adjoining works;
- routes affected by displaced local traffic or worker movements; and
- permanent access arrangements required once construction is complete.

BEPS-Great Moulton therefore asks for a concise, location-specific access and traffic schedule covering Station Road, Lodge Road, Frith Way and Hundred Lane / RB19.

For each route, that schedule should identify:

- the construction accesses and work areas served;
- the anticipated vehicle types and approximate movement numbers;
- whether abnormal indivisible loads are expected;
- any required swept-path works, widening, verge protection or temporary highway alterations;
- the anticipated duration and phasing of restrictions or traffic-management measures;
- any interaction with the railway or level-crossing arrangements;
- the relationship with affected PRow, including FP12, FP13, FP14, RB18 and RB19;
- arrangements for residents, agricultural operations, deliveries, school transport and emergency services; and
- the DCO Requirement, certified plan or management document through which the relevant control would be secured.

This would not require a new transport assessment. It would draw together information already dispersed across the Transport Assessment, Access and PRow Plans, traffic-management

documents, site-selection material and Works Plans so that the practical consequences for the Great Moulton road network can be understood.

Of particular importance is the permanent crossing of Hundred Lane / RB19. The Applicant should identify precisely what infrastructure that access is intended to serve, why it is required in addition to the Station Road/Lodge Road/Frith Way access arrangements, the anticipated operational traffic using it and whether it remains after decommissioning of the solar and BESS elements.



12.3 Construction, Replacement and Decommissioning Traffic

The Scheme has an anticipated operational life of approximately 60 years. East Pye states that routine operational traffic would normally be limited. However, the application also provides for substantial periodic replacement activity during that period.

The Applicant's Scheme assumptions include replacement of the solar PV panels, repeated replacement of BESS equipment and potential replacement of transformers and other electrical infrastructure. East Pye also identifies an average workforce of approximately 129 workers and a peak workforce of approximately 240 workers during replacement activity [APP/6.1.4; APP/7.7; APP/7.19].

East Pye's position is that the principal construction phase represents the transport worst case and that replacement activity would be materially less intensive. BEPS-Great Moulton does not suggest that every replacement cycle would reproduce the initial construction traffic levels.

The issue is instead that a 60-year project may generate repeated periods of construction-type traffic, including HGVs, staff vehicles, cranes, equipment deliveries, waste removal and potentially abnormal indivisible loads.

The Outline Operational Traffic Management Plan confirms that construction access routes would also be used for replacement activities and that any abnormal indivisible loads required during operation or replacement would be subject to later consultation and approvals [APP/7.7].

That approach provides a framework, but the Examination should be satisfied that the implications for the most constrained local roads are adequately controlled over the whole operational life of the Scheme.

This is particularly relevant to the Great Moulton infrastructure cluster because the same rural network may be required to accommodate replacement or maintenance associated with:

- solar PV equipment;
- inverters and conversion units;
- transformers;
- the BESS;
- Project Substation equipment;
- Grid Connection Infrastructure; and
- retained National Grid infrastructure.

The issue is therefore not simply the peak number of vehicles during initial construction. It is the repeated use of the same rural access network throughout the Scheme's operational life.

BEPS-Great Moulton asks the Applicant to confirm:

- which approved construction routes would be reused for replacement activity;
- whether Station Road, Lodge Road, Frith Way and Hundred Lane / RB19 could each be used;
- the circumstances in which abnormal indivisible loads may be required;
- how residents and highway authorities would be notified of substantial replacement campaigns;
- what traffic-management plan would apply to each replacement phase;
- whether PRow restrictions could be reintroduced during replacement works;
- how emergency and agricultural access would be maintained; and
- whether cumulative or overlapping replacement activities involving the solar arrays, BESS and substations are constrained so that several major replacement programmes cannot occur simultaneously without further assessment.

The same principles should apply to decommissioning.

Although the Applicant assesses construction as the transport worst case, decommissioning after approximately 60 years would itself involve substantial removal of panels, electrical equipment, cabling, fencing, tracks and other infrastructure. At the same time, the National Grid Substation and certain Grid Connection Infrastructure are presently intended to remain.

The decommissioning traffic assessment should therefore distinguish between infrastructure that will be removed and infrastructure that will remain, and should identify which access routes and permanent highway or PRow arrangements would continue to be required after the solar and BESS elements have been decommissioned.

12.4 Overall Position

East Pye has provided a strategic construction traffic assessment and has identified the A140/B1134 Station Road corridor for the principal western access and abnormal-load movements. The outstanding concern is therefore one of **local implementation and enforceable detail**, rather than absence of transport assessment.

For Great Moulton and Tivetshall, the Examination should be able to understand clearly how vehicles will move from the strategic highway network to each work area; what role is played by Station Road, Lodge Road and Frith Way; why the additional Hundred Lane / RB19 crossing is required; how PRow and local access will be protected; and how the same constrained network will be managed during construction, major replacement cycles, maintenance and eventual decommissioning.

A consolidated route-by-route and work-area-by-work-area schedule would provide that clarity and allow the Examining Authority to identify precisely which controls are secured through the DCO and associated management plans.

The scheme has an anticipated 60-year operational life. East Pye states that routine operational visits would normally be limited, but the application also provides for substantial periodic replacement activity. The solar PV panels are assumed to be replaced once, the BESS could be replaced up to five times, and transformers may require replacement during the operational period. East Pye estimates an average of 129 workers and a peak of 240 workers during replacement activity [APP/6.1.4; APP/7.7; APP/7.19].

The Applicant's position is that construction represents the transport worst case and that replacement activity would be materially less intensive. That may be reasonable at scheme-wide level, but it does not remove the need to understand how repeated replacement movements would be managed on sensitive rural links over the life of the development. The Outline Operational Traffic Management Plan confirms that construction access routes would also be used for replacement activities and that any required abnormal indivisible loads would be subject to later consultation and approvals [APP/7.7].

BEPS-Great Moulton therefore asks that the Examination confirms that the controls applied to construction traffic will also provide an enforceable framework for material replacement and decommissioning activity, including routing, HGV management, road-condition monitoring, repair obligations and protection of vulnerable road users. This is a request for continuity of control over the life of the scheme rather than an assumption that operational traffic will necessarily be significant.

12.5 Public Rights of Way and Vulnerable Road Users

East Pye identifies 84 PRow within or abutting the Order Limits: 71 footpaths, nine restricted byways and four bridleways [APP/7.8]. In the Great Moulton area these include routes through or adjoining Sites 1A, 1B, 1C, 2B and the BESS Site. East Pye's stated objective is to retain the safe operation of PRow, Boudicca Way and Via Beata, using management measures during construction and replacement activity [APP/7.8].



Public Rights of Way in Great Moulton are used by families, dog walkers, horse riders and older residents. Construction traffic would cross or run alongside these routes, reducing safety and enjoyment. These paths are part of daily life in the parish, not recreational extras.

The lanes around Great Moulton have no pavements, no lighting, and no safe refuge points. Children walk these routes daily to reach school buses, friends' houses, and recreational spaces. The proposed HGV traffic would significantly raise collision risk, reduce visibility, and create an intimidating environment for young pedestrians.

BHS (British Horse Society guidance) for solar sites.

"If bridleways or byways are alongside or through sites, care must be taken not to create a narrow corridor. Fencing can be intimidating, especially at this height, and create a need for vegetation control, or, if solid, create a drainage or poached surface problem by preventing light and air reaching the surface. A narrow corridor may also potentially create conflict from users being confined, with no 'escape space' from a threat as would be the case with an open field. The need to maintain adjacent hedges and surface vegetation so as not to further reduce the available width should also be considered, as well as vehicular access for maintenance if appropriate.

Unless the recorded width of the bridleway or byway is greater, a minimum useable width of 4m between fences is recommended, meaning fencing at no less than 5m apart to allow for the strip immediately adjacent to the fence being unusable, and with vegetation cut through the full width. This mitigates the enclosed effect of the corridor of the right of way between high fences"

Note there is no guidance for Horse Riders regarding the implications of the Health and Safety regarding moving tracker panels - this must be addressed.

The development site sits **directly opposite the children's football club grounds**, a well-used community facility where families gather, children train, and weekend matches attract high footfall. At peak times, large numbers of children cross or walk along the lane, often in groups, carrying sports equipment, and accompanied by parents with prams or younger siblings. Introducing construction HGVs onto this route creates an unacceptable safety hazard, particularly given the narrow carriageway, lack of verges, and limited sightlines.

During darker months, children and families accessing the football grounds already rely on the quiet nature of the lane to remain safe. Increased heavy-vehicle movements would remove this margin of safety entirely. The risk is heightened by the fact that children often arrive excited, distracted, or running late for training — behaviours that require a forgiving road environment, not one dominated by industrial traffic.

For Great Moulton, where community facilities are limited and the football club is a vital social and recreational hub, any reduction in safe access would directly harm children's wellbeing, independence, and participation in local activities. The proposal therefore conflicts with local and national policies requiring developments to protect vulnerable road users and maintain safe access to community facilities.

Great Moulton has no formal park, playground, or designated recreational green space. The footpaths, lanes, and quiet rural routes therefore function as the parish's only accessible outdoor areas for walking, exercise, children's play, and community interaction. Any increase in HGV traffic or loss of safe pedestrian access directly removes the only public recreational space available to residents. This elevates the significance of transport impacts far beyond simple inconvenience and represents a material loss of community amenity.

12.6 Impacts on Cyclists

Cyclists rely on the quiet, low-traffic nature of the rural lanes surrounding Great Moulton and Aslacton. These routes are narrow, winding, and lack formal passing places, meaning that any increase in HGV traffic creates close-pass hazards, forced verge exits, and heightened collision risk at blind bends.

These lanes also form part of the Via Beata, a long-distance pilgrimage and recreational route used by cyclists, walkers, and visitors from outside the parish. The tranquillity and safety of these lanes are integral to the experience of the route. Introducing construction HGVs and ongoing maintenance traffic would undermine the viability and enjoyment of this nationally recognised trail, deterring cyclists and reducing the attractiveness of the area for leisure and tourism.

The combination of narrow road geometry, increased heavy vehicle movements, and the strategic importance of the Via Beata makes the proposed development incompatible with safe and accessible cycling in the parish. The local concern is that the practical effect on walkers, cyclists, equestrians and other non-motorised users may not be captured fully by traffic-flow percentages alone. On narrow lanes without pavements or refuge areas, a relatively small number of additional HGV movements can materially alter perceived safety, ease of passage and recreational amenity, particularly where construction routes intersect with PRow or quiet lanes.

The Examination would therefore benefit from confirmation of the locations where construction or replacement traffic crosses, follows or directly affects PRow and other recognised recreational routes, together with the proposed separation, marshal, signage, speed-control and temporary-diversion arrangements. Where such measures remain for later detailed plans, the DCO should secure clear outcomes for continued safe access and reinstatement.

12.7 Glint and Glare: Roads, Dwellings and Recreational Users

East Pye has undertaken a scheme-wide glint and glare assessment. ES Chapter 18 records that reflections are geometrically capable of affecting 482 dwellings. Existing screening is predicted to significantly obstruct views for 414 dwellings, leaving 68 where effects are addressed through a combination of existing screening, terrain and embedded landscape mitigation. The Applicant concludes that the residual effects would not be significant [APP/6.1.18; APP/6.3.18.1].

That assessment provides an important evidential basis, but two matters warrant clear treatment in the Examination. First, some of the residual conclusions depend on proposed landscape mitigation. It is therefore relevant to understand the time needed for planting to become effective, the treatment of seasonal variation and the arrangements for replacement or remedial planting if screening does not establish as intended.

Second, the principal quantified receptors in the glint/glare assessment are roads, dwellings and aviation receptors. The Great Moulton area has a dense interaction between solar development, local lanes and PRow. Walkers, cyclists and equestrians can be slower moving and exposed for longer than drivers. BEPS-Great Moulton therefore asks the Applicant to explain how glint/glare effects on PRow, bridleways, restricted byways and quiet-lane users have been considered and, where necessary, how they would be mitigated from first operation.

12.8 Site 1, Site 2B and the BESS context

For Great Moulton, the relevant effect is cumulative. Site 1 is not experienced as a single component: it contains or interfaces with solar PV, the National Grid Substation, project substations, cable and grid infrastructure, access routes, fencing, lighting and mitigation land. The BESS lies immediately adjacent to this wider infrastructure context, while Site 2B is also connected to the local PRow network [APP/6.1.4; APP/7.8].

The request is therefore not for a separate EIA of each component, but for a clear explanation of how the combined visual, access and glint/glare experience of residents and recreational users has been taken into account where several elements of the scheme are seen or encountered together.

12.9 Aviation and Norfolk Gliding Club / Tibenham Airfield

Aviation is a recognised assessment topic in East Pye's application. ES Chapter 18 records consultation with Norfolk Gliding Club in relation to glint and glare, engine failure after take-off / glider launch failure and thermal updrafts. The Applicant also submitted a High Level Investigative Report addressing EFATO, thermal updrafts, wind shear and turbulence [APP/6.1.18; APP/7.27].

The glint and glare assessment identifies potential “yellow glare”, capable of temporary after-image, towards the approach path or final visual circuits of the assessed aerodromes. East Pye concludes that, with embedded mitigation and operational accommodation, the effects would be low and not significant, while noting ongoing consultation with aerodromes [APP/6.1.18; APP/6.3.18.1].

Before the issue is treated as resolved, it would be helpful for the Applicant to confirm the current position of Norfolk Gliding Club and any other relevant aerodrome operators, identify any outstanding concerns, and explain precisely how any necessary panel orientation, backtracking limits or other mitigation would be secured and maintained throughout operation.

Norfolk Gliding Club has raised detailed safeguarding concerns. The ExA should obtain the latest consultation position and ensure the final panel layout, pylons, cranes, lighting and glint/glare assumptions reflect actual local flying activity and any agreed mitigation.

12.10 Overall Position and Requested Clarification

East Pye has undertaken substantial transport, PRow and glint/glare assessment and has proposed outline management measures. BEPS-Great Moulton does not suggest otherwise. The remaining concern is whether the scheme-wide conclusions provide enough location-specific certainty for the narrow rural roads, PRow and aviation interfaces around Great Moulton, Tivetshall and the Site 1/BESS cluster.

Accordingly, BEPS-Great Moulton asks the Examining Authority to seek a concise consolidated response covering the following matters:

- the definitive construction, replacement and decommissioning traffic routes affecting Great Moulton, including the status of Frith Way, Lodge Road and Station Road;
- all access works, temporary controls and PRow interfaces in the Site 1/BESS area, with their duration and securing mechanism;

- how repeated replacement activity over the 60-year operational life would be controlled where it uses construction access routes;
- how vulnerable road users and PRow users are protected at crossings and on narrow shared rural lanes;
- how glint/glare effects on recreational users have been considered, particularly where mitigation depends on planting; and
- the final position of relevant aviation consultees and the mechanism securing any mitigation required for Tibenham Airfield and other assessed aerodromes.

A consolidated response on these points would allow the Examining Authority to distinguish matters already adequately controlled from those that may require additional definition or securing in the DCO. It would also provide residents with a clearer understanding of how the scheme would operate in practice over its full lifetime.

APP/6.1.4 - ES Chapter 4: The Scheme; APP/6.1.11 - ES Chapter 11: Transport and Access; APP/6.3.11.1 - Transport Assessment; APP/6.1.18 - ES Chapter 18: Other Environmental Matters; APP/6.3.18.1 - Glint and Glare Assessment; APP/7.7 - Outline Operational Traffic Management Plan; APP/7.8 - Outline Public Rights of Way and Permissive Paths Management Plan; APP/7.18 - Design Principles, Parameters and Commitments; APP/7.19 - Equality Impact Assessment; APP/7.20 - Site Selection Assessment; APP/7.27 - High Level Investigative Report; APP/2.7 - Access and Rights of Way Plan.

Chapter 13: Noise and Vibration

The villages of Great Moulton and the surrounding parishes are defined by their quiet, rural character. Our baseline sound levels are extremely low, often in the 20–30 dB range at night, and this tranquillity is a core part of why people live here. It contributes directly to our wellbeing, our sense of place, and the character of the wider landscape. In planning policy, rural tranquillity is recognised as an important environmental asset — and one that should be protected.

The WHO recommends keeping community noise below 50–55 dB during the day to avoid moderate to serious annoyance, and below 40 dB at night to protect sleep. They also note that sudden noise events above 60 dB indoors can wake people — a particular concern for older rural homes with limited sound insulation.

The WHO also makes clear that noise is more harmful when it disrupts a previously tranquil environment. That is exactly the situation here. Yet East Pye has not demonstrated how these impacts will be avoided or mitigated. The submission does not explain how the survey work will inform LOAEL and SOAEL thresholds, nor how the developer intends to ensure that SOAEL is avoided at all receptors, despite the NPSE requirement to prevent significant adverse effects.

13.0 Core Position

BEPS-Great Moulton does not contend that East Pye has undertaken no noise assessment. The Applicant has submitted ES Chapter 12 – Noise and Vibration [APP/6.1.12], Figure 12.1 Sound and Meteorological Survey Locations [APP/6.2.12.1], Figure 12.2 Noise and Vibration Sensitive

Receptors [APP/6.2.12.2], Appendix 12.1 Baseline Sound Survey Report [APP/6.3.12.1], Appendix 12.2 Noise Modelling and Calculations [APP/6.3.12.2], the Outline Operational Environmental Management Plan [APP/7.2], and the Statutory Nuisance Statement [APP/7.13].

The Applicant's case is that, with embedded mitigation, no significant noise or vibration effects are anticipated. The issue for Great Moulton is whether that conclusion is sufficiently robust for a very quiet rural receiving environment containing the proposed National Grid Substation, a 400 kV Project Substation, the BESS, distributed inverters and transformers, cooling plant, switchgear and associated operational infrastructure.

The independent Oakridge review does not assert that unacceptable effects have already been demonstrated. Its more important conclusion is that the information presently disclosed does not allow unacceptable effects to be confidently ruled out. That distinction should be retained.

The ExA does not need to assume harm; it needs to be satisfied that the Applicant's conclusion of no significant effect is supported by representative baseline data, transparent modelling inputs, justified acoustic-character corrections and enforceable mitigation.

For Great Moulton and Tivetshall, those matters are particularly material because the operational assessment depends on assumptions about residual sound, masking by road traffic and BESS broadband noise, reduced fan duty, indicative plant specifications and the performance of a substantial acoustic barrier. Small changes to those assumptions could materially alter the BS 4142 outcome at the nearest high-sensitivity dwellings.

13.1 The Existing Acoustic Environment Is Rural, Not Urban

East Pye's own landscape evidence establishes the relevant context. APP/6.3.7.2 identifies the Great Moulton Plateau Farmland landscape character area as rural and open. APP/6.1.7 further states that the BESS and substations would **increase urbanising influences by introducing forms with industrial characteristics into a rural and relatively open landscape**. The noise assessment should therefore be read against the Applicant's own description of the receiving environment rather than against assumptions appropriate to a busier or already-industrialised setting.

The Applicant's Non-Technical Summary [APP/6.4] reports scheme-wide night-time background levels ranging down to 18 dB LA90.

Again The Applicant has made it as difficult as possible, we were unable to locate the actual maps showing where the monitors had been placed.

East Pye have stated that the typical night-time background sound levels of approximately 28dB are low background levels in which tonal, low-frequency or otherwise distinctive plant noise can be perceptible even where the absolute A-weighted level is modest. BEPS-Great Moulton would submit that every aspect of the operational noise will rely on masking and representativeness assumptions that require particularly careful proof in a quiet rural

environment. **We would ask the ExA not to lose sight that this is not for solar panels, it is for a major infrastructure hub, very different.**

13.2 East Pye's Baseline Sound Survey What Was Done

An attended surgery was carried out across the scheme. **Oakridge notes that 51 monitoring positions were used, generally for periods of about six to eight days.** That is a substantial survey programme and should be acknowledged

For Great Moulton the technical question is not simply whether measurements were taken. It is whether those particular measurements represent the residual acoustic conditions at the nearest and most affected dwellings during the quiet periods that matter most to a BS 4142 assessment.

13.3 Monitoring Position, Road-Traffic Influence and Screening

This is one of the most important points arising from the Oakridge review. East Pye's survey was largely unattended. Oakridge records that the Applicant's site set-up observations described sound at MP41, MP42, MP43 and MP44 as being dominated by vehicular movements. East Pye were unable to identify which sources were responsible for changes in measured sound level, due to unattended monitoring for the majority of the period.

Oakridge also notes that no baseline octave-band or one-third-octave-band survey data were published for these positions. It is therefore not possible from the disclosed information to test whether road traffic actually dominated the frequency spectrum during the quietest night-time periods, or whether it merely affected particular periods of the survey. This matters because the operational assessment later relies, in part, on existing broadband sound to mask proposed plant noise.

The position of a sound level meter can materially affect the baseline that is subsequently attributed to a dwelling, without the underlying site photographs and geometry it would be impossible to ascertain the correct positioning of the monitors. When monitoring positions are used as proxies for several dwellings, the ExA should be shown the precise microphone coordinates, microphone height, distance to road centreline, distance and orientation to the represented dwelling, intervening buildings/hedges/bunds/topography, and the corresponding line-of-sight and propagation path from the proposed plant to each dwelling.

That information is particularly important around Great Moulton because the proposed sources and the existing traffic sources are not co-located. A measurement position influenced by traffic on Broadgate Lane or Station Road may not reproduce the quietest residual environment at a dwelling when traffic subsides, while the proposed electrical plant could remain operational throughout the night. In that circumstance, use of a traffic-influenced baseline may overstate the degree of masking available to the new source.

13.4 Why the Great Moulton Monitoring Results Require Caution

East Pye's own reported night-time background values at MP41–MP44 are already low. The assessment therefore turns on relatively small differences between specific sound and background sound. Under BS 4142, a few decibels of character correction or a small change in representative background level can materially change the assessment outcome.

Oakridge's criticism is therefore methodological rather than rhetorical: the numerical values measured at the logger positions may be correct, but the decision-maker still needs to know whether those values – and especially the residual spectral character on quiet nights – are representative of the nearest affected homes.

13.5 Operational Noise Modelling – Indicative Plant and Layout

East Pye's operational assessment is based on indicative plant, example equipment data and an indicative layout because final specifications are not yet available. Although conservative assumptions are used in some respects, the BESS assessment also depends on assumptions concerning fan duty, plant selection and future attenuation.

Oakridge identifies this uncertainty as material. Final plant numbers, type, location, source height, directivity and operating regime could alter both overall noise levels and acoustic character. This is important because BS 4142 considers not only the A-weighted level, but also tonality, intermittency, impulsivity and other distinctive characteristics.

The Outline OEMP [APP/7.2] requires noise at sensitive receptors not to exceed the levels assessed in ES Chapter 12. However, detailed-design verification should reproduce the worst-case operating conditions, source spectra and acoustic-character assumptions used in the ES, rather than relying solely on a broadband numerical limit.

13.6 Dependence on Acoustic Screening

Appendix 12.2 assumes a 4 m high acoustic barrier around relevant parts of the BESS. Oakridge identifies this as a fundamental part of the mitigation rather than an incidental measure.

Predicted receptor levels therefore depend on the barrier's height, continuity, mass, absorption, position and relationship to final source heights and ground levels. Changes to the plant layout or barrier design could materially change the predicted attenuation. This is particularly relevant to low-frequency noise, for which barrier performance can be less effective. The final design should therefore secure measurable acoustic performance, including frequency-specific attenuation where necessary, and demonstrate that gates, access points, drainage openings and changes in ground level do not compromise the assumed screening.

13.7 Low-Frequency Noise

A principal concern identified by Oakridge is not the absence of assessments, but the lack of transparent disclosure of the plant source spectra underlying it.

This matters because BESS cooling equipment, inverters and transformers can generate significant lower-frequency sound, which propagates and is screened differently from higher-frequency noise.

The reliability of East Pye's conclusions therefore depends upon source spectra, operating assumptions and modelling inputs that cannot presently be independently verified.

The ExA should require the origin of the one-third-octave sound-power data, whether manufacturer information, measurements or derived data, to be clearly identified.

13.8 Tonality, Transformer Hum and BS 4142

East Pye recognises that high-voltage transformers can produce a 100 Hz hum but applies no tonal correction, principally because it considers that transformer noise would be masked by broadband noise from BESS equipment and because suitable plant or attenuation could be selected at detailed design.

Oakridge questions whether that conclusion can be verified without source and baseline spectral data.

The masking assumption may also change with operating conditions. If BESS fans operate at reduced night-time duty while transformers remain energised, the broadband masking sound may decrease while the tonal source remains.

Given recorded background levels of approximately 28–31 dB LA90 at MP41–MP44, even a modest BS 4142 character correction could materially affect the rating level. Credible night-time operating combinations should therefore be assessed and any decision not to apply a tonal correction should be supported by transparent spectral or audibility evidence.

13.9 Cumulative Operational Noise – Great Moulton Grid Cluster

Residents will experience the National Grid Substation, Project Substation, BESS, solar conversion equipment and associated plant as a single operational sound environment.

East Pye has modelled multiple sources, but the final cumulative position remains dependent on plant and layout assumptions that are not yet fixed. The assessment should therefore demonstrate that all simultaneously operable sources are bounded, including transformers, reactors, auxiliary equipment, BESS cooling and inverter plant, conversion units, switchgear and relevant standby equipment. **Particular attention should be given to operating conditions**

where one source can no longer be relied upon to mask another, for example where BESS fan duty falls at night while the transformer plant remains energised.

13.10 Construction, Replacement and Decommissioning Noise and Vibration

East Pye concludes that construction noise and vibration can be controlled through mitigation. For Great Moulton, however, the relevant issue is the potential local concentration of works around Site 1 and the BESS. Substation construction, piling, cable works, compounds, OHL works, BESS installation and HGV movements may overlap.

The CEMP should therefore assess and control the local cumulative worst case for nearby Great Moulton receptors rather than relying only on scheme-wide assumptions that construction activity will move between sites. Noise would travel across the Great Moulton plateau, carrying further due to the open topography and lack of competing background sound. Residents would experience disturbance inside homes, in gardens, and during outdoor activities. Older residents, shift workers, and those working from home would be particularly affected.

Similar protections should apply during major replacement and decommissioning works over the proposed 60-year lifetime. Replacement of BESS equipment, panels or major electrical plant could reintroduce substantial HGV, crane, generator and construction-type activity and should be subject to receptor-specific noise and vibration controls..

13.11 Wildlife

Most ecological literature agrees that noise and vibration impacts from solar farms are short-term and construction-led, while operational impacts are low. However, the indirect effects of habitat loss, fragmentation, altered land management often matter more for wildlife than the noise itself. Species that rely on acoustic cues, such as bats, farmland birds, and small mammals, are particularly sensitive to sudden changes in their sound environment. Repeated disturbance during construction can displace wildlife from long-established territories, and recovery is often slow or incomplete, especially where habitat structure has been altered or reduced.

13.12 Impacts on Livestock and Horses

Great Moulton contains farms, paddocks, and equestrian facilities. Livestock and horses are sensitive to sudden noise, vibration, and unfamiliar vehicle movements. Construction activity and HGV traffic could cause stress, behavioural changes, and safety risks for animals and handlers. This is particularly relevant where access routes pass close to stables, grazing fields, or farmyards.

13.13 Cumulative Noise Impacts

If multiple phases of construction overlap or if other regional energy projects proceed concurrently, Great Moulton could experience extended periods of elevated noise. Cumulative impacts are a material planning consideration, and the parish's low baseline means the threshold for significant disturbance is reached more quickly than in urban areas.

13.14 Permanent Point of Connection Substation

A further distinction is required between the temporary generating infrastructure and the National Grid Point of Connection substation.

The solar and BESS elements are proposed for a finite operational life, but the National Grid substation is intended to remain as permanent transmission infrastructure. Its transformers, reactors, cooling equipment and auxiliary plant may therefore continue operating after the solar arrays and BESS have been removed.

This has an important consequence for noise assessment. The permanent substation could leave Great Moulton with a continuing industrial electrical noise source in what is presently a very quiet rural sound environment. Transformer hum and other low-frequency or tonal components may therefore become more apparent once BESS cooling plant, inverters and other temporary Scheme sources cease operating and can no longer provide the masking relied upon in parts of the Applicant's assessment.

The ExA should therefore ensure that the National Grid substation is assessed as a stand-alone permanent noise source, including credible night-time operation, tonal and low-frequency characteristics and the situation following decommissioning of the remainder of the Scheme. Any operational noise limit should continue to apply for the full lifetime of the retained substation and should not depend upon masking from infrastructure that will ultimately be removed.

Chapter 14: Air Quality

Great Moulton and the surrounding villages are rural settlements with limited existing industrial activity and generally good air quality. The principal air-quality effects of the East Pye Scheme are therefore likely to arise from construction traffic, earthworks, plant, dust and particulate emissions, with further temporary effects during decommissioning.

The concern for BEPS-Great Moulton is not that any single activity will necessarily cause unacceptable pollution, but whether the combined scale, duration and proximity of construction works have been adequately assessed and controlled for residents living close to rural lanes and construction areas.

14.1 Construction Phase

Construction represents the principal air-quality risk.

Potential effects include:

- diesel emissions from HGVs, generators and construction plant;
- dust from excavation, cable trenching, soil stripping and movement;
- resuspension of dust from temporary access tracks and road surfaces;
- emissions associated with road, verge and access works; and
- cumulative effects where several parts of the Scheme are constructed concurrently.

These impacts are particularly relevant where construction routes pass close to homes and where repeated HGV movements occur on narrow rural roads.

BEPS-Great Moulton considers that mitigation should therefore be secured through enforceable controls covering dust suppression, wheel washing, road cleaning, vehicle routing, idling, construction compounds and monitoring where necessary.

14.2 Operational Phase

Routine solar operation is unlikely to generate substantial air-quality emissions. The more relevant issues are continuing maintenance traffic and the possibility of replacement or refurbishment works during the proposed operational life of the Scheme.

This is particularly important because the draft DCO contains a broad power to “maintain”. PINS has advised that this definition should not permit works capable of creating materially new or different environmental effects.

BEPS-Great Moulton therefore submits that replacement or refurbishment of batteries, inverters, transformers, cables, drainage infrastructure or other major equipment should not automatically be treated as routine maintenance where the resulting traffic, noise, waste,

pollution or other environmental effects fall outside those assessed in the Environmental Statement.

The definition of “maintain” should be tightly controlled accordingly.

Uncertainty regarding drainage works and limits of deviation is also relevant where runoff, firewater containment, private water supplies and watercourse protection may be affected.

14.3 BESS Fire and Thermal Events

The BESS introduces a separate low-probability but potentially serious air-quality risk.

A thermal runaway or fire event may generate smoke, gases, volatile organic compounds, fine particulates and other combustion products. The consequences depend upon battery chemistry, fire behaviour, weather conditions and the effectiveness of emergency containment measures.

Given the proximity of rural receptors, farmland and public rights of way, BEPS-Great Moulton considers that emergency planning, atmospheric emissions, evacuation arrangements and firewater containment must be clearly addressed and secured.

14.4 Rural Fire-Spread Risk

The BESS is surrounded by agricultural land, hedgerows and vegetation.

During prolonged dry conditions, a fire could therefore create a secondary risk of spread into surrounding crops or vegetation. Access for emergency services and the ability to prevent fire propagation beyond the BESS compound should form part of the final fire-safety arrangements.

This issue should be assessed alongside the potential release of smoke and combustion products.

14.5 Dust and Agricultural Land

Construction dust may also affect adjoining agricultural land, vegetation and field margins.

The principal requirement should be to prevent avoidable deposition through effective dust control, particularly during soil stripping, excavation, cable installation and periods of dry weather.

Protection of agricultural soils should also be coordinated with the Soil Management Plan so that dust-control measures do not themselves damage soil structure or drainage.

14.6 Decommissioning

Decommissioning would create a further period of construction-type disturbance, including HGV movements, dismantling, excavation, waste removal and dust generation.

Although this would occur many decades after construction, the environmental controls should be established now through the DCO and decommissioning requirements.

BEPS-Great Moulton therefore submits that decommissioning arrangements should secure appropriate controls for dust, vehicle emissions, waste handling, soil disturbance and protection of nearby residents.

14.7 BEPSGreat Moulton Submission

BEPS-Great Moulton does not suggest that the Scheme will necessarily cause unacceptable ambient air pollution during normal operation.

The principal concern is whether the combined construction, maintenance, replacement, BESS emergency and decommissioning effects are adequately bounded and secured for a rural community with limited existing industrial activity.

The Examination should therefore ensure that:

- construction dust and vehicle emissions are subject to enforceable mitigation;
- cumulative construction activity is properly controlled;
- the DCO definition of “maintain” cannot authorise materially different environmental effects;
- BESS fire and atmospheric-release risks are adequately addressed; and
- equivalent environmental controls apply to future decommissioning.

This version is shorter and, importantly, separates ordinary air-quality effects from the more exceptional BESS fire/emergency-release risk, which makes the argument technically stronger.

Chapter 15: Socio-Economics

The East Pye proposal represents a profound and irreversible intrusion into a landscape whose historic character is inseparable from the medieval origins of Little Moulton and the wider parish of Great Moulton. This is not simply a solar scheme; it involves large substations, extensive Battery Energy Storage Systems, transformers, hardstanding, lighting, and security infrastructure. Together, these elements would introduce an unmistakably industrial presence into a countryside that has, until now, retained its historic form, tranquillity, and sense of continuity.

15.1 Impact to Tourism

Tourism in and around Great Moulton is modest but meaningful, relying on the area's unspoilt rural character and the steady flow of walkers, cyclists, heritage visitors, and pilgrims who come specifically for the tranquillity, historic landscape and to discover our many churches many with unique features found no where else in the country/world.

Horse riders also form an important part of the visitor's use of this landscape. The quiet lanes, historic routeways, and open rural views provide a safe and enjoyable environment for hacking, attracting both local riders and those travelling from further afield. Equestrian visitors depend on calm, low traffic conditions and are particularly sensitive to noise, sudden movement, industrial lighting, and construction activity. Country sports, including clay and game shooting, together with associated gundog training and working, also form part of the rural recreation and visitor economy in the area. These activities rely on calm, undisturbed countryside conditions.

The presence of large substations, BESS compounds, and increased vehicle movements would significantly reduce the safety and appeal of the area for equestrian use, disrupt country sports and gundog work, and diminish participation across these rural pursuits, further eroding the area's countryside based tourism and rural economy.

15.2 Impact to Local Businesses

Local cafes, small hospitality providers, and rural accommodation such as bed and breakfast establishments and holiday lets depend on this visitor economy. Any transformation of the Sanctuary landscape into an industrial energy zone, particularly through the installation of substations, battery compounds, and associated lighting, risks reducing visitor numbers and undermining the viability of these small businesses. The loss of the area's distinctive medieval setting would directly affect the appeal that draws visitors here in the first place, with real economic consequences for the community. After all, visitors do not choose to spend their holidays in landscapes dominated by industrial scale energy infrastructure; they come for tranquillity, heritage, and an unspoilt rural experience.

The industrial infrastructure proposed at East Pye would sever these historic relationships. Substations and BESS compounds are tall, visually dominant, and permanent. Their operational

noise, lighting, fencing, and hard surfaces would overwhelm the subtle medieval landscape, eroding its legibility and destroying the quiet rural character that has survived for centuries. The harm is not limited to the loss of views; it is a loss of context, meaning, and the ability to understand Great Moulton and the lost village of Little Moulton within their authentic historic environment.

The cumulative effect of the proposed infrastructure is the replacement of a peaceful, historically rich rural environment with a large-scale industrial complex. Such a transformation is fundamentally incompatible with the heritage significance of Great Moulton, the sacrosanct landscape of Little Moulton's Sanctuary fields, and the modest but meaningful tourism and pilgrimage economy that depends on the preservation of their unspoilt character

15.3 Impact to Agricultural Contractors

Wacton Parish Council and Great Moulton Parish Council have both stated "Local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land" (which the site resides on a Greenfield Class 3a 100% as per the Terra Agricultural Land Classification Report). This significant development on agricultural land must prioritise "areas of poorer quality land to those of a higher quality" as being preferred.

It would therefore be prudent to assume that removing a substantial acreage of all fields around Great Moulton would have a significant impact on agricultural contractors, as it would remove a substantial portion of the best and most versatile agricultural land. This would not only affect the ability of contractors to produce crops and provide grazing but also threaten the economic and environmental sustainability of the area. The removal of fields would also lead to a loss of open countryside, which is crucial for biodiversity and the overall health of the local ecosystem. Additionally, the loss of agricultural land would have implications for food security, as the UK relies heavily on imports to meet its food needs. The government's policies and the ongoing discussions about the impact of solar energy infrastructure on farmland highlight the need to balance agricultural productivity with environmental conservation and community needs.

15.4 Impact on Rural Workforce and Agricultural Contractors

The loss of productive farmland reduces demand for local agricultural contractors, machinery hire, seasonal labour, and associated rural services. These businesses rely on consistent agricultural activity to remain viable. Converting large areas of farmland to industrial energy use disrupts the local rural economy and removes income streams that support contractors, suppliers, and small agricultural enterprises. East Pye has not assessed this economic displacement.

15.5 Impact to Home Values

It is difficult to quantify this impact but the closer to a utility solar farm and the larger the installation, the greater is the adverse impact on house values. Houses in more rural areas are

more likely to be affected than those in more urban areas, although it is difficult to quantify this effect.

A review of the global literature was undertaken and the results of one of the most careful studies, carried out in the Netherlands, was used as a basis for estimating the impact of Botley West Solar Farm (BWSF) on local house prices. BWSF is surrounded by 11,000 properties of various sorts within 1.5kms of its boundaries.

The value of all houses (January 2027 median values) within each 0.1km buffer of BWSF was calculated, up to the maximum 1.5 kms distance. The total value of all properties is over £4.9 billion.

Using the Dutch results the estimated total loss in house values at January 2027 due to the construction of BWSF will be £153.1 million, approximately 3.1% of the total value of all properties, or an average loss of £14,115 per property. Houses near to BWSF will be more affected than those farther away; for example a decrease in value of £40,475 for detached properties within 0.1 kms of BWSF, falling to £29,240 at 0.5 kms and £8,440 at 1.5kms.

Future buyers might be more reluctant to consider houses near to solar farms; thus house values may not rise as much in the future.

16.6 Impact to Home Insurance

This impact does not appear to have been addressed by the insurance companies.

16.7 Cumulative Impact of all Proposed Development

East Pye has not shown that alternatives like rooftop solar or brownfield sites were seriously considered. The project's energy benefits are likely overstated, as they are based on ideal rather than realistic output.

With the loss of the BESS (Battery Energy Storage System), East Pye cannot balance its output when the grid is full. This means the site would receive constraint payments for shutting down, offering no real value to the grid or consumers. The absence of BESS removes key benefits such as grid support and renewable integration, making the environmental and social impacts unjustified compared to the reduced energy contribution.

In summary, without BESS, the adverse impacts of the project outweigh its benefits, and this should be a major consideration in the DCO process

Chapter 16: Soils and Agriculture

Great Moulton and the surrounding area contain substantial areas of productive agricultural land, including Best and Most Versatile (“BMV”) land.

The principal issue for BEPS-Great Moulton is not simply the temporary occupation of agricultural land by solar panels, but the extent to which the Scheme places **permanent grid infrastructure and other development on higher-quality agricultural land**, together with the potential effects of construction on soil structure and future agricultural use.

16.1 Agricultural Land Classification

The Applicant's Agricultural Land Classification assessment is contained in **APP/6.3.15.1 – ES Volume 3, Appendix 15.1**. BMV agricultural land comprises ALC Grades 1, 2 and 3a.

BMV Grade 3 has now been identified for site 1 and the BESS, part of site 1 has not been evaluated, but classed as BMV Grade 2

16.2 Best and Most Versatile Land

National policy does **not prohibit development on BMV agricultural land**. Although, EN-3 provides that, where agricultural land is necessary, poorer-quality land should be preferred to higher-quality land and BMV land should be avoided where possible.

The current NPPF similarly requires decision-makers to take account of agricultural land quality and, where significant agricultural development is necessary, to use poorer-quality land where possible.

The March 2026 Land Use Framework reinforces the strategic importance of productive farmland and states that BMV farmland should be safeguarded from permanent land-use change. It does not, however, impose a prohibition on renewable-energy development on BMV land.

16.3 Permanent Grade 2 Loss at Site 1

Of particular importance is the distinction between land temporarily occupied by solar infrastructure and land permanently removed from agricultural use.

The Applicant's ALC evidence identifies Grade 2 land within Site 1, including land required for the National Grid Substation. **The Applicant records approximately 6.1 ha of permanent Grade 2 agricultural land loss associated with the National Grid Substation.**

The Project Substation and other grid infrastructure within the Site 1/BESS area also engage the BMV policy considerations where they occupy higher-quality agricultural land.

BEPS-Great Moulton submits that these permanent losses deserve greater scrutiny than temporary solar occupation because the land would not return to agricultural production following solar decommissioning where permanent National Grid infrastructure remains.

16.4 Alternatives and Site Selection

The relevant policy question is therefore not whether BMV land may ever be developed, but whether the Applicant has adequately demonstrated why **permanent infrastructure needs to occupy higher-quality agricultural land where reasonable poorer-quality alternatives may exist.**

This is particularly relevant to the National Grid Substation siting exercise.

The ExA should consider whether Options 1–4B were assessed sufficiently consistently to demonstrate that the permanent loss of Grade 2 land at Site 1B was justified by technical and environmental considerations, rather than principally by proximity, land availability or operational convenience.

16.5 Site 2

The agricultural quality of Site 2 should also be considered carefully. The Applicant's assessment records areas of higher-quality agricultural land and acknowledges uncertainty in some unsurveyed areas, including land associated with Sub-Site 2B.

BEPS-Great Moulton considers that conclusions should therefore be based on the Applicant's detailed ALC survey rather than broad strategic mapping, and that any unsurveyed land should be treated conservatively until its classification is established.

16.6 Soil Damage During Construction

Separate from permanent agricultural land loss is the potential for temporary construction activity to damage soils through:

- compaction by heavy plant;
- stripping, storage and reinstatement of topsoil and subsoil;
- mixing of different soil horizons;
- excavation for cables and drainage;
- construction compounds and access tracks; and
- repeated vehicle movements during wet ground conditions.

These risks should be controlled through an enforceable Soil Management Plan with appropriate supervision, handling methods and restoration requirements.

16.7 BEPSGreat Moulton Submission

BEPS-Great Moulton does not contend that national policy prohibits solar development on BMV land.

The more focused issue is that the Scheme involves both temporary occupation of productive agricultural land and permanent loss of Grade 2 land for major grid infrastructure.

The Examination should therefore establish:

- the precise amount and grade of BMV land affected by each permanent component;
- whether poorer-quality reasonable alternatives were properly tested;
- whether the permanent Grade 2 loss at Site 1B has been adequately justified;
- whether Site 2 agricultural classifications are sufficiently complete; and
- whether enforceable soil-protection measures will prevent temporary construction impacts becoming permanent degradation.

The distinction between temporary solar occupation and permanent loss to substations and associated infrastructure should remain central to the assessment.

16.8 Land Quality Summary

Area	Land quality / ALC position	Key point for objection
Site 1	The ES states that all of Site 1 north of Hundred Lane is ALC Grade 2 . Grade 2 is Best and Most Versatile (BMV) agricultural land.	Site 1 is therefore not marginal or poor-quality land; it is very good quality agricultural land.
National Grid Substation, Sub-Site 1B	The National Grid Substation would cause the permanent loss of 6.1 ha of Grade 2 land . East Pye assesses this as a “minor adverse” permanent effect, not significant in isolation.	This is a permanent loss of very good BMV land for grid infrastructure, not simply a reversible solar-panel use.
Project Substation in Sub-Site 1B	The Project Substation in Sub-Site 1B is also on Grade 2 land , with East Pye saying avoidance of BMV is not possible because of technical proximity to the National Grid Substation.	Adds to the concentration of permanent/high-impact electrical infrastructure on Grade 2 land.

Area	Land quality / ALC position	Key point for objection
BESS Site	The ES states that the BESS will be located on Grade 2 land and that the BESS Site is “essentially all Grade 2 quality”.	The storage element is also on very good BMV land; East Pye has not avoided BMV here.
Project Substation in BESS Site	The Project Substation in the BESS Site is also proposed on Grade 2 land .	Further fixed infrastructure on Grade 2 BMV land.
Site 2	Sites 1 and 2 and the BESS Site are described as level, open fields on the western side of the Order Limits; Site 2B is specifically illustrated in the ES. The ES also records that part of proposed panel area in Sub-Site 2B was not surveyed, but adjacent land was Grade 2 and a worst-case assumption was made that the unsurveyed land is also Grade 2.	Site 2 includes confirmed or assumed Grade 2 BMV land, and the Site 2B compound choice was made despite nearby lower-quality subgrade 3a land being identified.

16.9 Historic Land Use - Dudley Stamp Land Use Inventory (England)

Land Use Class 4

For more than a century, this part of Great Moulton has been worked as traditional farmland. The Dudley Stamp Land Use Survey shows it as long-established agricultural land, and that history really matters. Continuous cultivation has shaped everything from the soil and local wildlife to the look and feel of the landscape. It’s one of the reasons the area has stayed so recognisably rural, even as other places have changed.

The land hasn’t been industrialised, dug out, or heavily disturbed. It’s simply been farmed, generation after generation. Bringing in industrial-scale infrastructure would be a major break from that long pattern of use. It would replace a familiar agricultural landscape with something entirely different, cutting across the time-depth and rural character that define the parish and give it much of its cultural and visual identity. [/Metadata_for_magic/Landscape_Glossary.pdf](#)

16.5 Impact of Solar Infrastructure on Soil Quality

Solar infrastructure alters soil conditions through shading, concentrated run-off, changes in moisture levels, and long-term disturbance. Panel arrays reduce sunlight reaching the ground, affecting soil temperature, biological activity, and the viability of traditional crop rotations.

Substations, BESS compounds, access tracks, and hardstanding introduce impermeable surfaces that disrupt natural drainage and increase erosion risk.

For Great Moulton, where soils support productive arable farming, these changes threaten both soil health and agricultural output. The proposal does not demonstrate how soil quality will be protected during the multi-decade operational period.

Great Moulton's soils have a long-established biological profile shaped by centuries of continuous agricultural use. Research shows that shading from solar arrays reduces soil temperature, microbial activity, and nitrogen-fixing bacteria, leading to long-term declines in soil fertility. These changes are not fully reversible after decades of altered conditions, meaning the soil beneath and around the arrays may never return to its original agricultural productivity.

16.6 Soils and Compaction

Construction traffic, HGV movements, and repeated use of access routes compact soil, reducing porosity, water infiltration, and root penetration. Compaction is particularly damaging on the Great Moulton plateau, where the land drains naturally across gentle slopes. Once compacted, soils can take decades to recover, and in some cases never return to their original structure.

Compaction increases surface run-off, heightens flood risk downslope, and reduces crop yields on adjacent farmland. The proposal does not demonstrate how compaction would be prevented, monitored, or remediated

16.7 Soils and Contamination

Construction activities introduce risks of contamination from fuel, oils, hydraulic fluids, concrete washout, and chemical spills. Substations and BESS compounds carry long-term contamination risks from leaks, fire-related residues, and degraded components.

Fire-related contamination is a particular concern for Battery Energy Storage Systems. Thermal events can release toxic residues that sterilise soil, destroy organic matter, and require deep excavation and disposal as hazardous waste. These impacts extend beyond the compound itself, especially in windy or dry conditions where contaminated particulates can spread across adjacent farmland.

Contaminants entering Great Moulton's soils would affect crop quality, soil chemistry, and watercourses connected to agricultural drainage systems. East Pye has not provided sufficient detail on containment measures, spill response, or long-term monitoring.

16.8 Impact of Microcracking, Leaching, Glass

Solar panels degrade over time, and microcracking can release small fragments of glass, polymers, and trace metals into the soil. Weathering and panel wash-off can introduce aluminium, lead, cadmium, and other compounds into surrounding land. These materials accumulate in topsoil, affecting soil organisms, crop health, and long-term fertility.

Crucially, **land beneath solar panels cannot safely return to below-ground crop production.** Broken glass and micro-fragments remain in the soil indefinitely, posing risks to food safety, machinery, and livestock. This represents a permanent loss of agricultural capability for the affected fields.

Studies of long-term panel degradation show that micro-fragmentation increases with age, weathering, and mechanical stress. These fragments accumulate in the topsoil and bind with organic matter, making removal practically impossible. This confirms that land beneath solar panels cannot safely return to below-ground crop production, as broken glass poses risks to food safety, machinery, and livestock.

16.9 Lack of Land Management Detail

The proposal lacks a clear, enforceable land-management plan. There is no detail on how vegetation will be maintained, how soil health will be monitored, or how agricultural land will be protected during the operational phase. Without defined responsibilities, measurable standards, or long-term oversight, there is no assurance that Great Moulton's soils will be preserved or that agricultural land will remain viable.

16.10 Soil Recovery Plan

A soil recovery plan is essential for any development affecting agricultural land. East Pye has not provided a credible strategy for restoring soil structure, fertility, or drainage after construction or at decommissioning. Soil recovery requires multi-year management, specialist input, and ongoing monitoring. Without a defined plan, Great Moulton faces the risk of permanent soil degradation and loss of agricultural productivity.

16.11 Irreversible Soil Structure Change

Permanent infrastructure such as substations, battery compounds, and access tracks causes deep compaction and structural alteration of soil layers. Once compacted to this extent, soil cannot be restored to its original agricultural quality, even with remediation. The long-term loss of soil structure reduces fertility, drainage, and biological activity, resulting in permanent loss of agricultural potential. East Pye has not demonstrated how these areas could ever return to productive use

16.12 Lack of Decommissioning Bond

The absence of a decommissioning bond leaves no financial guarantee that soil restoration, contamination removal, or land reinstatement will be carried out at the end of the project's life. Decommissioning will require significant resources to remove infrastructure, remediate soils, and restore agricultural land. Without a secured bond, the burden of reinstatement could fall on landowners or the community, leaving Great Moulton with long-term environmental and agricultural harm.

16.13 Irreversible Soil Damage from Substation Development

Two elements of the proposal result in permanent, irreversible loss of agricultural land:

The National Grid substation

- This infrastructure is permanent and will remain on the site indefinitely. The land it occupies will never return to agricultural use.

The Battery Energy Storage System (BESS)

- East Pye has stated that the BESS compound cannot be returned to agricultural land. This is due to contamination risks, soil disturbance, and the long-term impact of foundations, cabling, and fire-suppression systems.

Combined with the permanent contamination risk from broken glass beneath solar panels, the proposal results in the long-term removal of productive farmland from Great Moulton's agricultural landscape.

16.14 Permanent Loss of Best and Most Versatile Agricultural Land

The Oxford EN010147 request asked for justification for siting on BMV land, evidence of how avoiding BMV land had been considered, and soil restoration controls. East Pye should be required to answer those same questions, with the additional complication that Land Parcel 1 contains permanent or semi-permanent grid infrastructure.

East Pye should distinguish temporary solar occupation from irreversible or long-term land-take for substations, access roads, foundations, compounds, drainage, cable corridors and overhead-line works. It is not enough to say that solar land may return to agriculture after decommissioning if the grid hub permanently removes or damages Grade 2 land.

East Pye should provide a field-by-field schedule of Grade 2 BMV land affected by Site 1A-1D, Site 2B, the BESS, the National Grid substation, the project substation, cable routes and access works; explain how avoiding BMV land was considered; compare less harmful alternatives; distinguish temporary, long-term and permanent land-take; and explain how permanent substation land could ever be restored to pre-construction agricultural quality.

Chapter 17 Ground Conditions

17.0 Introduction

Ground conditions across Great Moulton and the surrounding plateau are shaped by centuries of stable agricultural use, minimal deep excavation, and naturally draining soils. The land has not been subjected to industrial disturbance, large-scale ground compaction, or subsurface infrastructure. Introducing extensive trenching, piling, heavy vehicle movements, and permanent energy infrastructure represents a fundamental change to the physical condition of the land.

National and local planning policy require developments to demonstrate that ground stability, soil integrity, and subsurface conditions will not be compromised. The East Pye proposal provides insufficient evidence to ensure that Great Moulton's ground conditions would remain safe, stable, and agriculturally viable.

17.1 Ground Disturbance from Construction

Construction would require extensive excavation for cable routes, foundations, access tracks, drainage works, and the installation of substations and the BESS compound. These activities disturb soil layers, alter natural compaction profiles, and can destabilise ground that has remained undisturbed for generations. The scale of excavation proposed is incompatible with the historic agricultural character of Great Moulton's land, which relies on intact soil horizons and predictable drainage patterns.

Great Moulton's ground conditions are particularly sensitive because the parish contains undisturbed medieval soil horizons, historic drainage lines, and archaeological layers. Deep trenching and piling risk collapsing these features, altering groundwater pathways, and destabilising ancient field boundaries that have remained intact for centuries.

17.2 Subsurface Infrastructure and Long-Term Stability

The proposal introduces deep cabling, concrete foundations, and permanent structures that alter subsurface conditions. Once installed, these elements change how water moves through the soil, how the land settles over time, and how adjacent agricultural fields behave during wet or dry periods. Subsurface infrastructure can create hard barriers that redirect water, cause localised saturation, or lead to unexpected ground movement. These risks are particularly relevant on the Great Moulton plateau, where natural drainage relies on uninterrupted soil profiles.

17.3 Risk of Contamination from Substations and BESS

Substations and Battery Energy Storage Systems introduce long-term contamination risks from oils, coolants, fire-suppression chemicals, and degraded components. A thermal event in the BESS could release toxic residues into the ground, requiring deep excavation and specialist remediation. East Pye have already stated that the BESS compound **cannot be returned to agricultural land**, confirming that the ground beneath it would be permanently altered or contaminated. This represents a long-term loss of soil function and agricultural capability within Great Moulton.

17.4 Ground Compaction from Heavy Vehicles

Construction traffic, HGV movements, and repeated use of access routes compact the ground, reducing its load-bearing capacity and altering its structural integrity. Compacted ground is more prone to surface water pooling, erosion, and long-term instability. Once compacted, soils can take decades to recover, and in some cases never regain their original structure. Compaction also increases the risk of subsidence or rutting along access routes, affecting both agricultural use and residential access.

17.5 Alteration of Natural Drainage Patterns

Ground disturbance and compaction alter how water moves through the soil. Trenches, foundations, and hardstanding can create artificial channels that accelerate, run-off or cause water to accumulate in unintended areas. For Great Moulton, where homes and lanes sit close to natural drainage lines, these changes increase the risk of localised flooding, waterlogging, and long-term ground instability. The proposal does not demonstrate how altered drainage patterns will be monitored or mitigated

17.6 Long-Term Ground Integrity Under Solar Arrays

Solar arrays require driven piles or ground anchors that penetrate soil layers and remain in place for decades. Over time, these structures can loosen, corrode, or shift due to soil movement, frost heave, or waterlogging. The land beneath solar panels also accumulates micro-fragments of glass and degraded materials from panel weathering. This contamination permanently alters the ground conditions and prevents the safe return of the land to below-ground crop production.

Soil beneath solar arrays also experiences altered moisture cycles due to concentrated run-off from panel edges. This creates alternating wet and dry zones that accelerate soil movement, frost heave, and pile instability. Over decades, these processes can cause structural shifts in the ground that are difficult to predict and impossible to fully reverse.

17.7 Lack of Ground Condition Surveys and Monitoring

The application does not provide sufficient baseline surveys of ground conditions, soil stability, or subsurface characteristics. Without detailed baseline data, it is impossible to assess the full extent of risk or to implement effective monitoring during construction and operation. The absence of a long-term monitoring plan means that changes to ground stability, contamination, or drainage may go undetected until they cause significant harm to Great Moulton's land or residents.

Without baseline geotechnical surveys, there is no way to detect or respond to changes in subsurface stability, contamination spread, or altered drainage behaviour. This is a significant omission in a parish where homes, lanes, and agricultural fields sit close to proposed infrastructure.

17.8 Long-Term Alteration of Ground Conditions

The proposal introduces several elements that would permanently alter the physical condition of the land in Great Moulton. The National Grid substation represents a fixed, immovable installation with deep foundations, hardstanding, and buried infrastructure that will remain in place indefinitely. Its presence fundamentally changes the ground profile, drainage behaviour, and subsurface stability of the surrounding area.

The BESS compound also results in irreversible ground alteration. East Pye have confirmed that this area cannot be restored to agricultural use, reflecting the long-term impact of excavation, foundations, cabling, fire-suppression systems, and potential contamination pathways. Even if above-ground structures were removed, the underlying ground conditions would remain permanently modified.

Across the wider site, driven piles, trenching, and decades of micro-fragment deposition from solar panels introduce long-lasting changes to soil structure and subsurface integrity. These cumulative effects mean that significant areas of land within Great Moulton would experience permanent changes to their ground conditions, regardless of any future decommissioning activity.

Chapter 18: Electromagnetic Fields

18.0 Introduction

The East Pye proposal introduces multiple new sources of electromagnetic fields (EMF), including the National Grid substation, high-voltage cabling, inverters, transformers, and the Battery Energy Storage System. Great Moulton currently has no comparable EMF-generating infrastructure, meaning the parish's baseline exposure is extremely low. National and local planning policy require developments to demonstrate that EMF emissions will not pose risks to human health, wildlife, aviation, or sensitive ecological receptors. East Pye has not provided sufficient evidence to assess or mitigate these impacts.

18.1 Impacts of EMF on Residents

Residents living near the proposed substation, cable routes, and BESS compound would experience a significant increase in EMF exposure compared with current rural baseline levels. EMF strength decreases with distance, but Great Moulton contains homes, gardens, and public routes close to the proposed infrastructure. Long-term exposure to elevated EMF levels is a material planning consideration, particularly where residential receptors are located within close proximity to high-voltage equipment. The absence of detailed modelling prevents a full assessment of risk to the community.

Great Moulton currently has a near-zero EMF baseline because the parish contains no high-voltage substations, rail electrification, or industrial EMF sources. This means any new EMF emissions represent a significant relative increase. Planning guidance recognises that sensitivity is defined by baseline conditions, making Great Moulton a high-sensitivity receptor.

18.2 Impacts of EMF on Children

Children are considered a sensitive receptor in planning and public-health guidance. Their developing nervous systems and longer lifetime exposure potential require a precautionary approach. The proposal places high-voltage infrastructure, transformers, and underground cabling close to areas used by children, including walking routes, homes, and the nearby football grounds. Without clear EMF mapping, shielding details, or separation distances, the proposal does not demonstrate that children in Great Moulton would be adequately protected.

Public Health England and the World Health Organization both identify children as a precautionary receptor for EMF

18.3 Impacts of EMF on Bats

Bats rely on echolocation and magnetic cues for navigation, foraging, and commuting. EMF emissions from substations, inverters, and cabling can interfere with these behaviours, particularly in species that use magnetic fields for orientation. Great Moulton supports bat populations that move along hedgerows, tree lines, and field edges—precisely the areas where

cabling and infrastructure are proposed. Disruption to navigation routes can reduce feeding efficiency, fragment habitats, and increase collision risk. East Pye has not assessed EMF impacts on bat behaviour or movement corridors.

Peer-reviewed studies show that several bat species use the Earth's magnetic field for navigation. EMF interference can cause disorientation, altered flight paths, and reduced foraging efficiency. This is particularly relevant in Great Moulton, where bats commute along hedgerows and tree lines that coincide with proposed cable routes and inverter locations.

18.4 Impacts of EMF on White-Clawed Crayfish

White-clawed crayfish are sensitive to electromagnetic fields and research on freshwater invertebrates shows that EMF exposure can disrupt their ability to orient, forage, and detect predators and can alter their stress responses and movement patterns,

EMF interference is particularly relevant where cabling crosses or runs near watercourses. The East Pye proposal includes underground cabling and infrastructure close to drainage ditches and water bodies connected to the wider aquatic network. Without EMF modelling or ecological assessment, there is no evidence that impacts on this protected species have been considered or mitigated.

18.5 Impacts of EMF on Airfields

Small airfields and private landing strips near Great Moulton rely on stable electromagnetic conditions for navigation equipment, radio communication, and aircraft instrumentation. High-voltage substations, transformers, and BESS units can generate EMF interference that affects signal clarity and instrument reliability. This is a material safety concern for pilots operating at low altitude during take-off and landing. East Pye has not provided an aviation-specific EMF assessment or consulted with local airfield operators, leaving a significant gap in the safety evaluation.

Aviation safety literature notes that EMF interference can affect radio communication clarity, navigation aids, and transponder reliability. Small airfields are particularly vulnerable because aircraft operate at low altitude during take-off and landing and rely on clean electromagnetic environments. The absence of an aviation-specific EMF assessment leaves a significant safety gap.

Chapter 19: Other Environmental Matters

19.1 Utilities

It would appear that no utilities plan is in place for Sites 1A/B/C/D:

19.2 Grid Connection and Substation Impacts are Unclear

Major connection required; local capacity and upgrade needs are unclear with a risk of service impacts without full evidence, the impacts have not been properly assessed or identified. Substations are high-impact infrastructure with noise, EMF, and visual implications, we as residents cannot even begin to evaluate what we can expect in our village community without:

- Design baselines
- detailed assessment of utilities around the proposed substation.
- explanations of temporary power needs or connections.
- EMF assessment linked to nearby receptors or infrastructure.

19.3 Water Supply

Private wells/boreholes are highly vulnerable to contamination from trenching, drilling, and BESS works and the risks of solar array altering runoff. It would appear that the water supply requirements have not been assessed with no Robust SuDS or flood-risk modelling essential to protect homes and farmland.

It appears that the Water Supply requirements has not been properly assessed or identified, therefore the legal duty to protect public health has not been met.

19.4 Telecoms & Emergency Access

Fibre Broadband is potentially at risk due to their shallow cabling routes in field and road edging, with the potential interference from metal structures/BESS. Emergency service requirements must be fully addressed due many of the local population using emergency medical pendant alarms and we as residents rely on our broadband fully, the loss of connectivity due to the lack of planning would be catastrophic for all of us.

19.5 Conclusion

The Utilities assessment is incomplete and does not provide the evidence needed to demonstrate that this project can be delivered with risk to all services and a full baseline survey, risk assessments, and resilience plans are needed before the scheme progresses. Cross Reference [Missing ecological surveys](#)

Chapter 20: National Grid Infrastructure Cluster

20.1 Substation, Project Substations x 2, BESS and Grid Connection Impacts

The proposal introduces a permanent cluster of National Grid infrastructure into a rural parish that has no industrial development of any scale and Sub-Site 1B should be treated as the principal western grid hub of the Scheme. It brings together the National Grid Substation, Project Substation infrastructure, the BESS interface, overhead-line and pylon works, cable connections, access, drainage, lighting, security infrastructure and other retained grid works.

East Pye has assessed these components across individual environmental topics. The remaining concern is whether the application provides one sufficiently clear, place-based assessment showing how the combined maximum case would operate around Great Moulton and Tivetshall, particularly at nearby homes, public rights of way and rural lanes.

The combined infrastructure would introduce long-term electrical and industrial characteristics into an area which the Applicant's own landscape evidence describes as rural and open. Relevant effects include operational noise from transformers, cooling systems and BESS equipment, lighting and security infrastructure, permanent and temporary access arrangements, drainage and fire-water controls, overhead-line works and the visual presence of substantial retained grid infrastructure.

The issue is therefore not simply the effect of each component considered separately. It is whether the cumulative operation of the whole Site 1B/BESS grid cluster has been demonstrated to be acceptable when its noise, landscape, lighting, safety, water, access and residential-amenity effects are experienced together.

BEPS-Great Moulton therefore asks the Examining Authority to require a consolidated Site 1B grid-hub assessment identifying the final or maximum parameters of each principal component, their combined relationship with nearby receptors, the mitigation relied upon and the DCO mechanism securing those controls.

20.2 Major Accidents and Disasters

East Pye still hasn't provided a legally compliant Accidents & Disasters (A&D) assessment for Land Parcel 1, even though this area contains the highest-risk infrastructure, including the BESS and the substation. Given how close these assets are to the village, they really should have been a priority.

There are several key gaps, including:

- No BESS hazard assessment
- No emergency response feasibility assessment
- No assessment of transformer oil-fire risk at the substation
- No consideration of high-voltage failure modes

- No assessment of natural hazards, such as surface-water flood risk to the electrical infrastructure
- No evaluation of pollution pathways
- Limited integration across related technical topics

On top of that, the mitigation measures proposed so far are generic and unquantified, and they don't address the specific risks posed by the BESS and substation. There's also no evidence showing that these measures would actually reduce risks to an acceptable level

20.3 Glint and Glare Airfields

The way East Pye has dealt with glint and glare is unsound. The assessment feels incomplete, outdated, and doesn't follow the national policies it's meant to. They also don't seem to have considered airport safeguarding zones, MOD requirements, or the key guidance from the CAA, ICAO, FAA, or CAST.

If the nearby airfield hasn't been properly accounted for, glare could also interfere with pilots during take-off or landing. Any changes to flight paths or operating patterns tend to impact residents first—through increased noise, altered flight times, or new routes overhead.

In short, ignoring these safeguarding requirements doesn't just break procedure—it puts residents' comfort, safety, and overall quality of life at risk.

- The PEIR chapter states that glint and glare is “scoped out”, yet simultaneously refers to an Appendix 18.1 Glint and Glare Assessment and acknowledges aviation receptors. This is internally contradictory and undermines the validity of the scoping rationale.
- No justification is provided for scoping out glint and glare despite NPS EN 3 explicitly requiring assessment where aviation receptors exist. Therefore, scoping out is not justified.
- Within the area of this scheme there are **6** airfields, Norwich Airport (controlled airspace), Helicopter routes and Military Low fly zones.

The anomalies that have become apparent regarding East Pye's ambivalence to Glint and Glare regarding the airfields is a real issue see relevant documentation below.

The Norfolk Flying club have corresponded with IG, due to the issues within the fly zone of 5km of glint & glare, turbulence, health and safety with flights over these structures if a plane has to lane due to engine or launch failures.

20.4 Norfolk Gliding Club's Objection

[Appendix 5: The General Aviation Awareness Council - PEIR](#)

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20.5 Glint and Glare on Rail Drivers and Rural Road Users

Glint and glare impacts on rail drivers and rural road users have not been assessed, despite the site's proximity to the mainline railway and the narrow, enclosed lanes around East Pye. Sudden reflections from solar panels can cause momentary visual impairment—a material safety concern on routes with bends, limited margins, and no safe refuge. The absence of a route-specific glint and glare assessment represents a significant gap in the applicant's safety analysis and fails to address risks to rail operations and local road users.

Local roads around Great Moulton are narrow, winding, and bordered by open fields. Drivers have long sightlines across the East Pye site, making them vulnerable to reflected glare at eye level. Even brief flashes can impair visibility, reduce reaction time, and increase accident risk on roads with minimal tolerance for error. No modelling has been provided, contrary to national guidance.

The EIA also omits cumulative visual effects. Glare interacting with wet road surfaces, windscreens, or low winter sun can amplify brightness and create hazardous conditions—particularly relevant in Great Moulton, where rural roads serve school transport, agricultural vehicles, cyclists, and pedestrians without pavements.

The absence of detailed glint and glare modelling for homes, gardens, and road users falls short of national guidance and local policy. Without this analysis, East Pye cannot demonstrate that the development will avoid unacceptable impacts on residential amenity, child wellbeing, or road safety in Great Moulton.

20.6 Glint and Glare on Homes

For people living nearby, glint and glare affects everyday life. Large reflective surfaces can create sudden, intense brightness that shines directly into homes, disrupts people in their gardens, or makes local roads uncomfortable or even unsafe to drive on. In Great Moulton, many properties face open farmland, meaning there is no screening and reflections travel long distances across flat ground. Low-sun angles at sunrise and sunset increase the intensity and duration of these effects.

For shift workers trying to sleep during the day, or families with young children, these flashes can be especially disruptive. South Norfolk Council Children's Services have confirmed that large solar infrastructures can cause significant issues for children, particularly those with Autism, ADHD, and Asperger's. Sudden bright light, flicker, and unpredictable visual stimuli are known triggers for sensory overload, distress, and behavioural disruption in neurodivergent children. The EIA does not acknowledge or assess these impacts.

20.7 Conclusion

The Oxford EN010147 request sought further information from aviation stakeholders on glint and glare, direct effects on air traffic control operations, thermal turbulence/plumes, bird strike and wider airport operations. This is useful for East Pye because Norfolk Gliding Club and other aviation concerns should not be treated as secondary or speculative.

East Pye should provide aviation-specific evidence, including direct consultation responses from Norfolk Gliding Club and any relevant airfield, gliding, general aviation or Civil Aviation Authority consultees. The assessment should address glint and glare, pilot distraction, approach/departure routes, thermal effects above large panel arrays, bird-strike interaction, emergency landing options, and cumulative effects from the BESS, substations, pylons and overhead-line works.

Where East Pye relies on a revised glint and glare study, the affected aviation receptor should be asked to confirm expressly whether the revised study resolves the concern. Silence or lack of a formal objection should not be treated as endorsement.

Chapter 21 Cumulative and In-Combination Effects

Introduction - Why Cumulative Impact Matters Here

Cumulative impact is an important planning consideration for Great Moulton because residents, road users, landowners and environmental receptors will experience the different elements of the East Pye scheme together, rather than as separate technical assessments.

East Pye has submitted cumulative and topic-specific assessments. The issue for BEPS-Great Moulton is therefore not that cumulative effects have been ignored altogether, but whether the application provides a sufficiently clear place-based assessment of the combined maximum effects arising from the concentration of infrastructure around Great Moulton, together with any other relevant committed developments, without double counting.

Within and around the Great Moulton area, the East Pye scheme brings together solar development, the National Grid Substation, Project Substations, BESS infrastructure, overhead-line works, cabling, construction compounds, haul routes, access works, fencing, lighting and associated mitigation land. Several of these components may affect the same receptors and, in some cases, during overlapping construction periods.

The key concern is therefore the combined experience at particular places and receptors, including:

- villages dependent on rural road networks;
- residents close to haul routes and major infrastructure;
- farms and private water supplies;
- Public Rights of Way and recreational users;
- sensitive ecological and landscape receptors; and
- schools, care settings and other potentially sensitive community receptors.

The Examination should therefore consider not only whether individual topic assessments identify significant effects, but whether the combined effects of multiple scheme components at the same locations have been clearly brought together and assessed as a whole.

For Great Moulton, the central issue is overlap: overlap of infrastructure, construction activity, traffic, noise, lighting, visual change, land take and disruption experienced by the same community and the same rural landscape.

This is stronger because it avoids overstating the case and makes the criticism much harder to answer simply by pointing to the existence of a cumulative-effects chapter.

21.1 Other Near-By Developments (Solar, Housing, Energy Infrastructure) (MAP)

The land around Great Moulton is already subject to a growing concentration of proposals, including battery storage, new housing, and additional solar schemes. GNLP cluster sites indicate further development pressure in the near future. When viewed spatially, these projects do not form isolated pockets of change but a continuous zone of transformation extending across several parishes.

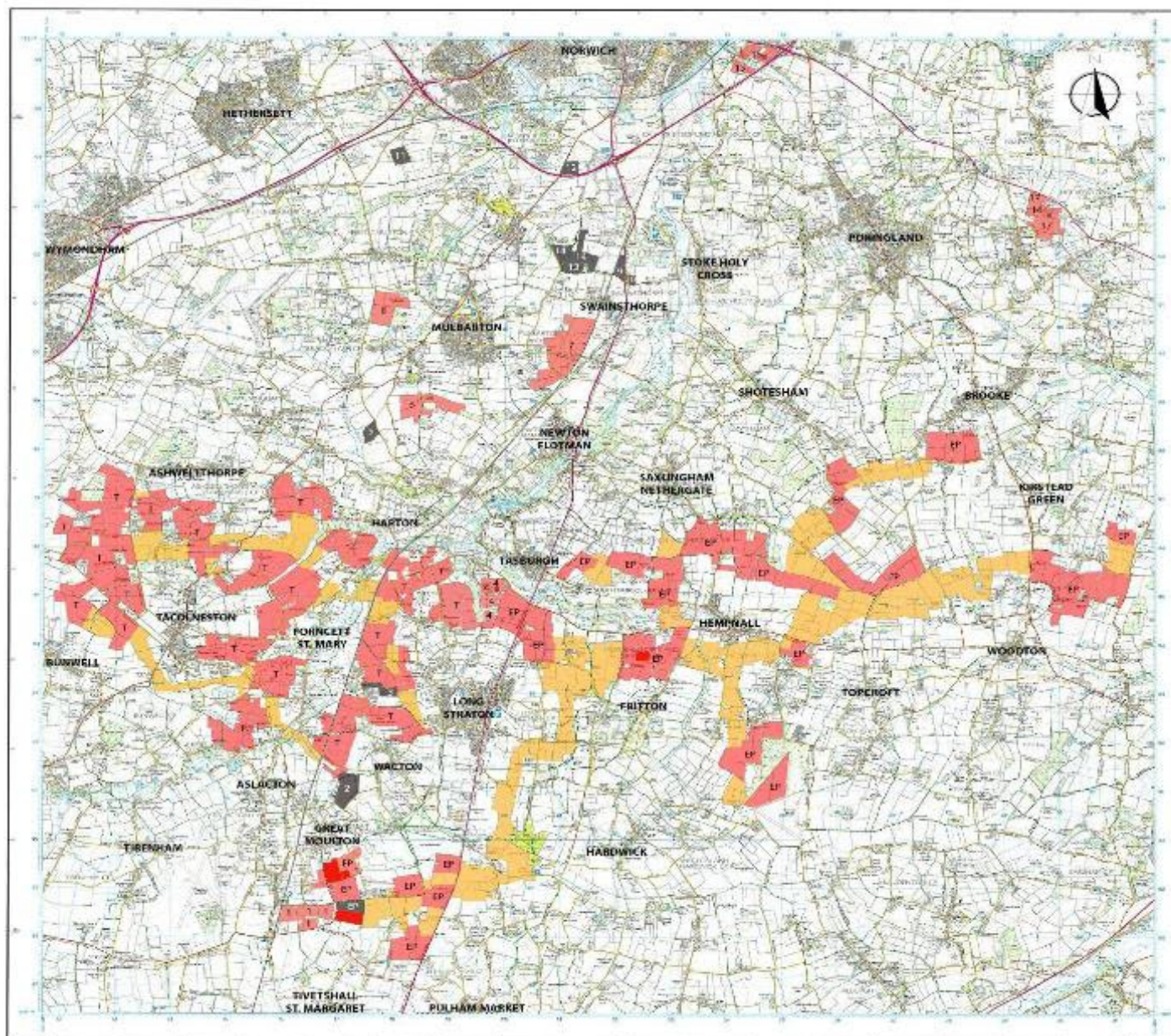
Below is a list of all developments within a 10km radius of the East Pye Solar Scheme. As the scheme covers 22km in its own right, the surround cumulative impact is extreme for all residents:

Within **10km of East Pye**, the cumulative solar / BESS / grid / infrastructure schemes identified are:

Scheme / ref	Type	Approximate distance stated
2024/3817 – Land north of Station Road, Tivetshall St Margaret	Solar PV farm	Partial overlap with Sub-Site 1C
2025/1689 – Land north of Carr Lane, Great Moulton	BESS	c. 900m north of Sub-Site 1B
2025/1152 – Land north of Hill Farm, Wacton Road, Forncett St Peter	BESS	c. 2km south-west of Sub-Site 4A
2025/2000 – Land south of Semere Lane, Dickleburgh	Solar farm	c. 2.4km south of Sub-Site 2A
2023/2657 – Malt Kiln Cottage, Norwich Road, Stoke Holy Cross	Ground-mounted solar array	c. 3.6km north of Sub-Site 7D
2021/2495 – Land north and south of Brick Kiln Lane, Swainsthorpe	Solar farm with ancillary infrastructure	c. 3.6km north-west of Sub-Site 7A
2025/0806 – Land west of Wymondham Road, Bracon Ash	BESS	c. 4km north-west of Sub-Site 4A
2025/1442 – Land east of Back Road, Yelverton	c. 15MW solar farm	c. 4km north-east of Sub-Site 9
2023/1055 – Land off Marsh Lane, Bracon Ash	Ground-mounted solar array	c. 4.3km north-west of Sub-Site 4A
FUL/2019/0062 – Land off Hall Road and Pheasants Walk, Earsham / Bungay	Minerals extraction and restoration	c. 4.8km east of Sub-Site 10E
2024/3750 – Hall Farm, land north of Hickling Lane, Swainsthorpe	400MW energy storage system / 132–400kV substation	c. 5.4km north-west of Sub-Site 7D
2023/1095 – Land north of Hickling Lane, Swainsthorpe	Energy storage system	c. 5.7km north-west of Sub-Site 7D

Scheme / ref	Type	Approximate distance stated
EN010080 – Hornsea Project Three onshore connection	Offshore wind grid connection to Norwich Main	c. 5.7km north-west of Sub-Site 8B / c. 6.2km north of Sub-Site 7A
2021/0569 – Land east of Cranes Road, Hethel	Solar farm and energy storage system	c. 5.8km north-west of Sub-Site 7A
2024/1336 – Norwich Main Substation, Mangreen Hall Lane, Dunston	400kV substation extension	c. 6km north-east of Sub-Site 7D
EN010109 – Sheringham and Dudgeon Extension Projects onshore works	Offshore wind extension grid infrastructure	c. 6km from Sub-Site 7A
2023/0009 – Land south of Cantley Lane, Ketteringham	240MWp BESS screening opinion	c. 8.7km north-west of Sub-Site 7A
TR010037 – A47 / A11 Thickthorn	Highway infrastructure	c. 9km north of Sub-Site 7A
TR010040 – A47 Blofield to North Burlingham	Highway dualling	c. 9km north of Site 9
EN0110019 – EcoPower Suffolk Solar	Up to 300MW solar + BESS	c. 10km south of Sub-Site 2A

Map of Cumulative Impact



TITLE

Map to show the potential cumulative impact of Solar on Land Infrastructure on a 400 sq km area (154 sq miles / 99,000 acres) within South Norfolk

The schemes included on the map are either proposals currently making their way through the planning process or developments that have received planning permission and are either operational / under construction / awaiting construction (the key provides greater detail on these schemes)

KEY

Pink - areas proposed for solar on land infrastructure (including solar panels up to 4.5m in height / security fences and cameras / inverter buildings / transformers / sub-stations / new tracks and roads etc.) and areas where planning permission for solar infrastructure has been granted which include schemes that are either operational, under construction or awaiting construction.

Orange - areas of land identified as underground cable route corridors in the Tasway and East Pye NSIP (Nationally Significant Infrastructure Project) proposals

Blue - sites proposed for Battery Energy Storage systems (BESS)

Red - sub-stations / national grid sub-station

The Schemes

Nationally Significant Infrastructure Project (NSIP) proposals

EP - East Pye

T - Tasway

The Other Projects

- 1) Station Road Solar Farm, Tower Hill - planning permission granted by SAC
- 2) BESS proposal for Great Moulton Field, Long Stratton - SNC requires an EIA (Environmental Impact Assessment)
- 3) Wacton Road BESS - a proposal awaiting a decision by SAC
- 4) Tasway Solar Farm - operational
- 5) Wymondham Road BESS is proposed - EIA not required
- 6) Kirsstead Solar Farm - operational
- 7) High Green Solar Farm, Saxlingham - permitted but not under construction (BEP)
- 8) Hethel Solar Farm - permitted but may not be developed
- 9) Norwich Road BESS (BEP) - under construction
- 10) Hannington BESS (planning permission granted)
- 11) Intwood Farm BESS is proposed - EIA not required
- 12) Kirsstead BESS - pending consideration
- 13) Saxlingham BESS - EIA not required
- 14) Hall Farm BESS - planning permission granted
- 15) Trowse Solar Farm - operational
- 16) Norwich Road Solar Farm, Back Road, Norwich - operational
- 17) Extension to Station Road Solar Farm, Norwich - proposed (pending consideration)

NB The Snettisham substation expansion and the large consumer building developments (DC to AC) south of the A17 Norwich Southern Bypass between the A17 and the B1112 are not included on the map as most of the development in this area is connected to the transmission of offshore wind energy

Overlaps are as accurate as possible according to the data available at the time of production

SCALE 1:100,000

OS Licence number AL0008/21/23

Date produced: 10/11/25

21.2 Cumulative Loss of Tranquillity

Noise, lighting, traffic, industrial structures, and the presence of a permanent grid node combine to erode the tranquillity of Great Moulton. Tranquillity is a defining characteristic of the parish and a key component of its landscape value. The cumulative effect of multiple disturbances across construction, operation, and decommissioning phases results in a long-term loss of rural quiet that cannot be mitigated. This cumulative impact has not been assessed.

21.3 Cumulative Impact on Landscape and Visual

Due to the scale and number of proposed and emerging solar schemes means the countryside is no longer affected by one site in isolation but by a growing cluster of very large, industrial-style developments. Taken together, these schemes would change the character of the area from open, rural farmland to a landscape increasingly dominated by solar infrastructure, fencing, tracks and substations. For residents, road users and people walking the local lanes and footpaths, the experience would shift from seeing occasional fields of panels to encountering them repeatedly across different parishes, creating a sense of being surrounded by energy infrastructure. In practical terms, this means the cumulative effect is far greater than any single application: it risks the gradual industrialisation of a wide rural area and a permanent change to how local communities experience their countryside.

21.4 Cumulative Impact on Ecology

Cumulative ecological effects arise from habitat fragmentation, lighting, fencing, and the loss of arable margins across a broad area. Species that rely on connected landscapes—particularly bats and farmland birds—are vulnerable to these landscape-scale changes. The combined footprint of multiple fenced compounds and disturbed habitats reduces ecological resilience and undermines local biodiversity.

21.5 Cumulative Impact on Heritage

The rural settings of churches, farmsteads, historic lanes, and dispersed settlements are integral to the heritage character of South Norfolk. Large solar schemes, especially when combined with new grid infrastructure such as the proposed 400 kV substation, introduce repeated industrial elements into these settings. Over time, the cumulative effect is a weakening of the historic landscape, where heritage assets are increasingly experienced against a backdrop of panels, fencing, and substations rather than open countryside.

21.6 Cumulative Impact on Transport and Traffic

Overlapping construction periods significantly intensify HGV movements on narrow rural lanes. Shared access routes become pinch points, increasing risks to road safety and creating prolonged noise, dust, and disruption for residents. Even if each project appears manageable on its own, the combined construction traffic places disproportionate pressure on a road network not designed for sustained industrial use.

21.7 Cumulative Impact of Noise and Vibrations

Construction noise in rural areas is highly noticeable due to low baseline sound levels. When several large schemes proceed within similar timeframes, the duration and spread of disturbance increase substantially. Residents may experience months or years of intermittent but intrusive noise and vibration.

21.8 Cumulative Impact on Air Quality

Even if each solar project appears acceptable on its own, the combined air-quality impacts can become significant when multiple large construction sites operate concurrently. Dust, vehicle emissions, and disturbed soils affect vulnerable residents, local schools, care settings, and sensitive ecological receptors.

Cumulative impacts are a material planning consideration and must be properly assessed before decisions are made.

21.9 Cumulative Socio-Economic Impact

Communities may face prolonged construction disturbance, loss of rural character, and a sense of over-concentration of energy infrastructure. These factors affect wellbeing, amenity, and perceptions of place. A robust cumulative impact assessment must consider these social dimensions, not just physical environmental effects.

21.10 Cumulative Impact to Soils, Agriculture and Ground Conditions

The area contains productive agricultural land that is vulnerable to compaction, drainage disruption, and soil structure damage. Heavy machinery, new tracks, compounds, and extensive trenching for cabling can degrade soil quality across multiple sites. When these impacts occur repeatedly across neighbouring fields and parishes, the cumulative effect is a reduction in agricultural productivity and increased risks of runoff, erosion, and waterlogging.

21.11 Cumulative Impact of EMF

The combined presence of high-voltage grid infrastructure, substations, inverters, cabling, and BESS compounds increases EMF contributions within the Great Moulton area. While each source may be individually compliant, cumulative exposure must be assessed holistically.

21.12 Cumulative Impact to Utilities & Private Water

Multiple ground-disturbing activities increase the risk of aquifer disturbance, contaminant mobilisation, turbidity, and sedimentation. Homes and farms relying on private water supplies are particularly vulnerable. A cumulative hydrological assessment is essential to understand combined pressures on groundwater and local water security.

21.13 Cumulative Impact of Major Accidents and Disasters

Large-scale solar farms and BESS installations, introduce accident and disaster risks that can compound across projects and share infrastructure. Cumulative risk arises not only from individual installations but from their interaction across geography and time.

21.14 Cumulative Impact of Glint and Glare

The combined solar arrays, BESS compounds, transmission infrastructure and 400 kV substation introduce a wide range of reflective surfaces around Great Moulton, creating repeated and extended glint and glare effects that residents, drivers, walkers and riders would experience throughout the day and across the seasons.

While each element might appear “low impact” in isolation, together they generate a much longer window of potential reflections, with multiple sources catching the sun at different times and from different angles. This results in a noticeably more intrusive and industrialised visual environment, affecting residential amenity, road safety, the character of local footpaths and the wider rural setting. The developers significantly underestimate the real-world impact on the community.

21.15 Cumulative Impact on Human Health and Wellbeing

Multiple large-scale energy and infrastructure projects concentrated around Great Moulton create a prolonged period of disruption that affects physical and mental wellbeing. Noise, dust, HGV traffic, construction vibration, loss of rural views, and the steady industrialisation of the landscape all contribute to chronic stress and reduced quality of life. Vulnerable groups—including children, older residents, people with sensory sensitivities, and those with long-term health conditions—are disproportionately affected.

The cumulative burden is not simply environmental; it is social and psychological. Residents face years of overlapping construction phases, repeated road closures, and the loss of

tranquillity that defines rural living. These impacts are not captured when each project is assessed in isolation, yet together they represent a significant and material effect on community wellbeing.

21.16 Cumulative Climate-Change Vulnerability

Each development introduces hard surfaces, soil compaction, altered drainage, and increased runoff. When several schemes occur across neighbouring parishes, the combined effect is a measurable shift in local hydrology and microclimate. This increases vulnerability to:

- flash flooding
- reduced groundwater recharge
- soil drying and erosion
- heat accumulation around infrastructure
- drought stress on farmland and hedgerows

Great Moulton already sits within a sensitive hydrological landscape with shallow groundwater and permeable soils. Multiple solar and energy schemes amplify these vulnerabilities. EN-1 requires cumulative climate-risk assessment, yet no combined modelling has been undertaken for the cluster of projects around the parish.

21.17 Cumulative Loss of Rural Quiet and Dark Skies

Great Moulton's rural character depends on low noise levels, minimal artificial lighting, and open dark skies. Multiple energy developments introduce:

- inverter hum
- substation noise
- construction machinery
- security lighting
- vehicle movements at night
- fencing and compounds that reflect light

Individually, these may appear manageable. Together, they erode the parish's tranquillity and dark-sky quality, replacing a quiet rural environment with a patchwork of industrial noise and illumination. This cumulative sensory change affects wildlife, residential amenity, and the experience of local footpaths and lanes.

21.18 Cumulative Impact Conclusion

Cumulative impact is a material planning consideration. Without a full, transparent, and evidence-based cumulative assessment, decision-makers cannot understand the true scale of change facing Great Moulton or the long-term burden placed on its residents.

Great Moulton is already subject to a concentration of existing, approved, and proposed energy-infrastructure developments. When all current and emerging proposals around Great Moulton are considered together, the pattern is unmistakable: this is not an isolated scheme but a sustained concentration of industrial-scale development across a rural parish, these together, create a level of cumulative impact far beyond what would normally be expected for a small rural village. The community faces prolonged construction periods, permanent alteration of its countryside, and a progressive erosion of rural character and tranquillity.

The Environmental Statement does not adequately assess these combined effects, despite the requirement under the EIA Regulations to evaluate cumulative impacts in a transparent and systematic manner.

- The developments affecting Great Moulton include:
- the proposed 400 kV National Grid Transmission substation
- the associated 400 kV substation
- multiple existing and approved solar parcels
- BESS installations
- overhead line works requiring raising
- construction traffic movements associated with all of the above

Individually, each of these projects carries landscape, amenity, traffic, noise, lighting, and hydrogeological implications. Collectively, they represent a significant and escalating burden on a small community with limited capacity to absorb such impacts.

The cumulative effects include:

- landscape and visual change across a wide area, with multiple energy installations visible simultaneously
- intensification of construction activity, including overlapping construction periods and increased HGV movements
- compounded noise and lighting impacts, particularly during early-morning and evening construction windows
- increased hydrogeological risk, with multiple ground-disturbing activities occurring within a PWS-sensitive area
- progressive loss of rural character and tranquillity, contrary to local and national policy objectives

- reduced amenity for residents, including impacts on rights of way, outlook, and daily living conditions

At no point has a comprehensive, integrated assessment been provided that considers how these impacts interact, overlap, or amplify one another. Instead, East Pye has assessed each component in isolation, resulting in an incomplete and misleading picture of the true scale of change facing Great Moulton.

Given the scale of infrastructure now proposed — including the escalation to 400 kV and the relocation of both substations into Sites 1B and 1D — a full cumulative-impact assessment is essential. Without it, neither the community nor the regulators can understand the real extent of environmental, amenity, and health-related impacts arising from the combined developments.

21.19 Community Impact Summary

The combined effects of the proposed 400 kV National Grid Transmission substation, the associated 400 kV substation, and the wider energy-infrastructure developments place a disproportionate burden on the residents of Great Moulton. This is a small rural community with limited resilience to large-scale industrialisation, yet it is being asked to absorb impacts that would be significant even for a much larger settlement.

The key community impacts include:

- Proximity to residential properties, with Site 1D located approximately 25 m from neighbouring homes
- Increased construction activity, including extended working hours, HGV movements, abnormal loads, and overlapping construction phases from multiple projects
- Loss of rural character and tranquillity, with industrial infrastructure replacing open agricultural land
- Noise and lighting impacts, both during construction and operation, affecting daily living conditions and night-time amenity
- Hydrogeological risk, with ground disturbance occurring in an area known to contain Private Water Supplies serving nearby homes
- Reduced access and amenity, including impacts on rights of way, recreational routes, and the general enjoyment of the countryside
- Cumulative stress on local infrastructure, particularly narrow rural roads not designed for sustained heavy-vehicle use. Frith Way, Narrowgate Way, and Hundred Lane are not merely transport routes; they are surviving components of the medieval settlement pattern of Little Moulton. Their narrow form, enclosed banks, and historic hedgerows

preserve the structure of the pre-modern landscape. Altering these lanes for industrial access would damage heritage assets that contribute to the time-depth and identity of the parish. Their preservation is essential to maintaining the historic character of Great Moulton.

These impacts are not isolated; they interact and compound one another. The relocation of both substations into Sites 1B and 1D, combined with the escalation from 132 kV to 400 kV, significantly increases the scale and intensity of change experienced by residents. Yet no comprehensive assessment has been provided that reflects the true extent of these combined effects on the community.

Without a full and transparent evaluation of community impact — including proximity, amenity, health, hydrogeology, and cumulative change — it is not possible to conclude that Great Moulton is an appropriate or proportionate location for this level of infrastructure.

Chapter 22: Human Health and Wellbeing

22.1 Article 8 Human Rights, PRow, Residential Amenity and Proportionality Impacts

Article 8 of the European Convention on Human Rights protects respect for private and family life and the home, while Article 1 of Protocol 1 protects the peaceful enjoyment of possessions. Development consent and compulsory powers may engage these interests where residents, homes, land or established patterns of daily life are materially affected. These rights do not create an automatic veto on development. The relevant question is whether any interference is lawful, necessary for the authorised purpose and proportionate, taking account of site selection, design, mitigation, access arrangements and, where relevant, compensation.

Public Rights of Way and access to the countryside are also relevant to residential amenity, recreation and community wellbeing. For a rural parish such as Great Moulton, established walking routes and quiet lanes contribute to everyday exercise, social contact, enjoyment of the countryside and the character of village life. Where those routes are closed, diverted or degraded, the effects should therefore be considered alongside wider impacts on residential amenity and wellbeing.

Human health and wellbeing are relevant considerations under the National Policy Statements. The assessment should consider the combined effects of matters such as noise, lighting, visual change, traffic, construction disturbance and changes to tranquillity and access to open countryside.

Great Moulton is presently characterised by a quiet rural environment, low background noise, dark skies, agricultural land and ready access to the surrounding countryside. The proposed concentration of solar development, National Grid and Project Substations, BESS infrastructure,

overhead-line works, cabling, access routes, compounds, fencing and lighting would introduce a number of changes that residents would experience cumulatively rather than as isolated technical effects.

BEPS-Great Moulton is therefore concerned that the application does not yet provide a sufficiently clear assessment of how the relocation and concentration of major energy infrastructure around Great Moulton may affect residential amenity, public access and community wellbeing, including during the prolonged construction period.

The proportionality question is whether these effects have been properly identified and balanced against the need for the development, and whether less intrusive siting, design, phasing or mitigation measures have been adequately considered.

The following sections identify the principal gaps and concerns.

22.2 Mental Health and Sensory Impacts on Residents of Great Moulton

The Mental Health and well being of the residents of Great Moulton have not been addressed within the East Pye Proposal.

The proposed relocation of major transmission infrastructure to the edge of Great Moulton introduces a range of sensory and environmental changes that have clear implications for residents' wellbeing. While this submission does not seek to make medical claims, it is well-established in planning policy and environmental assessment guidance that prolonged exposure to noise, lighting, visual intrusion, and construction disturbance can adversely affect quality of life.

22.3 The Key Sensory and Wellbeing Impacts

The key sensory and wellbeing impacts include:

- Persistent construction noise, including HGV movements, reversing alarms, piling, and ground-disturbance activities
- Operational noise from transformers, cooling systems, and associated equipment
- Night-time lighting, both during construction and operation, altering the dark-sky environment of the village
- Visual dominance of large-scale industrial structures in close proximity to homes
- Loss of tranquillity, which is a recognised component of rural amenity under national planning policy
- Increased traffic activity, including abnormal loads passing through narrow village roads
- Ongoing uncertainty, due to the lack of clarity regarding the works proposed in Site 1D and the absence of a full reassessment following the escalation to 400 kV

These factors collectively create a sustained sensory burden that is not comparable to normal rural living conditions. National Policy Statements EN-1 and EN-5 recognise that such changes can affect residents' wellbeing and require applicants to demonstrate how these impacts have been assessed, mitigated, and justified.

To date, no comprehensive assessment has been provided that considers:

- the proximity of the works to homes
- the duration and phasing of construction
- the combined sensory effects of multiple overlapping infrastructure projects
- the implications of introducing 400 kV equipment into a previously low-impact environment

Without this information, it is not possible to conclude that the proposal protects the wellbeing and amenity of the community or that the sensory environment of Great Moulton has been adequately considered.

22.4 Concerns Raised by the Cabinet Member for Children's Services

The Cabinet Member for Children's Services (Norfolk County Council) is also extremely concerned, as per her response to the Targeted Consultation. Her response follows:

"East Pye Solar – Targeted Consultation

I am very concerned regarding the applicant's decision, as part of the above Targeted Consultation on the East Pye Solar Farm, to locate a new National Grid 400 kV substation on a site to the South of Great Moulton close to existing residents in the village.

I understand that the applicant consulted on two options as part of their statutory consultation undertaken over the Summer (2025); and that the County Council in its response indicated clearly that it favoured the location further to the South away from the residential area of Great Moulton.

In Norfolk we currently have around 30,000 children identified with Special Educational Needs, disabled children, children with speech and language problems, children with sensory impairment, and children with autism.

Hence my keenness to make the applicant fully aware as to the impact that the proposal to site the 400 kV substation close to the village of Great Moulton will likely have on autistic children who, I hasten to add, have no voice in any development considerations.

The care towards their health and wellbeing is not apparently thought about. On the applicant's website it states that they are committed to working with the local communities to identify and define community benefits.

Families who care for their children with Special Educational Needs, including autism, go to great lengths to ensure their child or children are protected. They go to even greater lengths to ensure their children live

their lives peacefully, as they often experience the world in ways that differ from their peers, especially when it comes to sensory processing.

One of the most significant challenges many autistic children face is sensitivity to noise. Everyday noise which may go unnoticed by others, can feel overwhelming and painful. This heightened sensitivity and auditory hypersensitivity can trigger physical and emotional reactions. Families make life changing decisions. For example, moving to quiet locations in order that their children are not disturbed by the hustle and bustle of busy town life.

Families also take the education of their children seriously and some children are home educated, as they are unable to manage in a very busy school environment. It is far too overwhelming for them, and they are just unable to cope.

One solution a family can choose is to home educate their children, where they set up a home study area for them, in a carefully managed environment.

We can only imagine the total devastation a child or children would feel if their known safe quite controlled space were shattered. The alarm and distress the child or children will experience, is unlikely to go away in the short term.

The proposed location, as set out in above targeted consultation, for the 400 kV substation raises serious health and mental health concerns for those local residents living in and around the Great Moulton area. The particular concern will be around the noise generated both during and after construction; and will have a significant impact on any family/families with children with Special Educational Needs as referred to above.

More to the point, any child with special educational needs will have nowhere else to escape to where they are home schooled. This leaves any family out of alternative options which will be very distressing for the family and child to say the least.

While I understand the applicant's commitment to deliver this project, I would ask that serious consideration be given to finding an alternative location for the 400kV substation, which needs to be further away from the residents of Great Moulton.

I fail to see any community benefit whatsoever regarding the proposed siting of a 400 kV substation in such close proximity to the above local residents."

22.5 Sensory Environment and Rural Character

Great Moulton is a small rural village characterised by low ambient noise levels, dark-sky conditions, and an open agricultural landscape. These qualities form an essential part of the area's amenity value and are recognised in national planning policy as components of the rural environment that should be protected wherever possible.

The introduction of large-scale transmission infrastructure into Sites 1B, 1C, and 1D would fundamentally alter this sensory environment. The combined effects of construction activity,

operational equipment, lighting, and visual intrusion represent a significant departure from the baseline conditions that residents currently experience.

Key changes to the sensory environment include:

- Substantial increases in noise levels, both during prolonged construction phases and from operational equipment such as transformers and cooling systems
- Introduction of industrial lighting, affecting night-time darkness and altering the visual character of the village edge
- Visual dominance of large-scale structures, replacing open agricultural land with industrial forms visible from homes, gardens, and public rights of way
- Increased movement of heavy vehicles, creating intermittent but intrusive noise and vibration on narrow rural roads Frith Way, Narrowgate Way, and Hundred Lane are not merely transport routes; they are surviving components of the medieval settlement pattern of Little Moulton. Their narrow form, enclosed banks, and historic hedgerows preserve the structure of the pre-modern landscape. Altering these lanes for industrial access would damage heritage assets that contribute to the time-depth and identity of the parish. Their preservation is essential to maintaining the historic character of Great Moulton.
- Loss of tranquillity, a recognised planning consideration and a defining feature of the local landscape

These changes are not temporary or minor; they represent a long-term shift in the character of the area. The Environmental Statement does not provide a clear or comprehensive assessment of how the sensory environment of Great Moulton will be altered, nor does it demonstrate how these impacts have been mitigated or justified in the context of a village-edge location.

Given the scale of the proposed infrastructure and its proximity to residential properties, a detailed assessment of sensory and character impacts is essential. Without it, the proposal cannot be considered to protect the amenity, wellbeing, or rural setting of the community.

22.6 Vulnerable and Sensitive Receptors

National Policy Statements EN-1 and EN-5 require applicants to identify and assess impacts on sensitive receptors, including children, older residents, and individuals with sensory or cognitive vulnerabilities. The proposal does not provide such an assessment, despite the proximity of Sites 1C and 1D to residential properties and home-education environments.

Sensitive receptors in Great Moulton include:

- children with Special Educational Needs and Disabilities (SEND), including those with sensory processing difficulties

- home-educated children whose learning environments are located within their homes
- residents who rely on quiet, stable sensory conditions due to health or cognitive needs

households located within 25 m of the proposed works in Site 1D

The absence of a receptor-specific assessment represents a significant gap in the Environmental Statement. Without it, the proposal cannot be considered compliant with the requirements of EN-1 and EN-5 regarding the protection of vulnerable groups.

22.7 Noise-Related Stress and Sleep Disturbance

Construction and operational noise can cause stress, anxiety, and sleep disruption, particularly in rural areas where baseline noise levels are extremely low. Sudden or persistent noise from HGVs, machinery, inverters, and substations can trigger physiological stress responses, including elevated heart rate, increased cortisol levels, and reduced concentration. Night-time noise from transformers or cooling systems is especially harmful in quiet parishes like Great Moulton, where residents are accustomed to near-silence after dark. Sleep disturbance is linked to long-term health effects, including cardiovascular strain and reduced immune function.

22.8 Loss of Rural Tranquillity and Mental Wellbeing

Tranquility is a recognised contributor to mental health, and Great Moulton's peaceful environment is a defining feature of daily life. The introduction of industrial infrastructure, heavy construction traffic, and long-term operational noise erodes this tranquillity. Visual intrusion from large-scale energy infrastructure can also affect mental wellbeing, particularly for residents whose homes overlook the site or who use nearby footpaths and lanes for recreation. The cumulative loss of quiet, open views and natural soundscapes can lead to stress, reduced quality of life, and a sense of environmental loss.

Because Great Moulton has no public park or formal recreational area, residents rely on the surrounding footpaths, lanes, and open countryside for daily exercise, mental restoration, and social connection. These routes are the parish's functional equivalent of a public park. Industrialisation of these spaces through noise, traffic, and visual intrusion removes the community's only accessible green environment, with direct consequences for mental wellbeing, physical activity, and social cohesion.

22.9 Loss of Safe Walking Routes

Frith Way and Narrowgate Way function as the parish's only accessible green space and are used daily for walking, exercise, and social interaction. Introducing construction traffic and industrial access points removes these safe routes for the duration of construction and

decommissioning. The loss of accessible outdoor space affects physical activity, mental health, and community cohesion. East Pye has not assessed the health implications of removing the village's only safe walking environment.

22.10 Impacts on Children and Young People

Children are particularly sensitive to environmental change. Increased traffic, EMF exposure, noise, and loss of safe walking routes can affect their physical safety, independence, and emotional wellbeing. The proximity of the development to the children's football grounds raises specific concerns: children arriving excited or distracted are more vulnerable to traffic hazards, and parents may feel less comfortable allowing independent travel. Long-term exposure to noise, EMF, and reduced access to safe outdoor spaces can affect cognitive development, concentration, and overall wellbeing.

In the absence of a village park, children use the footpaths and lanes for walking, cycling, exploring nature, and travelling to the football grounds. These routes are essential to their independence and outdoor play. Any reduction in safety or tranquillity therefore has a disproportionate impact on children's wellbeing compared with communities that have alternative recreational spaces.

22.11 Impacts on Older Residents and Vulnerable Groups

Great Moulton has a significant number of older residents who rely on the quiet, stable environment of the parish. Noise, vibration, and increased traffic can heighten anxiety, reduce mobility, and create barriers to social participation. Vulnerable residents—including those with respiratory conditions, sensory sensitivities, or mobility challenges—are disproportionately affected by dust, diesel emissions, noise, and changes to familiar walking routes. Planning policy requires developments to protect the health of vulnerable groups, yet the proposal does not demonstrate how these impacts will be mitigated.

22.12 Community Cohesion and Social Wellbeing

Large-scale industrial development can affect community cohesion by creating uncertainty, stress, and division. Residents may feel a loss of control over their environment, leading to frustration, reduced trust in planning processes, and long-term anxiety about safety, property values, and environmental change. The presence of permanent infrastructure such as the National Grid substation and the BESS compound reinforces the sense of irreversible change. These impacts are particularly acute in small rural parishes where community identity is closely tied to the landscape.

22.13 Physical Health Risks from Air Quality and Dust

Construction-related dust and diesel emissions can exacerbate asthma, COPD, and other respiratory conditions. Fine particulates (PM_{2.5} and PM₁₀) are linked to cardiovascular disease, reduced lung function, and increased hospital admissions. Great Moulton's low baseline air pollution means residents are more sensitive to increases in particulates and diesel exhaust. Dust deposition on gardens, outdoor seating areas, and children's play spaces i.e. school playgrounds reduces the quality of daily life and increases exposure risks.

22.14 EMF Exposure and Public Health Concerns

The introduction of high-voltage infrastructure, underground cabling, and BESS units raises concerns about long-term EMF exposure. While scientific consensus continues to evolve, public health guidance emphasises precaution, particularly for children and long-term residential exposure. Great Moulton's near-zero EMF baseline means any increase is significant. Uncertainty about EMF impacts can itself cause stress and anxiety, affecting mental wellbeing even where physical health risks are still being studied.

22.15 Traffic Safety and Psychological Stress

Increased HGV movements on narrow rural lanes create daily stress for residents who walk, cycle, or drive these routes. Fear of collision, near-misses, and reduced visibility can deter walking and cycling, reducing physical activity and increasing social isolation. Parents may feel less comfortable allowing children to walk independently, affecting confidence and wellbeing. The psychological burden of navigating unsafe roads is a recognised health impact in rural planning assessments.

22.16 Long-Term Uncertainty and Future Burden

The proposal introduces decades of uncertainty regarding noise, EMF exposure, soil contamination, and the risk of BESS thermal events. Long-term uncertainty is itself a health stressor, particularly when combined with the knowledge that some infrastructure—such as the National Grid substation and the BESS compound—will permanently alter the landscape. Residents may experience chronic stress related to safety, environmental change, and the future of their homes and community.

22.17 Cumulative Health Impacts

Human health impacts do not occur in isolation. Noise, air pollution, EMF exposure, visual intrusion, traffic danger, and loss of tranquillity interact to create cumulative stress. Great Moulton's rural baseline means even small changes can have disproportionate effects. When

combined, these impacts represent a significant risk to the physical and mental wellbeing of the community. Planning policy requires cumulative effects to be assessed, yet the application does not provide a comprehensive evaluation.

22.18 Expert Observations from Dr Cathrine Rowett

Dr Cathrine Rowett has set out a series of stark observations on the destruction of the village, each demanding serious scrutiny and a clear response.

“The proposed changes to the East Pye plans are seriously problematic, and I can no longer see any way to support any of this project, given the revisions to the proposals for the pylons, substations and BESS schemes and the damage to the highways and ancient footpaths that are threatened by this scheme. The effect on the village of Great Moulton and residents living nearby will be devastating, both during construction and after the scheme is up and running.

NG substation, project substation and BESS

In particular, the location of the NG substation has now been moved to the second option offered in the initial plans, as was already clear it would have to be. Residents and councillors explained in the first consultation that option 2 was unacceptable for many reasons, including proximity to the settlement, inappropriate highways access routes, threat to local ecology and footpaths etc. These points have evidently been not only ignored but the situation made much worse by the huge increase in size of the substation and the relocation of pylons. This is an insult that makes residents feel utterly irrelevant and powerless. I cannot think of a more inappropriate response to the concerns about the damage this location will cause to roads and communities and the footpath and bridleway network.

The substation and BESS locations are in a location where there is an extreme cumulative impact of multiple energy projects all affecting the same community and the same wildlife and amenities. This is completely inappropriate and is a symptom of the unplanned nature of the system of speculative energy projects that is resulting in increased hostility and unrest in the community. The resulting negative responses will potentially threaten the government’s entire energy strategy and put us back 30 years in the transition to clean energy.

On the damage to Frith Way (which is an important route for many local people, but tiny without passing places)

I would also like to draw attention to the importance of the ancient road called Hundred Way, which is currently a very precious and unspoiled green lane (restricted byway). The trees and structure of this green lane need to be protected, but it will also lose its character as an amenity for residents and wildlife if it is surrounded on all sides by industrial infrastructure. I note that the changes to the area included in the project, at site 6, shows a section that crosses Hundred Lane. This must not be used as a crossing point to reach land on the other side of Hundred Lane. There should be no access to the land that comprises this precious byway for any kind of construction traffic or construction work.”

The alterations to the roads for abnormal loads indicate that the location of the infrastructure is in the wrong place. The road system is not fit for the use that is proposed, because these are green field rural sites and there should not be any suggestion of building major structures where the only access is narrow and bendy roads. The government's land use framework should designate this land as agricultural and for nature recovery, not for energy infrastructure.

Straightening Station Road in Tivetshall will have the effect of speeding up traffic and adding considerable danger to the road, with negative effects for those who have driveways onto this 60-mph road.

The damage to Lodge Lane and Frith Way is inadequately accounted for on the maps. The road is unfit for the traffic that would need to pass that way for the substation and the work on the pylon. I do not think that they have got the measure of this road, and how unsuitable it is for construction traffic.

Though not in my division, I strongly object to the proposal to mess up Hall Lane in the Long Stratton area, which has been left relatively unscathed by the Long Stratton Bypass and residents do not need yet another round of road reconstruction in that area of Long Stratton. I also strongly object to the idea that construction traffic should be travelling through Long Stratton, which is now not a through route and is supposed to be free of heavy traffic. This plan is unsuitable, and should be scrapped, to take account of the new situation with the bypass. Again this shows that the scheme is located in the wrong place"

22.19 Overview

The proposal introduces a level of noise, lighting, visual intrusion, and construction disturbance that is fundamentally incompatible with the rural, low-impact environment of Great Moulton. These changes have clear implications for human health and wellbeing, yet East Pye has not provided any meaningful assessment of these impacts, nor have they considered the needs of vulnerable groups, including children with sensory sensitivities and Special Educational Needs.

The concerns raised by the Cabinet Member for Children's Services highlight the seriousness of these omissions. Despite the proximity of Sites 1C and 1D to residential properties, home-education environments, and sensitive receptors, the Environmental Statement contains no receptor-specific analysis, no sensory-environment assessment, and no mitigation strategy proportionate to the scale of the proposed infrastructure.

Without a comprehensive evaluation of human health, wellbeing, and sensory impacts — as required under EN-1 and EN-5 — it is not possible to conclude that the proposal protects the amenity, safety, or quality of life of the community. These gaps represent a significant deficiency in the applicant's assessment and must be addressed before the proposal can be considered further.

Chapter 23: Great Moulton Specific Issues

23.1 Site Selection, Reasonable Alternatives and Deliverability Concerns

The principal issue for Great Moulton is no longer simply whether East Pye undertook a site-selection exercise. The Applicant plainly did undertake one. The more important question is whether the evidence now before the Examination provides a sufficiently clear, consistent and auditable explanation of how environmental assessment, engineering requirements, grid connection considerations, access, land availability and landowner willingness combined to produce the final Great Moulton-centred Scheme.

This issue is now directly engaged by the Examining Authority.

In **ExQ1 Q1.3.1–Q1.3.2**, the ExA has asked the Applicant to address the robustness of the site-selection process and, in particular, the respective roles played by environmental considerations, engineering requirements, grid connection constraints, landowner willingness and land availability. Those questions provide the most relevant and current foundation for residents' concerns.

The issue is therefore not whether commercial or deliverability considerations were capable of being taken into account. They plainly were. The issue is whether the Examination has sufficient evidence to understand the weight given to those considerations, how they interacted with environmental constraints, and whether reasonable alternatives were examined on a sufficiently consistent basis before the final configuration was selected.

Evolution of the Grid Connection Strategy

East Pye's Site Selection Assessment, **APP/7.20**, shows that Great Moulton and Tivetshall were not the original starting point for the Scheme.

The Applicant initially investigated a Point of Connection at Norwich Main Substation while undertaking its search for solar development land. East Pye subsequently records that NGET advised that there was insufficient existing capacity at Norwich Main and no suitable opportunity to expand the substation to accommodate the proposed 500MW development.

Norwich Main was therefore discounted and the connection strategy shifted to the **Bramford–Norwich 400kV overhead line**.

That change is important because it materially altered the geographical focus of the Scheme. Sites 1 and 2 and the proposed Great Moulton grid infrastructure emerged in the context of the revised connection strategy. The subsequent site-selection process was therefore necessarily influenced by the requirement to secure an acceptable connection to the 400kV network.

The Applicant's documents indicate that the eventual location reflected a combination of factors including:

- proximity to the Bramford–Norwich 400kV overhead line;
- engineering and electrical connection requirements;
- highway access;
- connection and cable-routing efficiency;
- environmental constraints;
- land availability;
- commercial deliverability; and
- willingness of landowners to participate in the Scheme.

Those are all potentially legitimate considerations. However, they are not interchangeable, and they do not answer the same planning question.

A location which is technically convenient, commercially deliverable or available from a willing landowner is not necessarily the location with the lowest overall environmental or community effects.

23.1.1 National Grid Substation Options 1 –3

East Pye initially identified three alternative locations for the proposed National Grid Substation around:

- Newton Flotman;
- Tharston/Tasburgh; and
- Long Stratton.

Those locations were considered against matters including transport and accessibility, environmental constraints and relevant siting considerations including the Horlock and Holford principles.

East Pye records that Tharston/Tasburgh was considered less favourable because of highway and land constraints. Newton Flotman and Long Stratton were initially regarded as potentially feasible but were subsequently discounted having regard to matters including accessibility, routes through or close to residential areas and heritage constraints.

The important issue for the Examination is not simply that those alternatives were considered, but whether the later Great Moulton alternatives were ultimately subjected to an equivalent and sufficiently transparent level of comparative scrutiny.

Emergence of the Great Moulton Alternatives

A further location south of Great Moulton, close to Station Road, was subsequently identified because of its position beneath or close to the Bramford–Norwich 400kV overhead line and its relationship with the B1134.

This later option was not one of the original three National Grid Substation alternatives.

East Pye records that the Great Moulton location offered potential advantages associated with connection efficiency and accessibility and was considered capable of accommodating the required grid infrastructure.

However, the chronology is important.

The later Great Moulton options emerged after the original connection strategy had changed and after Options 1–3 had already been subject to earlier consideration. The Examination therefore needs to be able to establish whether the later options were assessed using a genuinely comparable evidential framework and whether the environmental disadvantages and advantages of each alternative can be compared on a like-for-like basis.

This concern is now directly relevant to the questions raised by the ExA in **ExQ1 Q1.3.1–Q1.3.2**.

23.1.2 Wider Siting Zones and Land Availability

East Pye subsequently considered wider reasonable alternative siting zones.

APP/7.20 identifies three siting zones. **Siting Zone 2**, covering land generally south of Great Moulton, east of Tibenham Airfield and west of the A140, is recorded as performing relatively well against a number of technical and environmental considerations.

However, the Applicant also identifies constraints including:

- public rights of way;
- priority habitat;
- watercourses and drainage features;
- access considerations; and
- other environmental constraints requiring further consideration.

Of particular importance, APP/7.20 records that certain alternative land within the wider area was not progressed because the necessary land had not been made available to the Applicant or because a willing landowner was not forthcoming.

That distinction should remain clear.

APP/7.20 expressly states that land availability, including the participation or willingness of landowners, is a key consideration for site selection. It also records that alternative land sufficient to accommodate the Scheme had not been made available to the Applicant. APP/7.14 similarly explains that some alternative development zones were not considered reasonable alternatives because the relevant land had not been made available, the narrower point is that a land-availability test is principally a deliverability test; it is not, by itself, an environmental-comparison test. A location may be technically convenient and commercially deliverable without being the location with the lowest combined effects on landscape, residents, agricultural land, water, ecology, heritage, public rights of way, access and noise.

The Applicant's alternatives case should therefore distinguish clearly between an option being environmentally preferable, technically preferable, commercially efficient, or available because landowner participation could be secured. Those conclusions are not necessarily the same.

The ExA's questions are therefore particularly important because they provide an opportunity for the Applicant to explain precisely how landowner willingness and land availability affected the alternatives process and what weight was given to those factors when compared with environmental and community effects.

23.1.3 Solar Site Selection

A similar issue arises in relation to the selection and retention of the solar development land.

East Pye explains that there is no single prescribed national methodology for selecting utility-scale solar sites and that its assessment considered matters including:

- environmental constraints;
- agricultural land classification;
- grid proximity;
- land area;
- topography;
- access;
- planning constraints; and
- land availability.

APP/7.20 also records the importance of securing sufficiently large areas of land from landowners willing to participate in the Scheme.

Residents do not suggest that land availability is irrelevant. A development cannot ordinarily be delivered on land that the Applicant cannot realistically secure.

The more limited but important point is that a land-availability test is principally a **deliverability test**. It is not necessarily an **environmental-comparison test**.

Accordingly, where potentially suitable land was excluded because it had not been made available to the Applicant, the Examination should distinguish between:

1. land which was environmentally or technically unsuitable; and
2. land which may have been environmentally or technically capable of consideration but was not commercially available to the Applicant.

That distinction is important when assessing the weight that can properly be placed upon the alternatives case.

23.1.4 The Great Moulton/Tivetshall Western Infrastructure Cluster

The consequences of the site-selection process are particularly significant because the Great Moulton location is not simply accommodating solar panels. The selected configuration brings together a substantial concentration of energy and grid within Site 1 and the adjoining BESS area including:

- solar PV development across Sites 1A–1D;
- the proposed National Grid Substation;
- Project Substation infrastructure;
- the BESS, a further project substation and all associated conversion and electrical equipment
- underground cabling;
- works to the existing overhead-line network;
- access and haul routes;
- construction compounds;
- fencing, security and lighting;
- drainage and water-management infrastructure; and
- mitigation and environmental enhancement land.

Great Moulton and adjoining Tivetshall will therefore not experience these works as isolated technical components. They will be experienced together as a concentrated energy and grid infrastructure cluster.

The Environmental Statement necessarily divides the assessment between individual environmental topics and individual elements of the Scheme. The Examination must also consider what the maximum assessed development means collectively for the same residents, roads, public rights of way, farms, water receptors and landscape.

The cumulative planning question is therefore materially different from asking whether each component can individually be accommodated or mitigated.

The combined effects require consideration across, among other matters:

- landscape character and visual amenity;
- tranquillity and dark skies;
- residential amenity;
- heritage assets and their settings;
- public rights of way;
- agricultural land and soils;
- groundwater and private water supplies;
- surface-water drainage and flood risk;
- biodiversity and habitat connectivity;
- construction traffic and highway safety;
- abnormal indivisible loads;
- operational and construction noise;
- operational lighting;
- aviation and glint and glare;
- emergency access and BESS safety; and
- the overall experience of surrounding rural communities.

The site-selection case should therefore demonstrate not simply that sufficient land exists to accommodate the individual components, but why the combined infrastructure cluster remains justified at this location when its environmental, amenity and community effects are considered together.

Particular attention should be given to the interaction between temporary and permanent development. Solar arrays and the BESS may ultimately be capable of removal, but elements of the grid connection infrastructure may remain. The Examination should therefore distinguish between effects associated with the nominal operational life of the generating development and those arising from infrastructure intended to remain beyond it.

23.1.5 Changes During Examination

The same principle applies if the Applicant now proposes changes to the Scheme during Examination.

Changes involving Site 1B, Site 1D, the BESS, solar arrays, access routes, cable alignments, tower works, substation layouts or other grid infrastructure should not automatically be treated as minor or localised simply because the physical area affected may appear limited.

The relevant question is whether the change alters the environmental assessment, land requirements, construction methodology, mitigation, cumulative effects or the assumptions on which the existing application documents were prepared.

Where a material change is proposed, the Applicant should identify which application documents are affected and provide updated material where necessary. Depending upon the nature of the change, that may include revisions to:

- Works Plans;
- Land Plans;
- the draft DCO;
- Book of Reference;
- Grid Connection material;
- LVIA and residential visual assessment;
- drainage strategy and Flood Risk Assessment;
- biodiversity and BNG assessment;
- heritage and settings assessment;
- agricultural land and soils assessment;
- LEMP/OLEMP;
- construction and operational management plans;
- decommissioning material;
- transport and access assessment;
- aviation and glint-and-glare assessment;
- noise assessment;
- compulsory-acquisition material; and
- relevant protective provisions.

The Applicant should also identify whether the environmental baseline remains valid for any revised layout.

If revised development falls outside land or effects previously covered by surveys or assessment, the correct approach is not simply to assume that earlier conclusions remain

applicable. The Applicant should demonstrate, through proportionate updated evidence, whether the change creates any new or materially different environmental effects.

23.1.6 Oxford / Botley West Comparator

Other NSIP examinations may illustrate the type of further information that an examining authority can request where substantial design changes or reductions occur during Examination, the Oxford/Botley West examination, **EN010147**, may therefore provide a useful procedural comparison in showing that changes to a major energy scheme can have consequential effects across multiple application documents..

We submit that a stronger and more directly relevant basis for BEPS-Great Moulton's position is the East Pye Examination itself and, in particular, the ExA's questions in **ExQ1 Q1.3.1–Q1.3.2** concerning the robustness of the Applicant's site-selection case and the interaction between environmental assessment, engineering requirements, grid connection, landowner willingness and land availability.

23.1.7 Conclusion

BEPS-Great Moulton - Great Moulton does not contend that East Pye undertook no site-selection exercise, nor that considerations such as grid connection, engineering feasibility, land availability or commercial deliverability were irrelevant.

The concern is narrower and more significant.

The Applicant's own documents demonstrate that the final Great Moulton-centred configuration evolved through a changing grid strategy and was influenced by a combination of environmental, engineering, access, commercial and land-availability considerations.

What the Examination must now be able to understand clearly is **how those considerations were balanced**, whether the later Great Moulton alternatives were subjected to sufficiently comparable scrutiny, and whether the final Site 1/BESS/grid infrastructure configuration remains justified when its cumulative effects are considered as a whole.

In particular, the evidence should distinguish between:

- an option being environmentally preferable;
- an option being technically preferable;
- an option being commercially or operationally more efficient; and
- an option being available because willing landowners could be secured.

Those conclusions are not necessarily the same.

BEPS-Great Moulton therefore respectfully submits that the Applicant's response to ExQ1 Q1.3.1–Q1.3.2 should provide a clear and auditable account of the evolution of Options 1–4B and the wider Site 1/BESS configuration, identifying the comparative environmental, engineering, grid, access, land-availability and landowner considerations that led to the final selection.

Where further design changes are proposed during Examination, the Applicant should additionally demonstrate that the site-selection conclusions, environmental assessment and mitigation remain valid for the revised Scheme and should update any application documents materially affected by those changes.

23.2 Site Selection and the Great Moulton Configuration

The detailed site-selection history set out above leads to a narrower but important issue for Great Moulton: whether the final concentration of infrastructure at Site 1 and the BESS has been justified as a whole, rather than simply shown to be technically deliverable.

East Pye's own evidence shows that the present configuration developed following the change from Norwich Main to the Bramford–Norwich 400kV overhead line and was influenced by grid connection requirements, engineering considerations, access, land availability and landowner participation. Those considerations may properly form part of an alternatives assessment, but they do not establish by themselves that the resulting location represents the lowest-impact reasonable configuration.

That distinction is particularly important because the decision was not simply to locate solar panels at Great Moulton. The resulting Site 1/BESS area brings together Sites 1A–1D, the National Grid Substation, Project Substation infrastructure, BESS-related development, overhead-line and pylon works, cable routes, access infrastructure, drainage, security, lighting and mitigation land.

The Examination should therefore consider whether the combined consequences of that final configuration were themselves tested against reasonable alternatives. This includes effects on landscape and visual amenity, Grade 2 Best and Most Versatile agricultural land, residential amenity, noise, groundwater and private water supplies, ecology, public rights of way, highways and the permanent grid infrastructure that will remain beyond the operational life of the solar development.

The central distinction is between deliverability and environmental justification. A configuration may be technically feasible, close to the transmission network and capable of being assembled from available land without necessarily being the least harmful reasonable option.

BEPS-Great Moulton therefore submits that the Applicant's response to ExQ1 Q1.3.1–Q1.3.2 should enable the Examining Authority to understand not only why the Great Moulton

configuration could be delivered, but why, after considering the combined environmental and community consequences, it remained the appropriate configuration to take forward.

Where further changes are proposed during the Examination, the Applicant should also demonstrate that those changes do not undermine the site-selection reasoning, environmental assessment or mitigation upon which the existing application relies.

Principal references: APP/7.20 Site Selection Assessment, including sections 3 and 4; APP/7.14 Planning Statement, paras 8.2.29-8.2.32; ExQ1 Q1.3.1-Q1.3.

23.3 Permanent Versus Temporary Development - The Great Moulton Distinction

A second central issue is the distinction between the temporary or time-limited elements of the solar scheme and the retained transmission infrastructure that East Pye expressly states will remain after the approximately 60-year operational period.

ES Chapter 4 states that, when operation and maintenance end, the Sites would be decommissioned and the land returned to the landowner, but that the National Grid Substation and Grid Connection Infrastructure would remain in situ. The Policy Compliance Document makes the same distinction. This is not a minor drafting point: it changes the duration, reversibility and long-term landscape consequences of development at Great Moulton.

Principal references: APP/6.1.4 ES Chapter 4, para 4.6.3 onwards; APP/7.15 Policy Compliance Document; APP/7.3 Outline Decommissioning Environmental Management Plan.

23.3.1 Why the distinction matters

A landscape effect that ends because infrastructure is removed and the land restored is materially different from one created by major transmission infrastructure for which no equivalent end date is identified. Sixty years is already an inter-generational change. More importantly, the Great Moulton landscape does not return to its pre-development condition at Year 60 if the National Grid Substation, Grid Connection Infrastructure and any necessary retained access, crossings or mitigation continue afterwards.

The same issue can be seen at Great Moulton RB19. East Pye's PRow Visual Amenity Assessment records that the construction haul-route crossing is also to form permanent maintenance access. It identifies vegetation loss at the crossing and significant effects during construction, Year 1 and Year 15, with the access crossing remaining as a permanent change to a short section of the route.

Principal reference: APP/6.3.7.9 ES Appendix 7.9, Great Moulton RB19 assessment.

Planting may screen retained infrastructure over time, but screening is not the same as removal. The planning balance should therefore distinguish between temporary solar/BESS/project

infrastructure effects and the permanent or indefinite transmission infrastructure effects that remain beyond the solar operational period.

23.3.2 Post-Year-60 assessment

The Applicant should identify explicitly what remains on the ground after the solar scheme is decommissioned, what access and drainage are needed to operate and maintain those retained assets, which landscape mitigation is retained and by whom, and what residual landscape, noise, agricultural, PRow and community effects remain. If no discrete post-Year-60 assessment has been undertaken, the Examination should be told how those long-term effects are captured in the existing Environmental Statement.

Core submission

Great Moulton should not be characterised simply as hosting a temporary and reversible solar development. East Pye's own documents confirm that the National Grid Substation and Grid Connection Infrastructure remain after decommissioning. The assessment and planning balance should reflect what will actually remain on the ground.

23.4 Operational Noise in an Exceptionally Quiet Rural Environment

Noise is the third Great Moulton issue, the western cluster combines the National Grid Substation, Project Substation plant, BESS equipment, solar conversion equipment and associated electrical infrastructure in a rural area where East Pye's own baseline survey records very low background sound levels at a number of monitoring locations.

ES Chapter 12 records typical background sound levels in the high teens and low twenties of dB LA90 at several survey positions, including early-morning and night-time periods. The assessment therefore concerns new continuous electrical and mechanical sound in a very quiet acoustic environment, not the addition of plant to an already industrial soundscape.

Principal references: APP/6.1.12 ES Chapter 12, Table 12-17 and operational assessment; APP/6.3.12.1 Baseline Sound Survey; APP/6.3.12.2 Noise Modelling and Calculations; APP/7.2 Outline OEMP.

Oakridge Review [Appendix 1](#)

Reliance on Indicative Design and Future Mitigation

BEPS-Great Moulton is particularly concerned that East Pye's noise strategy relies on assumptions and mitigation measures that have yet to be finalised. The independent review by Oakridge Environmental Services (OES26-N-GMRG-001/V2) identifies material uncertainties in that approach, particularly in relation to final plant specification, operational assumptions, mitigation performance and acoustic character.

23.4.1 East Pye's Assessment and the Remaining Uncertainty

East Pye has undertaken operational noise modelling and concludes that, with mitigation, operational effects would generally not be significant in EIA terms. That assessment should be acknowledged. However, it relies in part on example manufacturer data, an indicative plant layout and assumptions concerning final plant operation and mitigation.

The independent Oakridge Environmental Services review identifies this as a material uncertainty. Final plant specification, number, location, source height, operating regime and acoustic characteristics may affect both predicted noise levels and the outcome of the BS 4142 assessment. Oakridge also identifies reliance on measures including reduced BESS fan duty and a 4 metre acoustic barrier, the performance of which is important to the Applicant's conclusions.

The issue is therefore not that East Pye has undertaken no noise assessment. It is whether the Examination can be satisfied that the final development will remain within the acoustic assumptions on which the assessment depends. Any plant specification, operating restriction or mitigation essential to the “no significant effect” conclusion should therefore be clearly secured, measurable and enforceable.

23.4.2 Acoustic Character, Low-Frequency Sound and Cumulative Plant

In Great Moulton's exceptionally quiet rural environment, overall A-weighted noise levels are not the only consideration. Transformer hum, cooling equipment, inverters and other electrical plant may be more noticeable where sound is tonal, low-frequency or otherwise distinctive.

Oakridge particularly questions whether the available information is sufficient to verify East Pye's assumptions concerning transformer tonality, low-frequency propagation and the masking of operational sound by the existing residual environment. The review notes that high-voltage transformers can generate a 100 Hz component and that the necessary frequency information has not been provided to independently demonstrate whether such sound would be masked at the most sensitive receptors.

BEPS-Great Moulton therefore submits that the final operational assessment should be based on the actual plant and layout and should assess the combined contribution of the National Grid Substation, relevant Project Substations, BESS and other fixed plant at Great Moulton receptors. Any tonal, low-frequency or other acoustic-character corrections required by BS 4142 should be applied to the final equipment rather than assumed away at this stage.

23.4.3 Permanent Substation Noise Beyond Decommissioning

The permanence issue also has an acoustic consequence. East Pye states that the National Grid Substation and Grid Connection Infrastructure will remain after the solar scheme is decommissioned.

The Examination should therefore identify which operational noise sources would remain after Year 60 and what enforceable acoustic controls would continue to apply to them. A noise assessment framed around the operational life of the solar scheme does not, by itself, resolve the effects of transmission infrastructure that may continue operating thereafter.

23.4.4. Core Submission

Oakridge does not establish that unacceptable noise will necessarily occur. Its importance is that it identifies material uncertainty in the evidence relied upon to conclude that significant effects will be avoided. [Appendix 1](#)

BEPS-Great Moulton therefore submits that the final plant, cumulative operating scenario, acoustic character, mitigation performance and receptor limits should be demonstrated and secured before consent, and that those controls must continue for the full operational life of any retained National Grid infrastructure. I think this is stronger than the longer version because it avoids duplicating Oakridge while still bringing out its most important findings. The phrase I would particularly retain is:

“The issue is therefore not that East Pye has undertaken no noise assessment. It is whether the Examination can be satisfied that the final development will remain within the acoustic assumptions on which the assessment depends.”

23.5 Examination-Stage Changes and Maintenance of the Assessment Envelope

Any examination-stage change affecting Site 1B, Site 1D, the BESS, access arrangements, cabling, overhead-line works, substation layouts or the relationship between the electrical components should be tested against the assumptions on which the Environmental Statement and other application documents were prepared.

A change does not need to involve a large area of land to alter the assessed effects. Relocation or redesign may affect, amongst other matters, noise propagation, visual effects, residential relationships, access and traffic movements, drainage, agricultural land take, ecology, heritage, public rights of way or cumulative effects.

Where a material change is proposed, East Pye should therefore identify clearly:

- which Environmental Statement assumptions are affected;
- which application and Examination documents require amendment;
- whether the revised development remains within the assessed Rochdale envelope;
- whether existing baseline surveys remain representative of the revised location or configuration; and
- whether any new or materially different environmental effects arise.

Where necessary, corresponding documents should be updated, including the Works Plans, Land Plans, draft DCO, Book of Reference, Grid Connection material, LVIA/RVAA, noise assessment, drainage strategy and Flood Risk Assessment, ecology and BNG material, heritage

assessment, agricultural land assessment, transport and access assessment, aviation/glint and glare assessment, management plans and any affected compulsory-acquisition documentation.

The important issue is not whether a proposed change is described as minor or localised, but whether the evidence demonstrates that the revised configuration remains within the environmental and legal assessment envelope on which the Examination is being conducted.

23.6 Best and Most Versatile Agricultural Land and Permanent Grade 2 Loss

The agricultural land issue is particularly important at Site 1 because East Pye's own detailed survey identifies Site 1 as Grade 2 and confirms a permanent loss of 6.1 ha of Grade 2 land for the National Grid Substation. It also states that the Project Substation within Sub-Site 1B and the Project Substation within the BESS Site are proposed on Grade 2 land.

Principal reference: APP/6.1.15 ES Chapter 15, paras 15.8.41-15.8.43 and associated ALC material.

East Pye assesses the 6.1 ha National Grid Substation loss, in isolation, as a minor adverse permanent effect that is not significant. The wider planning issue is not confined to that isolated EIA significance judgment. Grade 2 land is Best and Most Versatile agricultural land, and national policy requires applicants to explain and minimise the use of higher-quality agricultural land where practicable.

The key alternatives question is therefore whether the detailed ALC evidence was fed back into the site-selection process once the extent of Grade 2 land became clear. It is not sufficient simply to say that the selected substation must be on BMV land because the selected grid configuration requires it. The Examination should be able to see whether lower-grade or otherwise less harmful reasonable alternatives were reconsidered after the detailed soil evidence was available.

East Pye should provide a clear parcel-by-parcel schedule for Sites 1A-1D, the BESS Site and the relevant grid works identifying surveyed grade, assumed grade where survey is absent, temporary disturbance, long-term occupation and permanent loss. That would allow the agricultural effects of the western cluster to be understood without conflating temporary solar land use with permanent transmission land take.

23.7 Horlock Principles, Landscape Siting and Substation Design

APP/7.20 states that the National Grid Substation siting assessment was based on National Grid's substation siting and design guidance, commonly referred to as the Horlock Rules. The important question is not simply whether that guidance is cited, but how it was applied to the final Great Moulton location.

Principal references: APP/7.20 section 3; APP/7.1/APP-212 Design Approach Document; APP/6.1.7 Landscape and Visual; APP/6.3.7.9 PRow Visual Amenity Assessment.

Great Moulton Plateau is an open agricultural landscape with long views and limited natural screening in a number of directions. Future planting can reduce visibility over time, but planting is mitigation after siting; it is not the same as selecting a location already screened by topography or existing vegetation. The Applicant should therefore show how topography, existing screening, skyline effects, residential receptors and PRoWs were compared across the alternatives before Site 1B was selected.

same reasoning applies to the technology and layout of the substation. Where more compact or differently arranged electrical technology could materially reduce land take, height, visual clutter or the extent of permanent hardstanding, the Applicant should explain whether it is a reasonable design alternative and, if rejected, why. PS-Great Moulton should avoid asserting that one technology is automatically preferable in every respect; the stronger elimination point is that the chosen design should be justified against realistic lower-impact alternatives.



2.8 Water Environment, Groundwater and Private Water Supplies

at Moulton residents have repeatedly raised groundwater and private-water-supply concerns because the western cluster involves deep foundations or piling, cable trenches, standing, drainage systems, transformer oils, vehicle movements, construction compounds and emergency/firewater controls in an area containing private supplies and sensitive groundwater receptors.

Principal references: APP/6.1.9 Water Environment; APP/6.3.9.1 Flood Risk Assessment; APP/6.3.9.3 water-related appendices; APP/6.2.16.5 ground conditions material; Outline EMP/OEMP and drainage commitments.

strongest case is not to assume contamination will occur. It is that the Examination should require a receptor-specific evidence trail showing which private supplies may be hydraulically connected to the development area, what baseline monitoring exists, how construction and operational pollution pathways have been assessed, and what monitoring and response measures are secured if water quality or yield changes.

The same applies to transformer oil and other potentially polluting substances. Containment, drainage isolation and incident response should be designed for the actual final substations and BESS layout, not left solely to generic good-practice statements.

23.9 Ecology and Biodiversity - Final Layout Versus Survey Assumptions

The Great Moulton ecological issue should be framed around whether the final infrastructure layout remains within the survey and assessment assumptions, rather than asserting that all earlier ecology work has become invalid. East Pye has submitted scheme-wide ecology surveys, including bat and Great Crested Newt work, and those studies must be acknowledged.

Principal references: APP/6.1.8 ES Chapter 8; APP/6.3.8.3 Great Crested Newt Survey; APP/6.3.8.6 Bat Activity Survey; BNG documents APP/7.23-7.25; OLEMP.

Where substations, roads, trenches, security fencing, lighting or drainage move within Site 1, the Applicant should identify whether affected ponds, hedgerows, tree lines, field margins and bat corridors remain covered by the original survey effort and mitigation assumptions. Pond 41 and nearby ponds, together with the hedgerow and field-margin network, are examples of receptors that should be checked against the final layout rather than discussed only at scheme-wide level.

The necessary outcome is a clear ecology gap analysis for the final Site 1/BESS configuration, identifying any survey limitation, changed impact pathway or additional mitigation required before detailed design is approved.

23.10 Fire, Electrical Infrastructure and Emergency Response

East Pye has submitted an Outline Battery Safety Management Plan and other safety commitments. The Great Moulton concern is therefore not that fire safety has been ignored, but whether emergency planning is sufficiently integrated across the BESS, National Grid Substation, Project Substations, inverters, transformers, cabling and shared access network.

Principal references: APP/7.5 Outline Battery Safety Management Plan; APP/6.1.18 Human Health / Major Accidents material; APP/7.18 Design Principles Parameters and Commitments; APP/6.3.9.1 FRA; Outline CEMP/OEMP.

The final emergency arrangements should identify access for fire and rescue vehicles, electrical isolation responsibilities, firefighting water, firewater containment, smoke/plume response, cordon management, protection of nearby residents and PRow users, and how simultaneous access constraints are managed during construction or an incident. Where detailed BESS consequence modelling is relied upon, the Examination should also understand what equivalent assumptions apply to transformer and switchgear incidents at the substations.

These matters should be secured through the DCO and final management plans rather than left as general commitments to future liaison.

23.11 Transport, Construction Access and Abnormal Loads

The western cluster creates a transport issue because the same rural road network may need to serve solar construction, BESS construction, substation works, overhead-line and pylon works, cable installation and abnormal-load movements. The assessment should therefore demonstrate that the traffic programme reflects the whole build-out of the Great Moulton infrastructure, including National Grid works where those works extend beyond the core solar construction programme.

Principal references: APP/6.1.11 Transport and Access; APP/7.6 construction traffic/access material; current Works Plans and Access Plans; DCO provisions and highway commitments.

For Great Moulton, the key routes include Station Road/B1134, Frith Way, Lodge Road, Hundred Lane and the internal/temporary access network. The Examination should be able to identify which route serves each major work element, what vehicle classes are expected, whether abnormal loads require separate management, and what controls prevent unsuitable local lanes from becoming de facto construction routes.

The Applicant should also confirm whether construction of the National Grid Substation is fully represented in the traffic numbers and duration assumptions. If the transmission works have a different programme or contractor, the cumulative traffic assessment should explain how overlapping peaks have been bounded.

23.12 Public Rights of Way, RB19 and Residential Amenity

Public Rights of Way are not simply legal lines through the Order Limits. Around Great Moulton they are part of everyday recreation and the experience of the rural landscape. East Pye's own visual amenity assessment for Great Moulton RB19 records major adverse significant effects during construction and at Year 1, reducing to moderate adverse significant effects at Year 15, and confirms that the haul-route crossing is also to form permanent maintenance access.

Principal references: APP/6.3.7.9; APP/2.6 Streets Plan; current Access and PRow plans; draft DCO provisions concerning streets, temporary restrictions and access.

The legal status and treatment of FP13, RB19 and other affected routes should be shown consistently across the Streets Plan, PRow plans, Works Plans, Book of Reference and draft DCO. Any closure, diversion, restriction or construction crossing should state its duration, legal power, alternative route and mitigation.

The amenity assessment should also consider the combined experience of enclosure, construction traffic, substation and BESS views, noise, lighting and loss of open skyline. Retaining the legal ability to walk a route is not the same as retaining its rural amenity.

23.13 Lighting, Dark Skies and Night-Time Character

Lighting is relevant because the western cluster includes security and task lighting associated with the National Grid Substation, Project Substations, BESS and other critical electrical infrastructure. East Pye's submitted scheme description includes motion-sensing lighting in these areas, with final details to be controlled at detailed design.

Principal references: APP/6.4 Non-Technical Summary; Lighting Strategy / Design Principles; OEMP/OLEMP; relevant landscape and ecology chapters.

The Examination should therefore require a clear operational lighting envelope: locations and maximum mounting heights, luminaire type and spectrum, hours and activation regime, maximum spill at identified receptors, measures to protect bat corridors and dark rural lanes, and procedures for testing and adjustment after installation. Phrases such as "where practicable" should not be relied upon where a measurable lighting limit can reasonably be secured.

This is especially important because lighting interacts with landscape, ecology, residential amenity and the perception of permanent industrialisation. The assessment should therefore consider the cluster at night as well as by day.

23.14 Overall Great Moulton Position and Requested Action

BEPS-Great Moulton submits that the principal concern at Great Moulton is the combined effect of the Scheme. The National Grid Substation, Project Substations, BESS, solar development, overhead-line works, cabling, access, traffic, noise, lighting and drainage should not be considered in isolation, because they will be experienced together by the same community and within the same rural landscape.

The Applicant has undertaken extensive assessment, but its own documents also show that the final location emerged through a changing grid strategy; landowner willingness and land availability played a material role; permanent Grade 2 land loss arises from the National Grid Substation; the National Grid Substation and Grid Connection Infrastructure remain after the solar scheme is decommissioned; and the operational noise assessment concerns multiple electrical plant sources in a very quiet rural environment.

23.15 Residential Amenity, Countryside Access and Proportionality

The impacts on PRow must also be considered in combination with the residential and community impacts of the wider infrastructure cluster. The proposed National Grid Substation, 400kV project substations, BESS, solar panels, cable corridors, pylons, construction compounds, access tracks, fencing, lighting and security infrastructure would not be experienced by residents as isolated technical elements. They would be experienced as a cumulative industrialisation of the countryside around Great Moulton and Tivetshall.

For residents, PRow provides more than recreational convenience. They are routes for daily walking, family activity, exercise, mental wellbeing, access to open countryside, dog walking, social contact and quiet enjoyment of the local rural environment. Where those routes are closed, diverted or made less attractive by construction traffic, fencing, substations, pylons, glare, noise or loss of open skyline, the effect is a real and direct loss of amenity.

The proportionality assessment is therefore incomplete unless it considers whether the same infrastructure could be sited, designed or phased in a less intrusive way; whether closures could be avoided or reduced in duration; whether safe and attractive alternatives would be provided; whether construction and operational impacts have been assessed together; and whether the public benefit of the Scheme justifies the scale and duration of interference with local rights and rural amenity.

Those facts should be brought together rather than treated as separate objections. The Examining Authority is asked to ensure that the final Great Moulton configuration is justified and controlled as the infrastructure cluster that residents will actually experience.

BEPS-Great Moulton therefore respectfully requests that the Examining Authority require the Applicant to:

- provide a clear and auditable comparison of the National Grid Substation options and the subsequent Site 1/BESS configuration, identifying the respective weight given to environmental effects, engineering, grid constraints, access, land availability and willing landowners;
- identify precisely which assets are temporary, time-limited, long-term or permanent, and provide a post-Year-60 assessment of the retained National Grid Substation, Grid Connection Infrastructure and any necessary permanent access, drainage and mitigation;
- secure an enforceable operational noise envelope for the final plant and layout, including cumulative fixed-plant noise, acoustic character and the retained transmission infrastructure;
- provide an auditable parcel-by-parcel schedule of Grade 2 and Grade 3a agricultural land affected by Site 1, the BESS and grid works, distinguishing temporary disturbance from permanent loss;
- demonstrate how the Horlock siting principles and reasonable lower-impact substation layout/technology alternatives were applied to the final Great Moulton location;
- confirm that the final layout remains within the assessed water, ecology, landscape, transport, safety and PRow envelopes, with updated evidence where it does not; and

- provide a place-based cumulative assessment of the western infrastructure cluster so that residents, roads, PRowS, water receptors and the Great Moulton Plateau landscape are not considered only through separate technical chapters.

Until those matters are clear, the Examination cannot readily distinguish between effects that are genuinely temporary and reversible and those that will create a lasting change to Great Moulton. That distinction should be central to the assessment of site selection, mitigation, residual harm and the overall planning balance.

23.16 Human Rights, Public Rights of Way, Wellbeing and Residential Amenity [Cross Reference Chapter 22: Human Health and Wellbeing](#)

Public Rights of Way around Great Moulton, Tivetshall and Wacton should not be considered solely as highways infrastructure. They form part of the everyday recreational network used for walking, exercise, dog walking, social contact and access to the countryside and therefore contribute to health, wellbeing, residential amenity and enjoyment of the rural environment.

The relevant issue is consequently the combined effect of closures, diversions and restrictions together with construction traffic, noise, fencing, lighting, substations, BESS infrastructure and changes to landscape character.

Article 8 does not protect a general right to an unchanged environment. However, environmental effects may engage Article 8 where they directly and seriously affect private and family life or enjoyment of the home. Any consideration of human-rights implications should therefore focus on the actual scale, duration and severity of effects on residents rather than treating every PRow change as a human-rights interference in itself.

BEPS-Great Moulton submits that the Examination should consider PRow impacts together with residential amenity, health and wellbeing, landscape, tranquillity and cumulative community effects.

23.17 Great Moulton FP13

BEPS-Great Moulton is concerned that Great Moulton FP13 appears to pass through or close to the proposed National Grid Substation area but is not consistently presented as a Public Right of Way in the relevant plans.

If FP13 is shown or described as private access where it is in fact a recorded PRow, that distinction requires clarification. A public right cannot simply be treated as private access for the purposes of assessing construction or operational effects.

The concern becomes more significant if FP13 is proposed to be closed or restricted for approximately two years. A restriction of that duration would represent a material loss of recreational access and rural amenity and should be clearly identified, justified and secured through the appropriate DCO powers or other lawful mechanism.

BEPS-Great Moulton therefore requests confirmation of:

- the definitive legal status and alignment of FP13;
- how and for how long it would be affected;
- the alternative route, if any; and
- the specific DCO provisions relied upon.

23.18 Regulation 5(2)(k) and Accurate PRow Plans

Regulation 5(2)(k) is important because the application plans should enable affected communities and the Examining Authority to understand proposed changes to access and Public Rights of Way.

Current government guidance confirms that where development requires new or altered access or the closure, diversion, extinguishment or creation of a PRow, those proposals should be shown on the relevant plans and linked to the powers sought through the draft DCO.

If FP13 or any other PRow has been omitted, incorrectly described or insufficiently distinguished from private access, the Applicant should provide corrected plans and a clear schedule identifying:

- each affected PRow;
- the nature and duration of the effect;
- any temporary or permanent diversion;
- the relevant DCO power; and
- the resulting effects on accessibility, safety, amenity and wellbeing.

This is particularly important where PRow are also affected by construction access, haul routes or major electrical infrastructure.

23.19 BESS and PRow Receptors

APP/7.20 states that the nearest PRow to the BESS is approximately 50 metres away. BEPS-Great Moulton considers that this distance should be clearly evidenced against the definitive PRow network and the latest BESS and Order Limits.

This is relevant because more than one public route may be associated with the BESS area, including routes around One Hundred Way and Tivetshall St Margaret FP5.

Distance from PRow affects the assessment of visual effects, noise, lighting, security fencing, construction disturbance and recreational amenity. An incorrect receptor location could therefore understate the experience of people using those routes.

BEPS-Great Moulton requests a simple verified schedule showing each PRow around the BESS and Site 1 infrastructure, its legal status, nearest distance to the relevant works and any proposed closure, diversion or restriction.

Appendix 1

Noise Impact Assessment Review - Oakridge Environmental Services

Great Moulton Residents Group – Review of Noise Impact Assessment East Pye Solar – Planning Inspectorate Reference: EN0110014	OES26- N-GMRG-001/V2
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Noise Impact Assessment Review

East Pye Solar

Solar PV station, erection of a battery energy storage facility
(BESS), National Grid substation
and associated infrastructure

On behalf of

Block East Pye Solar and Great Moulton
Parish Council

Great Moulton

Norfolk

Planning Inspectorate Reference: EN0110014

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1. Introduction

1.1 Introduction

This report is prepared on behalf of Great Moulton Parish Council in support of refusal of the planning application EN0110014 for the erection of a battery energy storage facility (BESS) and a National Grid substation within the parish of Great Moulton, Norfolk. The BESS and National Grid substation will serve a proposed solar farm which is also part of the application. However, it is the BESS and substation that have the potential to cause significant adverse effects to the residents of Great Moulton. The grounds for refusal include consideration of potential noise impacts stated as follows:

This report is a technical review of the applicant's submitted Noise Impact Assessment and supporting information. It does not purport to provide a complete new operational noise assessment of the scheme.

Rather, it considers whether the submitted information is sufficiently detailed, transparent and robust to allow the decision-maker to conclude that unacceptable adverse noise effects would be avoided. Where the applicant's information is incomplete, uncertain or not capable of independent verification, this report identifies those limitations and the implications for decision-making.

1.2 Summary

The case is not that the BESS and National Grid substation development is inherently unacceptable in noise terms. Rather, the concern is that the submitted information does not provide sufficient information and therefore introduces a high level of uncertainty as to whether adverse noise effects would be avoided or capable of being mitigated effectively once the site becomes operational, particularly having regard to:

- BS 4142 assessment methodology, context and uncertainty;
- The very quiet rural night-time acoustic environment;
- Potential low-frequency and lack of information on tonal characteristics;
- Uncertainty over the final plant specification; and
- Limited information on modelling inputs and scale of uncertainty of the noise propagation model for a large collection of noise sources with a low frequency character

acoustic character, mitigation assumptions and receptor background conditions remain uncertain, the decision-maker cannot be confident that the proposed development would be acceptable in noise terms.

While it is acknowledged that grid-scale battery energy storage systems (BESS), substations and associated electrical infrastructure can often be made acceptable in noise terms, it is respectfully submitted that the current submission does not provide sufficient certainty to conclude that this particular development would not give rise to

adverse or significant adverse effects on residential amenity, particularly during the night-time period and in relation to low-frequency and/or tonal noise.

The BESS is considered in some detail because it appears to be one of the potentially dominant operational noise sources, but the same issues of specification uncertainty, source data, acoustic character, mitigation assumptions and receptor context are also relevant to the National Grid substation and other noisy operational elements of the scheme.

1.3 Documents examined

Report	Prepared by	Date
Environmental Statement Vol. 1: Chap.12 – Noise and Vibration	Stantec	March 2026
Environmental Statement Vol. 2: Figure 12.1 Sound and Meteorological Survey Location	Stantec	February 2026
Environmental Statement Vol. 2: Figure 12.2 Noise and Vibration Sensitive Receptors	Stantec	February 2026
Environmental Statement Vol. 3 Appendix 12.1 Baseline Sound Survey Report	Stantec	March 2026
Environmental Statement Vol. 3: Appendix 12.2 – Noise Modelling and Calculations	Stantec	March 2026
Statutory Nuisance Statement Revision 1	Stantec	March 2026

Table 1 - Reports examined

2. Stantec Environmental Statement – Noise and Vibration

2.1 Baseline Sound Survey

The Environmental Statement on noise and vibration prepared by Stantec provides a baseline noise survey taking data from 51 noise monitoring positions that effectively covers the number of noise-sensitive receptors across this vast site. The survey durations were 6 to 8 days at each location and provide a good representative snapshot of the ambient and background sound levels in terms of broadband A-weighted $L_{eq,T}$, $L_{90,T}$ and $L_{F Max,T}$.

However, the report states that as this was an unattended survey, it is not possible to accurately comment on the dominant noise sources or specific noise events during the entire survey period. Comments were given on the on-site environmental sound climate at the time of set-up and collection and these included "on-site sound levels dominated by vehicular movements on the surrounding road network" for the majority of the survey positions and in all 4 of the survey positions reported for Parcel Group 1 which covers Great Moulton.

These are MP41 to MP44. Since no octave or third-octave band data have been published, it is not possible to determine whether road traffic noise is the dominant source of noise in this isolated rural area. The presence of road traffic noise can be indicated by comparing the spectral content of the measured levels with the typical road traffic spectrum set out in BS EN 1793-3 and referenced in BS 8233:2014. This is a concern, as the subsequent noise model and specific sound level assessments rely somewhat on the masking effect of road traffic sound. The DEFRA-funded strategic noise maps produced by Extrium (<http://www.extrium.co.uk/noiseviewer.html>) shows that the A140 to the east of Great Moulton does not appear to have a significant noise impact on the area. (See **Figure 1** to **Figure 3**).

These strategic road traffic noise maps are not a substitute for receptor-specific background sound measurements, but they provide useful context when considering whether road traffic is likely to provide a consistent masking influence at Great Moulton, particularly during the night-time period.

The submitted ES Chapter 12 identifies MP41, MP42 and MP43 as the associated measurement positions for residential receptors in and around Great Moulton, including dwellings on Broadgate Lane and Station Road. The ES also identifies these receptors as high sensitivity receptors.

This reinforces the need for particular caution when applying generic assumptions about the residual acoustic environment at Great Moulton, because the acceptability of the operational assessment depends on whether the measured baseline is genuinely representative of the receptor locations and whether the assumed masking environment is present during the most noise-sensitive periods.

The principal concern at this time is not whether the background sound levels reported by the applicant are numerically correct at the monitoring locations. Rather, it is whether those measurements and the acoustic conclusions drawn from them are representative of the nearest and most affected residential receptors.

The submitted assessment relies upon assumptions regarding the residual acoustic environment, including the degree to which existing background sounds like road traffic, would mask operational noise from the BESS, National Grid substation and associated infrastructure. If those assumptions are not representative of the receptor locations, the conclusions of the BS 4142 assessment may be materially affected. This uncertainty could then be further exacerbated by tonal and character assumptions informing the selected Noise Rating level on which judgement is made as to whether or not there are significant impacts.

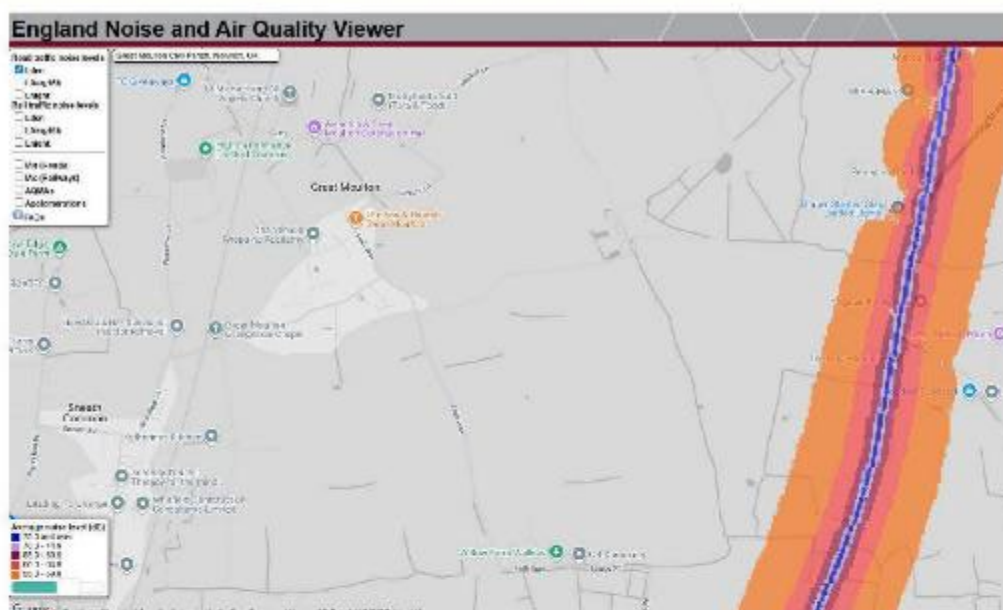


Figure 1- Lden Road traffic noise levels from Extrium



Figure 2 LAeq,16hrs road traffic noise levels (daytime) from Extrium



Figure 3 Night road traffic noise levels from Extrium

2.2 Noise modelling and calculations

2.2.1 Assessment Assumptions and Limitations

The authors have stated that:

"Detailed plant specifications are not available at this stage, and potential noise emissions based on example equipment data have been assessed using an example plant layout which has been based on achieving the Outline Operational Environmental Management Plan..... noise requirements"

The ES Chapter 12 states that the operational assessment has been informed by scheme information but also identifies assessment assumptions and limitations. The submitted information therefore appears to rely on an indicative plant layout and example plant data at this stage.

This is important because the final number, type, layout and operating regime of BESS containers, inverters, transformers and associated cooling plant may materially affect both the overall rating level and the acoustic character of the installation. In a BS 4142 assessment, such uncertainty is not simply a matter of calculation refinement; it affects the confidence that can be placed on the predicted outcome and on the conclusion that no significant effect is anticipated.

This introduces a level of uncertainty that is difficult to evaluate. The authors have prudently used a conservative approach assuming plant operates simultaneously, continuously, and at maximum output. However, there is no indication as to the number of battery storage units to be installed and the authors have made an exception with the BESS by assuming reduced sound levels associated with lower fan duty as a method of mitigation. It is not clear from the report how many units have been used in the calculation of noise from the BESS.

The calculation includes the provision of a 4m high acoustic barrier in areas around the BESS with a surface density of 15kg/m² and an absorptive side facing the battery storage containers.

The inclusion of a 4 m high acoustic barrier as part of the modelled mitigation indicates that operational noise requires material mitigation in order to achieve the assessment conclusions. The effectiveness of that mitigation is therefore central to the reliability of the assessment and should be supported by clear assumptions regarding barrier location, height, surface density, absorption, source heights, frequency performance and long-term deliverability.

Consideration could be given to an earth bund around the BESS and substation site that provides sound and visual screening.

The need for a 4 m high acoustic barrier as embedded or additional mitigation is itself a material indicator that operational plant noise is capable of being significant if not carefully controlled.

The ES Chapter 12 includes operational plant noise assessment tables and residual operational assessment tables, but the robustness of those conclusions depends on the performance assumptions for the barrier, the assumed source heights, source directivity, plant layout and the frequency content of the source data. If any of these assumptions change at detailed design stage, the modelled screening performance and receptor levels may also change.

The sound source data have only been given in broadband A-weighted sound power levels and thus, if the noise model has been calculated in accordance with ISO 9613-2, has used the 500 Hz octave-band frequency to estimate sound attenuation. However, there are concerns regarding low-frequency sound from the BESS, inverters and substations, which will not be addressed by A-weighted broadband levels, and attenuation over distance in the lower frequencies such as 50 Hz and 100 Hz is less than that in the mid to high frequencies.

The ES Chapter 12 reports operational sound power data in tabulated form and concludes that residual effects would not be significant. However, without the supporting octave-band or one-third-octave source data, it is not possible to independently test whether the model has appropriately accounted for low-

frequency propagation, barrier performance at low frequencies or the potential prominence of transformer hum and cooling plant noise at night. This is particularly relevant as the development includes both BESS infrastructure, inverters and a National Grid substation, as these source types can include tonal, low-frequency or otherwise distinctive acoustic components.

The practical implication for nearby residents is that the likely audibility, character and intrusiveness of operational noise cannot be confidently determined from the information currently provided.

This is particularly important at night, when residual sound levels in rural areas may be low and when tonal or low-frequency components may be more noticeable than would be suggested by broadband A-weighted levels alone.

The absence of transparent source spectra and detailed modelling inputs therefore prevents a robust assessment of whether operational noise would be inconspicuous, clearly audible, adverse, or potentially significant at the most affected dwellings.

When considering background noise levels and statements in the applicants noise reports suggesting reliance on traffic noise to provide masking of operational sound, the accuracy and consideration of spectral make-up of the ambient noise is a key consideration to ensure any consideration of impact is as accurate as possible.

2.2.2 Operational Assessment of Low Frequency Noise

The authors of the noise model have provided a calculated 1/3 octave band façade incident external sound level from estimated noise from both the National Grid Substation and the BESS site.

However, it is not clear how the one-third-octave-band sound power levels from the plant have been determined. For example, manufacturer's data or measurements taken from existing sites. Although the authors state that they have used manufacturers' sound power levels of similar plant, this is not documented and only the A-weighted sound power levels are reported.

Without this information it is not possible to check the validity of the estimated sound levels.

The ES Chapter 12 includes operational plant assessment outputs for high sensitivity residential receptors and identifies residual operational effects as not significant. However, the ability to reach that conclusion is dependent on the accuracy of the assumed source spectra and propagation model. If the underlying frequency data are not provided, the assessment cannot be independently checked against the low-frequency criteria or the tonal audibility method in BS 4142. This is a material limitation because a broadband A-weighted level can mask the presence of a pronounced low-frequency component which may be more noticeable inside dwellings, particularly during the night-time period.

This issue is particularly relevant to electrical infrastructure such as transformers and substations, where tonal or low-frequency components may form an important part of the perceived acoustic character. The assessment should therefore demonstrate not only compliance with broadband noise limits, but also that the frequency content and acoustic character of the predicted sound would not give rise to adverse perceptibility or disturbance at nearby dwellings.

It is also not clear how much absorption from the proposed noise barriers located around the BESS has been estimated in the model, but the effective absorption at low frequencies will be affected by the depth of the absorptive layer. This is due to the length of the soundwave, which is equal to the speed of sound in air (m/s) divided by the frequency of the sound (Hz). This can range from 13.7 m at 25 Hz to 2.1 m at 160 Hz. (See **Table 2.**) The use of earth bunds, which have a wider footprint as mitigation, would address some of these concerns.

Frequency (Hz)	25	31.5	40	50	63	80	100	125	160
Wavelength (m)	13.7	10.9	8.6	6.9	5.4	4.3	3.4	2.7	2.1

Table 2 – Typical wavelength values (m) for low frequency 1/3 octave bands (Hz).

2.2.3 BS 4142 Acoustic Feature Rating Corrections

The authors have concluded that neither the BESS nor the National Grid Substation produce any tonal sound, despite stating:

"High voltage transformers can generate a 100Hz hum due to vibration of the transformer coil. The acoustic modelling exercise indicates that the specific sound level from the high voltage transformers, including the 100Hz tone, is unlikely to be distinguishable at the receptor as it will be masked by other broadband sound relating to the BESS inverters and BESS Containers."

Annexe C of BS 4142:2014+A1:2019 provides a 1/3 octave band method for assessing the audibility of tones. If the 1/3 octave band data used in the noise model were provided, this would prove/disprove the likelihood of tones and the value to be added to the Rating Level.

In the absence of disclosed one-third-octave data, it is not possible to confirm whether the transformer 100 Hz component would be sufficiently masked at the receptor, or whether it would remain perceptible during periods of low residual sound.

This is important because the assessment appears to rely on the assumption that broadband BESS-related sound will mask any transformer tone. That assumption may not be robust where the BESS cooling plant is operating at reduced night-time duty, or where weather, plant loading or operating mode changes the relative contribution of the transformer and cooling plant sources.

The authors also state:

"BESS are designed without any noticeable acoustic features due to the broadband nature of the sound. Noise from the proposed development is not likely to be readily distinctive against the residual sound environment. Therefore, no rating penalty has been applied for 'Other Sound Characteristics'."

Section 11 of BS 4142:2014+A1:2019 states:

"The character and level of the residual sound compared to the character and level of the specific sound. Consider whether it would be beneficial to compare the frequency spectrum and temporal variation of the specific sound with that of the ambient or residual sound to assess the degree to which the specific sound source is likely to be distinguishable and will represent an incongruous sound by comparison to the acoustic environment that would occur in the absence of the specific sound. Any sound parameters, sampling periods and averaging time periods used to undertake character comparisons should reflect the way in which sound of an industrial and/or commercial nature is likely to be perceived and how people react to it."

If one-third-octave-band or at least one-octave-band data were available from the baseline sound survey, this could be used to show whether the specific sound level is in fact indistinguishable against the residual background. The authors may be relying on the presence of road traffic noise, particularly in the 80 Hz to 160 Hz one-third-octave bands. However, it has not been demonstrated that road traffic is the dominant noise source in all areas, particularly in Great Moulton where the BESS and National Grid substation are proposed. Road traffic in this rural area is sporadic and there are long periods, particularly at night, when there is very little traffic.

The same concern applies to any reliance on road traffic or general residual sound to mask tonal or low-frequency components from the proposed plant. Masking cannot be assumed from short attended observations or from broadband A-weighted sound levels alone. It should be demonstrated using representative night-time frequency data for the residual sound environment and the predicted plant noise. Without that comparison, there remains uncertainty as to whether tonal components, particularly around 100 Hz, would be perceptible at residential receptors during quiet night-time periods.

In the absence of this information, it is not possible to determine whether the operational sound would be appropriately characterised as acoustically neutral, or whether rating penalties for tonality, intermittency, distinctiveness or other acoustic features may be required. T

his is a material issue because even relatively small changes to the rating level may alter the BS 4142 outcome, particularly where representative night-time background sound levels are low.

2.3 Implications for residential receptors

The implications for residents are not that unacceptable noise effects have been conclusively demonstrated at this stage. Rather, the submitted information does not allow those effects to be confidently ruled out. This distinction is important.

Where a proposed development includes substantial operational electrical infrastructure in a quiet rural environment, the assessment should provide sufficient information to demonstrate that noise from the BESS, National Grid substation, transformers, inverters, cooling plant and associated infrastructure would not result in unacceptable effects at the nearest and most affected dwellings.

The current assessment does not provide sufficient transparency regarding final plant specification, source spectra, modelling assumptions, mitigation performance or the representativeness of receptor background sound levels.

As a result, it is not possible to determine with confidence whether operational noise would be insignificant, acceptable subject to mitigation, or potentially adverse at individual residential receptors. This uncertainty is itself material to the planning decision, because the decision-maker must be satisfied that significant adverse effects on health and quality of life would be avoided before consent is granted.

3. Conclusion

Paragraph 4.43 of the Statutory Nuisance Statement states:

"A noise assessment has been undertaken and is reported in ES Volume 1, Chapter 12 - Noise and Vibration [EN0110014/APP/6.1.12]. This chapter focuses on an assessment of the likely significant effects on noise and vibration as a result of the Scheme. The noise and vibration assessment concludes that no significant noise or vibration effects are anticipated."

However, it is not possible to validate this assessment due to the degree of uncertainty in the submitted assessment. This is due to:

- The lack of detail in plant selection, both for the BESS and National Grid substation;
- Operational assumptions such as reduced fan duty at night and the suggestion of acoustic enclosures without details/specifications;
- Lack of spectral data for both the assumed plant noise and the residual/background sound survey;
- Lack of detail regarding the acoustic barrier performance and the propagation of low frequency noise (<160Hz) over distance;
- Insufficient evidence supporting the decision not to add a feature correction to the specific sound level.

Taken together, the available information does not demonstrate that the development would avoid adverse or significant adverse noise impacts with sufficient certainty. The conclusions of the submitted assessment are therefore not robust, as they are dependent on assumptions which have not been substantiated by project-specific data. Accordingly, the Council's position remains that insufficient information has been provided to demonstrate that acceptable noise levels can be achieved and maintained. The absence of confirmed plant specification, lack of frequency-based source and survey data and limited transparency of the modelling approach collectively introduce a substantial level of uncertainty into the assessment. This is not a minor or isolated uncertainty, but one which has the potential to materially alter the outcome of the BS 4142 assessment.

Relatively small changes in the underlying assumptions — including acoustic character corrections and spectral content — may reasonably result in rating levels within a range indicative of adverse or significant adverse impact. In the context of an exceptionally quiet rural environment, such outcomes may be particularly difficult to mitigate effectively through design or operational controls once the site is constructed.

The ES Chapter 12 records that operational plant noise has been assessed against defined LOAEL and SOAEL thresholds and concludes that residual operational effects would not be significant. However, those conclusions are only as reliable as the assumptions on which they are based. The present review identifies several areas where the submitted information does not allow independent verification of the assessment outcome, including the absence of confirmed plant specification, incomplete disclosure of source spectral data, uncertainty over acoustic feature corrections, limited transparency over barrier performance, and uncertainty regarding the representativeness of the residual acoustic environment at Great Moulton.

If the applicant subsequently provides confirmed plant specifications, source sound power spectra, detailed modelling assumptions, mitigation specifications and representative receptor-based background data, it may then be possible to undertake a more definitive assessment of likely operational impacts. Until that information is available, any attempt to quantify the precise degree of impact at individual dwellings would be subject to significant uncertainty.

This raises fundamental concerns regarding reliance on pre-commencement or pre-operational planning conditions to resolve these issues at a later stage. Paragraph 198 of the National Planning Policy Framework requires planning decisions to ensure that development avoids significant adverse impacts on health and quality of life arising from noise.

Where the submitted information does not allow the decision-maker to confidently conclude that unacceptable noise impacts would be avoided, the appropriate conclusion is not that the matter can simply be deferred, but that the assessment is presently insufficient. The associated Planning Practice Guidance sets out the concept of the Significant Observed Adverse Effect Level (SOAEL), above which adverse effects should be avoided. The potential for adverse or significant adverse noise effects cannot be ruled out with the degree of confidence required.

On the information currently submitted, the proposed development has not demonstrated compliance with Policy ENV2 or national planning policy in relation to noise.

On the information currently submitted, the applicant has not demonstrated with sufficient confidence that adverse or significant adverse noise effects would be avoided, particularly at night and in relation to low-frequency and/or tonal operational plant noise.

Noise is a material consideration in the national Planning Framework. Refusal of the application is therefore justified unless and until the applicant provides sufficient project-specific evidence to demonstrate that the BESS, National Grid substation, Inverters and associated noisy infrastructure can operate without causing unacceptable noise impacts at affected residential receptors.

Appendix 2

The sound of solar: Noise in a sustainable world | New Civil Engineer

The issue of Noise associated with large NSIP developments.

██████████ is managing director at RSK Acoustics – 2 April 2025

The noise associated with solar farms, particularly large developments, can be significant and compounded by their rural locations. In these settings, any additional noise can be noticeable and can have an impact on people using and living in the area, as well as local wildlife.

It is often assumed that solar farms don't make any noise, that they are silent generators of clean energy. While the panels themselves make no noise, the infrastructure surrounding solar farms that enables energy to reach our homes does create residual noise. It is important to design for this noise at the start of the process to avoid surprise mitigation further down the project's development that could increase costs and delay planning approvals.

When considered at the scale of solar farm installations that we see in the UK, the electrical infrastructure that enables these large-scale connections to the grid can have an impact on existing noise environments if noise is ignored. Typically developed in rural locations where there is sufficient land to house solar photovoltaic (PV) panels, these naturally quieter environments can often mean that low-level noise emissions that would often go unnoticed in an urban environment have the potential to be disruptive. Managing this is regulated closely by planning policies to ensure any noise brought by the infrastructure is not harmful to wildlife or residents.

National policies such as the National Planning Policy Framework (NPPF) and the Noise Policy Statement for England (NPSE) both provide specific overarching requirements to protect residents and communities from noise associated with developments and promote its effective management for good health and quality of life. At a local level, individual councils and authorities will have their own policies, resulting in some national variation and making it crucial to understand what applies to a specific site. An understanding of acoustics is vital to delivering new projects in line with these regulations and for positive community outcomes. Dispelling myths around sound and solar means appropriately anticipating the impact of an installation and designing mitigation early on.

On a solar farm, it is the supporting infrastructure, such as battery storage, transformers and substations, that produces noise. The significance of that audible noise is relative to the existing environment and the plant chosen. Identifying the right products for the development and working closely with the manufacturers allow for greater control over potential noise. Engaging with the manufacturers at this stage also enables collaborative work on designing the plant for greater noise control and quieter operation when installed

Ambient sound levels typically fluctuate through the course of the day – it is usually quieter overnight than during the day – and vary by location. The bustle of a city will create much more noise than rural countryside. This means that a low-level sound generated by a battery energy storage system or transformer may not be noticeable during the day in the middle of a city, but in the countryside it would be. It is also important to bear in mind the cumulative effect of multiple plants and machines running together; it is unlikely that a solar farm will have a single source of noise.

When there is an understanding of these specific environmental factors, and their relationship with the infrastructure to be installed, it becomes possible to manage noise. To most effectively mitigate potential significant noise, incorporating actions into the design is vital. It means not only cost savings against implementing measures later on but also issues can be removed in their entirety.

Layout is particularly important on large sites where significant infrastructure is needed. It is possible to design in a way that is sympathetic to acoustics, moving sources away from receptors such as residents or wildlife or creating noise barriers with needed site structures. These intelligent designs make use of the natural noise-managing properties of terrain, structures and buildings. If this is considered at the design stage, buildings such as offices and substations that are an integral part of the site can be positioned in a way that they serve as these needed noise barriers.

Making these design elements as effective as possible comes down to accurate early estimations of source noise levels. Preparing models that simulate the acoustics of the site means that mitigation can be designed from the beginning. Like in many construction and engineering disciplines, it's always the case that action to eliminate will be taken before action to insulate. The accuracy of models and plans makes this possible. Engaging acoustic specialists early on enables mitigation to be optimised. Working on the early planning and design stages of the project also means that it is possible for cross-discipline collaboration, opening opportunities for solutions to be found together.

Ultimately, by incorporating acoustic considerations from the outset and integrating noise reduction strategies into the design, we not only align with regulations but also foster harmonious relationships with local communities and protect wildlife. Effective noise management is not an afterthought but a crucial element of sustainable solar farm development that ensures long-term success and minimal environmental impact.

Appendix 3

Correspondence between [REDACTED] - BEPS-Great Moulton and National Grid Regarding the Substation Transmission Connection

Good morning [REDACTED],
Thank you for this info and the promise of an update if things change.
I have taken the liberty of sending a copy to the contact at Great Moulton Parish Council,
[REDACTED], so she has a direct link to you for the future.

East Pye update



[REDACTED]

[Reply](#) [Reply all](#) [Forward](#) [...](#)

Wed 29/04/2026 15:54

Thank you. I understand things are only just moving forward but in 6 weeks time the planning inspectorate will be starting their process towards recommending or not, we are anxious to know if the PI can give the go ahead for a large substation in the edge of our village without any direct input from yourselves

Could I ask if you have looked at the process that East Pye have used to establish if our village is suitable or landowner led just because it was the easy option, obviously we do understand you cannot tell us anything, but to know that you are taking this process with the attention to detail that is required would at least give the residents some help in coming to terms with the industrialisation of our farming community

Many thanks
[REDACTED]
For BEPS community group

Sent from [Outlook for iOS](#)

...

[Reply](#) [Forward](#)



[REDACTED]

[Reply](#) [Reply all](#) [Forward](#) [...](#)

Wed 29/04/2026 15:29

You replied on Wed 29/04/2026 15:54

Dear [REDACTED]

I hope you are well. I am aware you recently contacted my colleague [REDACTED] to ask about our plans for a new substation

Following [REDACTED] earlier email, I spoke to the project team as promised. Our plans for a potential substation are still at a very early stage, and it is too early to share further details. Please be assured we will contact you and the wider community as soon as we know more.

Thank you again for your interest.

Kind regards,
[REDACTED]

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Many thanks,
[REDACTED]

[REDACTED]

On 16 Oct 2025, at 20:43, [REDACTED]@nationalgrid.com> wrote:

Dear [REDACTED]

Further to my email below I have spoken to our development team regarding a potential connection for East Pye.

To confirm, we are yet to develop plans for a new substation connection in the area and do not have a preferred location. Please be assured we will look to inform you and the local community once we have something to share.

Best wishes

[REDACTED]

Head of External Affairs

Electricity Transmission

[Nationalgrid](#)

From: [REDACTED]@nationalgrid.com>

Sent: Wednesday, January 21, 2026 3:20:42 PM

To: [REDACTED]@gmail.com>

Cc: [REDACTED]@nationalgrid.com>; [REDACTED]

[REDACTED]@nationalgrid.com>

Subject: RE: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

H [REDACTED]

Thank you for your message.

I am just checking your questions with our project team and will be in touch with a response.

Best wishes

[REDACTED]

[REDACTED]

Head of External Affairs

Electricity Transmission

[Nationalgrid](#)

[REDACTED]

[REDACTED][@nationalgrid.com](#)

National Grid House (Floor 5), 1-3 The Strand, London, WC2N 5EH

[nationalgrid.com](#) | [Twitter](#) | [LinkedIn](#)

Please consider the environment before printing this email.

[REDACTED]
[REDACTED]
From: [REDACTED]@gmail.com>

Sent: 20 January 2026 12:55

To: [REDACTED]@nationalgrid.com>

Cc: [REDACTED]@nationalgrid.com>; [REDACTED]

[REDACTED]@nationalgrid.com>

Subject: Re: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Dear [REDACTED]

Thank you for your response

We were aware that East Pye Solar is preparing a Development Consent Order which they propose to submit in February and as part of this is the proposal for a parcel of land as a potential site for the possible National Grid Substation, what we as a village are concerned about is the proximity of this to the village, some 25 metres from property boundaries and public byeways and given the fact that Norfolk Fire Service have reported that the proposed location is unsafe due to its proximity to homes and it would cause an existential threat to Tibenham Airfield, given the gravity of this situation and this decision on siting for local residents and businesses transparency about how the decisions are made we feel is extremely important and although this scheme has not reached planning it has unexpectedly been given a Gate2 connection (we assume as it has Secured Land Rights), but:

You state that 'The scheme's grid connection agreement requires East Pye Solar to source suitable land for the substation connection and to consent it on our behalf.' Therefore, could you clarify whether National Grid has any say in whether this is a suitable location and if this location is found to be unsuitable due to the various issues highlighted previously at what stage will the National Grid require a new location to be found?

East Pye state they have a Gate 2 connection but I am confused as having read the **Queue Management Milestone M1 – Planning Submission - What M1 now requires (updated under CMP434)**:

If validation has not yet occurred at the time of Gate 2 application, the submitted application itself may be provided temporarily – but the planning reference number must be provided before the Gate 2 Offer is issued."

Therefore as East Pye have not achieved the Gate2 criteria why are the National Grid considering this application?

I look forward to your thoughts

Kind regards

We would - Steering Group

From: [REDACTED] <[\[REDACTED\]@nationalgrid.com](mailto:[REDACTED]@nationalgrid.com)>

Sent: Thursday, January 08, 2026 09:08

To: [REDACTED] <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>

Cc: [REDACTED] <[\[REDACTED\]@nationalgrid.com](mailto:[REDACTED]@nationalgrid.com)>; [REDACTED]

[REDACTED] <[\[REDACTED\]@nationalgrid.com](mailto:[REDACTED]@nationalgrid.com)>

Subject: RE: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

Dear [REDACTED]

Happy New Year and apologies for the delayed response. Below is an update which I hope answers your questions.

As you are aware, East Pye Solar Limited (a subsidiary of Island Green Power) is preparing a Development Consent Order application. The scheme includes proposals for a parcel of land which has been identified as a site for a possible National Grid substation which will connect the solar farm to the high voltage network.

The scheme's grid connection agreement requires East Pye Solar to source suitable land for the substation connection and to consent it on our behalf. We have reviewed the proposals and will continue to work with East Pye Solar, and provide feedback, during their examination process this year.

At National Grid we continually review site selection for potential connections to ensure network needs are met and to support our customers. I am not sure if you are familiar with Connections Reform but for awareness, it is an overhaul of the grid connection process which prioritises projects that are ready and needed to help maintain a reliable network. As part of this, the process will determine if the proposed substation site for East Pye Solar is the most suitable solution when considering other projects progressing through Connections Reform.

Once all these factors have been considered, and the associated work is complete, we will be able to share more information with you and the local community about our plans.

Best wishes

[REDACTED]
[REDACTED]
Head of External Affairs

Electricity Transmission

Nationalgrid

[REDACTED]
[REDACTED] <[\[REDACTED\]@nationalgrid.com](mailto:[REDACTED]@nationalgrid.com)>

National Grid House (Floor 5), 1-3 The Strand, London, WC2N 5EH

[nationalgrid.com](https://www.nationalgrid.com) | [Twitter](#) | [LinkedIn](#)

Please consider the environment before printing this email.

From: [REDACTED]@gmail.com>

Sent: 17 December 2025 17:16

To: [REDACTED]@nationalgrid.com>

Subject: Re: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Hello [REDACTED]

Further to my email of the 6 November, I was wondering if you have been able to ascertain anything relating to this new substation that East Pye Solar are proposing?

We as a village are very anxious about the proximity of this to our village and also as East Pye have managed to obtain a Gate 2 connection with NESO, even though they are not meeting the criteria that NESO have set, we are more concerned about this substation, the build timelines and any consultations that may or not be required before this sub-station is built. Our local councils, both South Norfolk and Norfolk CC, have both expressed their concern about the access routes to build this structure and how they would be able to manage to contain any incidents that may occur.

Also we would like to raise the following points to raise the seriousness of this proposed development.

'The proposed new East Pye Solar National Grid substation is located within a groundwater Source Protection Zone in the catchment of a sensitive river, in a landscape containing multiple private drinking water supplies, immediately adjacent to the London–Norwich main railway line and within the safeguarding influence of Tibenham airfield. The local road network is incapable of accommodating the required abnormal indivisible loads, such that access would depend on constructing new haul routes across clay fields, with significant geotechnical intervention, drainage disruption and increased pollution risk to the underlying aquifer and water environment. The site is also located approximately 100 metres from existing homes in and around the village of Great Moulton, and the fire and rescue service has advised that this separation distance is dangerously small for a substation of this scale and type, creating an unacceptable level of residual risk to nearby residents in the event of fire, explosion or major incident. Taken together, these constraints indicate that the selected site is inherently unsuitable for a substation of this nature, and that the promoter has not demonstrated a realistic, environmentally acceptable or safe means of construction and operation when reasonable alternative locations are clearly available.'

Thank you [REDACTED] and I look forward to hearing from you shortly.

Kind regards

We would Steering Group
Great Moulton

From: [REDACTED]@nationalgrid.com>

Sent: 06 November 2025 09:13

To: [REDACTED]@gmail.com>

Subject: RE: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

Hi [REDACTED]

I hope you are well and thank you for your latest email.
Let me pick this up with our project team to understand more.
I will be in touch next week.
Best wishes
[REDACTED]

[REDACTED]
Head of External Affairs
Electricity Transmission
[Nationalgrid](#)

[REDACTED]
[REDACTED]@nationalgrid.com

National Grid House (Floor 5), 1-3 The Strand, London, WC2N 5EH
[nationalgrid.com](#) | [Twitter](#) | [LinkedIn](#)

Please consider the environment before printing this email.

[REDACTED]
Advance notice of holiday:

From: [REDACTED]@gmail.com>

Sent: 02 November 2025 19:24

To: [REDACTED]@nationalgrid.com>

Subject: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. If you suspect this email is malicious, please use the 'Report Phish' button.

Dear [REDACTED]

I didn't think I would have to bother you so soon, but we have just received a Targeted Consultation document from East Pye Solar Park. [East Pye Solar - Targeted Consultation Document](#). This highlights significant changes regarding the siting of a substantial National Grid Substation, new pylons up to 61 metres, and a 400kV substation up to 13 metres which have caused significant distress among residents. I am sure you are aware it is imperative that electricity network developments avoid unacceptable impacts on residential amenity, noise and lighting.

The proposed Sub-Site 1B and the additional site 1D allocated for the National Grid 400 kV substation would place major industrial infrastructure just 300 metres from homes and less than 900 metres from the heart of Great Moulton village. This site is entirely situated within an Environment Agency Drinking Water Safeguard Zone and Source Protection Zone 2, encompassing numerous private wells. This raises serious risks to residential amenity, groundwater quality, and public health, especially given the presence of oil-filled transformers and the risk of fire-water run-off posing contamination threats that contravene the Water Resources Act 1991 s.93.

The proposed substation site is directly north of the main London–Norwich railway line, where electromagnetic interference, subsidence from cable trenching, and restricted emergency access present operational and safety concerns for Network Rail.

The site is also located approximately 4 km from Tibenham Airfield, an active glider base, and thus falls inside the CAA CAP 168 ten-kilometre safeguarding consultation zone. The planned 20–25-metre-high gantries and lightning masts would disrupt glider flight paths and necessitate aviation-lighting mitigation.

Also, it may be of interest to you that the developer of Tasway Energy Park has publicly stated an intention to connect to the National Grid at or near Great Moulton. However, the East Pye Solar Targeted Consultation materials do not address this possibility.

Key Concerns:

Transparency and Due Process:

Why is East Pye proposing a substation of this scale without clear backing or detailed input from the National Grid?

You previously clarified that there has been no formal communication or agreement between National Grid and East Pye regarding this location. Is this still the case? The lack of detail regarding the National Grid is leaving the community deeply unsettled and we are concerned that East Pye's documents allude to an agreement between them and yourselves.

Suitability of Location:

Would National Grid contemplate placing a substation of this scale in a rural area where the road infrastructure is insufficient?

Is it acceptable for such infrastructure to be sited so close to homes in a historic farming community, referenced in the Domesday Book?

3. Environmental and Strategic Considerations:

We understand National Grid takes a holistic view of environmental impacts when planning new substations. Can you confirm this remains the case, and how such considerations would be applied here?

4. Alignment with Local Policy:

The South Norfolk plan explicitly states that the Great Moulton Plateau should not be industrialised due to its heritage and landscape value. We believe these proposals constitute industrialisation and urge National Grid to respect local policy and community sentiment.

Our Requests:

- Please clarify National Grid's current position regarding the East Pye proposal.
- If National Grid has not endorsed this location, when and how will East Pye be informed, and if appropriate, what steps will be taken to ensure a more suitable site is identified?
- Could we ask that National Grid engage directly with our community to address our concerns and ensure full transparency throughout this process.

We hope National Grid will act with sensitivity and uphold its commitment to environmental stewardship and community engagement.

We look forward to your response and to working together to protect the heritage and wellbeing of our village.

Thank you.

Yours sincerely,

[Redacted Signature]

We would Steering Group

Attached is a copy of the consultation document [East Pye Solar - Targeted Consultation Document](#), a copy of the map, relevant photographs of the site and roads adjacent to site and drone footage of site 1B

From: [Redacted]@nationalgrid.com>

Sent: Friday, February 20, 2026 8:30:51 AM

To: [REDACTED]@gmail.com>

Cc: [REDACTED]@nationalgrid.com>; [REDACTED]

[REDACTED]@nationalgrid.com>

Subject: RE: [EXTERNAL] Urgent Concerns and Clarification Required: Proposed National Grid Substation at East Pye Solar Park

Dear [REDACTED]

Thank you for your recent email and patience. I have been liaising with the wider project team before coming back to you with the latest information.

Island Green's gated position is being determined by the independent National Energy Systems Operator and will be communicated to us in due course along with the customer. Once we know more, we will be in touch to explain next steps. I hope you can appreciate we are unable to share any further insight until this process is concluded and cannot comment on individual customer outcomes.

I appreciate you are also seeking some generic substation images. Substation designs are unique to their location and the volume of customers we are connecting so I don't feel this will help in terms of showing what a potential connection could look like. But please be assured we will keep the local community informed regarding any potential plans.

Best wishes

[REDACTED]

Appendix 4

Merryfield Stud Appendix

9.1.2 Barbastelle Bats

The second report commission for Merryfield Stud which is sited to the north-east of the village. This report was created specifically for South Norfolk CC against a proposed Battery Storage, but the information contained is relevant relating to the Barbastelle Bats together with 7 other species and Botanical species recorded on this small parcel of land.

ECOLOGICAL SURVEYS – MERRYFIELD STUD

We have been commissioned by the owners of Merryfield Stud [FIG 1] to undertake ecological surveys on their property at Great Moulton due to fears that the BESS being proposed by FIELD has the potential to cause disturbance to the sites ecology interest along with potential damage to their horse grazed grasslands and therefore their livelihood not to mention stress resulting from living in close proximity to the BESS.

It is felt by those concerned that FIELD have fail to adequately consider the effect of the BESS on ecology of this high value site.

The surveys have been undertaken by members of the newly formed Claylands Ecology Group¹ (CEG) a group of professional ecologists focussing as their name suggests on the Claylands area of South Norfolk. It has been set up to offer advice to landowners with regard to habitat and species management advice.

The surveys have focussed on five elements – Physical, Historical, Botanical, (including hedges and hedgerow trees, Mammals (bats) and Threats.



PHYSICAL.

The land holding measures approximately 10.5ha (c26 acres) part of a shallow grassy valley consisting of 6 fields on a roughly north-south axis, located at Grid Ref: TM 16945 91151 (approximate centre of the site) The western boundary is formed by a deep ditchline c2.4m deep in placed carved out by the northward's movement of water over the centuries.



Geum urbanum	Herb Bennet	flowering plant	TM17089132	Baczowska, Helen
Glechoma hederacea	Ground-ivy	flowering plant	TM17089132	Baczowska, Helen
Hedera helix	Ivy	flowering plant	TM17089132	Baczowska, Helen
Heracleum sphondylium	Hogweed	flowering plant	TM17089132	Baczowska, Helen
Holcus lanatus	Yorkshire-fog	flowering plant	TM17089132	Baczowska, Helen
Hypericum hirsutum	Hairy St John's-wort	flowering plant	TM17089132	Baczowska, Helen
Hypericum perforatum	Perforate St. John's-Wort	flowering plant	TM17089132	Baczowska, Helen
Jacobaea vulgaris	Common Ragwort	flowering plant	TM17089132	Baczowska, Helen
Juncus effusus	Soft-rush	flowering plant	TM17089132	Baczowska, Helen
Juncus inflexus	Hard Rush	flowering plant	TM17089132	Baczowska, Helen
Lathyrus pratensis	Meadow Vetchling	flowering plant	TM17089132	Baczowska, Helen
Lemna minor	Common Duckweed	flowering plant	TM17089132	Baczowska, Helen
Linaria vulgaris	Common Toadflax	flowering plant	TM17089132	Baczowska, Helen
Lotus corniculatus	Common Bird's-foot-trefoil	flowering plant	TM17089132	Baczowska, Helen
Lycopus europaeus	Gypsywort	flowering plant	TM17089132	Baczowska, Helen
Medicago lupulina	Black Medick	flowering plant	TM17089132	Baczowska, Helen
Mentha aquatica	Water Mint	flowering plant	TM17089132	Baczowska, Helen
Mercurialis perennis	Dog's Mercury	flowering plant	TM17089132	Baczowska, Helen
Myosotis scorpioides	Water Forget-me-not	flowering plant	TM17089132	Baczowska, Helen
Odontites verna	Red Bartsia	flowering plant	TM17089132	Baczowska, Helen
Ophrys apifera	Bee Orchid	flowering plant	TM17089132	Baczowska, Helen
Phleum bertolonii	Smaller Cat's-tail	flowering plant	TM17089132	Baczowska, Helen
Phleum pratense	Timothy	flowering plant	TM17089132	Baczowska, Helen
Picris hieracioides	Hawkweed Oxtongue	flowering plant	TM17089132	Baczowska, Helen
Plantago lanceolata	Ribwort Plantain	flowering plant	TM17089132	Baczowska, Helen
Plantago major	Greater Plantain	flowering plant	TM17089132	Baczowska, Helen
Potentilla anserina	Silverweed	flowering plant	TM17089132	Baczowska, Helen
Potentilla reptans	Creeping Cinquefoil	flowering plant	TM17089132	Baczowska, Helen
Prunella vulgaris	Selfheal	flowering plant	TM17089132	Baczowska, Helen
Prunus spinosa	Blackthorn	flowering plant	TM17089132	Baczowska, Helen
Pulicaria dysenterica	Common Fleabane	flowering plant	TM17089132	Baczowska, Helen

Ranunculus repens	Creeping Buttercup	flowering plant	TM17089132	Baczowska, Helen
Rosa canina agg.		flowering plant	TM17089132	Baczowska, Helen
Rubus fruticosus agg.	Bramble	flowering plant	TM17089132	Baczowska, Helen
Rumex acetosa	Common Sorrel	flowering plant	TM17089132	Baczowska, Helen
Rumex conglomeratus	Clustered Dock	flowering plant	TM17089132	Baczowska, Helen
Rumex obtusifolius	Broad-leaved Dock	flowering plant	TM17089132	Baczowska, Helen
Silene latifolia subsp. alba		flowering plant	TM17089132	Baczowska, Helen
Solanum dulcamara	Bittersweet	flowering plant	TM17089132	Baczowska, Helen
Sonchus	Sow Thistle	flowering plant	TM17089132	Baczowska, Helen
Stachys sylvatica	Hedge Woundwort	flowering plant	TM17089132	Baczowska, Helen
Stellaria graminca	Lesser Stitchwort	flowering plant	TM17089132	Baczowska, Helen
Torilis japonica	Upright Hedge-parsley	flowering plant	TM17089132	Baczowska, Helen
Tragopogon pratensis	Goat's-beard	flowering plant	TM17089132	Baczowska, Helen
Trifolium dubium	Lesser Trefoil	flowering plant	TM17089132	Baczowska, Helen
Trifolium pratense	Red Clover	flowering plant	TM17089132	Baczowska, Helen
Urtica dioica	Common Nettle	flowering plant	TM17089132	Baczowska, Helen
Veronica chamaedrys	Germander Speedwell	flowering plant	TM17089132	Baczowska, Helen
Viburnum opulus	Guckler-rose	flowering plant	TM17089132	Baczowska, Helen
Vicia cracca	Tufted Vetch	flowering plant	TM17089132	Baczowska, Helen
Vicia hirsuta	Hairy Vetch	flowering plant	TM17089132	Baczowska, Helen

Pond A.

The location of Pond A is shown on Fig 3. It acts as a balancing pond accepting roof drainage and ditch water in times of spate and measures 250m². It is therefore considered a relatively poor aquatic environment.

Pond B.

The location of Pond B is shown on Figure 3. A rich aquatic habitat measuring c180m² and containing Curled Pondweed (*Potamogetum crispus*) and Horned Pondweed (*Zannichellia Palustris*) along with the emergents Water Crowfoot (*Ranunculus aquatilis*) and Water Mint (*Mentha aquatica*) [PHOTO 3]

It is open to the north-east; east and south-east with the remainder shaded out by Goat Willows (*Salix Caprea*)



Both ponds are shown on the 1st Edition Ordnance Survey maps

4 BATS

We have concentrated on the winter pony grazed grassland to the north named Lilly's Meadow with large outgrown ancient hedgerows and deep ditch lines and the summer grazed field directly to the south (Rodney's Field) as a habitat for foraging bats. 2 off Anabat Express static detectors were placed, one in the north-west corner of Lilly's Meadow [TM 17060 91371] and the second in the southwestern corner of Rodney's Field [TM 16912 90934] and recordings obtained for periods of June and July 2025.

Prior to this, one had been in an area of secondary woodland (Gilberts Plantation) approximately 430m to the south-east over a period of 3 nights commencing on 19 May 2025. (See tables below)

LILLY'S MEADOW	
DATE	SPECIES RECORDED
06/06/2025	Common Pipistrelle Soprano Pipistrelle, Serotine
07/06/2025	No bat registrations
08/06/2025	Common Pipistrelle, Soprano Pipistrelle, Barbastelle, Serotine, BLE
09/06/2025	Common Pipistrelle, Soprano Pipistrelle, Barbastelle, Noctule, BLE
10/06/2025	Common Pipistrelle, Serotine
11/06/2025	Common Pipistrelle, Serotine, BLE, Daubenton's
12/06/2025	Common Pipistrelle, Serotine, Daubenton's
13/06/2025	Common Pipistrelle, Soprano Pipistrelle, Noctule, Barbastelle,

07/07/2025	Common Pipistrelle
08/07/2025	Common Pipistrelle, Natterer's, Barbastelle, Serotine, Soprano Pipistrelle
09/07/2025	Common Pipistrelle, Barbastelle, Serotine,
10/07/2025	Noctule, Common Pipistrelle, Barbastelle Natterer's
11/07/2025	Noctule, Common Pipistrelle, Soprano Pipistrelle, Serotine, Barbastelle
12/07/2025	Noctule, Common Pipistrelle, Serotine, Barbastelle, Natterer's Soprano Pipistrelle
13/07/2025	Noctule, Common Pipistrelle, Soprano Pipistrelle, Natterer's, Barbastelle

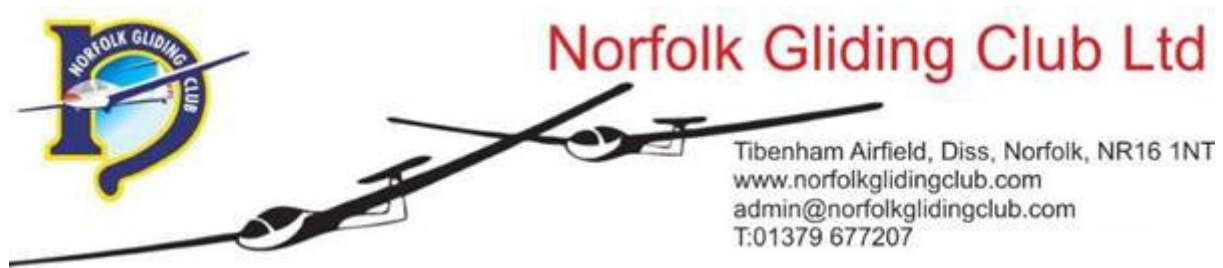
RODNEY'S PASTURE	
DATE	SPECIES RECORDED
06/06/2025	Common Pipistrelle Soprano Pipistrelle Serotine Barbastelle Myotis Spp
07/06/2025	No registrations
08/06/2025	Common Pipistrelle Serotine Soprano Pipistrelle
09/06/2025	Common Pipistrelle, Serotine, BLE
10/06/2025	Common Pipistrelle, Serotine,
11/06/2025	Common Pipistrelle, Barbastelle, Natterer's, Serotine, BLE
12/06/2025	Common Pipistrelle, Noctule, Serotine, Barbastelle
13/06/2025	Common Pipistrelle, Soprano Pipistrelle, Serotine, Natterer's
14/06/2025	Natterer's, Common Pipistrelle, Barbastelle
15/06/2025	
02/07/2025	Common Pipistrelle, Soprano Pipistrelle, Serotine,
03/07/2025	Common Pipistrelle, Soprano Pipistrelle
04/07/2025	Common Pipistrelle, Natterer's, Serotine
05/07/2025	Common Pipistrelle, Barbastelle,
06/07/2025	No registrations
07/07/2025	Common Pipistrelle, Serotine, BLE
08/07/2025	Common Pipistrelle, Serotine, Soprano Pipistrelle, Barbastelle
09/07/2025	Common Pipistrelle, Serotine, BLE, Soprano Pipistrelle
10/07/2025	Common Pipistrelle, Noctule, Soprano Pipistrelle, Serotine
11/07/2025	Noctule, Common Pipistrelle, BLE, Serotine
12/07/2025	Noctule, Soprano Pipistrelle, Common Pipistrelle, Barbastelle
13/07/2025	Noctule, Serotine, Myotis Spp, Barbastelle

GILBERTS PLANTATION	
DATE	SPECIES RECORDED
19/05/2025	Common Pipistrelle, Barbastelle, BLE
20/05/2025	Common Pipistrelle, Barbastelle, BLE, Natterer's
21/05/2025	Common Pipistrelle, Soprano Pipistrelle, Myotis spp, Barbastelle

A total of 8 species of bats were recorded using the grassland at Merryfield Stud is an

Appendix 5:

Norfolk Gliding Club Correspondence - Norfolk Gliding Club's Objection



East Pye Solar Farm

Glint and Glare report dated May 2024/May 2025

Norfolk Gliding Club Objection – July 2025

During the statutory consultation in July 2025, Norfolk Gliding Club were informed that:

‘The Gliding Club did not provide a response to PINS in respect of the EIA Scoping Opinion’

Despite our in-person meeting with Abdul Wadud (Pager Power), Ian Douglas (Stantec) and Samantha Jones (Island Green) in January 2025 and subsequent emails to all three, Norfolk Gliding Club have had no replies, no feedback from the meeting and were not made aware of the PINS Scoping Opinion until July 2nd 2025.

Included with the documentation that was brought to our attention was a lengthy Glint and Glare study produced on behalf of the applicant by Pager Power.

Despite this, Norfolk Gliding Club (NGC) confirms its objection to the application on the grounds of aviation safety.

Executive Summary

This response focuses only on the aviation aspects of the Glint and Glare report, the errors, the inaccuracies and the omissions that relate to aviation safety at Norfolk Gliding Club and to the users of Tibenham airfield.

The initial issue of the report is shown as March 2024 but Pager Power did not contact NGC until October 2024 seeking guidelines for the report they had already produced.

Last year Mr Wadud of Pager Power acknowledged in discussion with us that they had no real aviation background even though they had carried out 15 such studies at other airfields and admitted that our situation with another airfield close to our western boundary was unique. Their (Pager Power) expertise lay in the use of the Forge software to determine the possibility of glint and glare issues based on the likely positions of aircraft flying in and out of each airfield.

We (NGC) provided guidance on the complexities of the mixed glider and powered aircraft operations at Tibenham but as can be seen from their report, their analysis was based on the simplistic circuit patterns found on some power only sites (i.e. sites that operate fixed-wing aircraft and have defined flying circuits and runway approach routes.) These differ significantly from the actual circuits flown at Tibenham airfield as shown in Appendix A.

The safety risks to aviation introduced by a solar panel installation of this size and in such close proximity to an active airfield fall into four categories which can be defined as, Glint and Glare (G&G), Thermal Updrafts, Engine Failure After Take Off (EFATO) and Bird Strikes. Of these four Pager Power's limited experience enabled them to address only the first. Yet all four have a similar potential for fatal accidents.

In their report Pager Power acknowledged, referring to the 2021 FAA guidance, that it is up to the airport to determine the safety requirements but failed to make reference to the Civil Aviation Authority's (CAA) regulation 2018/1139 which states that it is the **aerodrome operator who is the only authority that can determine safety** when it comes to the question of proposed obstacles around their airfield (my emphasis).

Despite specific advice and guidance from the CAA, the General Aviation Awareness Council, the British Gliding Association and other airfields, Pager Power continued based on their simplistic approach to produce their glint and glare conclusions which are shown to be predicated on a series of inaccurate assumptions.

These have little resemblance to the flying operations at Tibenham, they fail to address the other three aviation safety issues and therefore we believe the planning application should be refused.

Appendix G provides outline details of three airfields where the proximity of proposed obstacles conflicted with EFATO safety thresholds – in all three cases either planning permission was refused or mitigation applied with the obstacles being re-located.

What are the safety risks to aviation posed by solar farms

Glint and Glare

What does it mean?

Glint is defined as a momentary flash of bright light.

Glare is defined as a continuous source of bright light from large reflective surfaces that could impede vision. It is further sub divided into red, yellow and green glare:

Red glare can cause permanent eye damage but cannot be produced by solar panels

Yellow glare is defined as a source that will impair vision and with the potential to cause a temporary after-image effect.

Green glare is defined as a source which may cause eye strain but with low potential to cause a temporary after-image effect.

Why is it a risk?

The location of East Pye Site 1 will result in pilots being impacted from a variety of positions and angles relative to the scheme. Some runways are orientated directly towards the proposed development site for both arriving and departing aircraft. Others have circuit tracks which fly towards, parallel to and over the top of the site. Appendix A shows the positions of these circuits at Tibenham relative to the proposed schemes.

When a glider pilot is preparing an aircraft to land, the workload is high (and more technically challenging than with a fixed wing aircraft).

In addition to the physical manipulation of the aircraft, pilots will be speaking on the radio and making constant visual checks looking outside of the aircraft for other aircraft in the locality, as well as to ensure they are accurately positioned over the ground relative to their intended landing area as they sequence themselves for a successful landing. In the cockpit, the pilot will be frequently monitoring instruments and in particular, the airspeed indicator. This is vital to ensure the aircraft remains at flying speed since low airspeed at low height can be very dangerous.

Understanding and managing this is a fundamental aspect of learning to fly. A change in the operating environment at Tibenham, whereby pilots including students, are exposed to temporary visual disturbances (after-image effect) will have an adverse impact on safety and make visual reference to land-based features and instruments inside the cockpit more challenging.

Gliders flying head on are difficult to see therefore a flash of bright light (Glint) cannot be ignored as it might originate from another aircraft rather than solar panels.

Glider pilots are trained to carry out a standard gliding circuit in accordance with the BGA training manual as depicted in appendices B and C.

This shows that the standard gliding circuit is not the 'straight in' approach from 0.3-miles out and a 7.1 degree slope as implied by Pager Power but involves flying a descending circuit parallel to and within gliding range of the landing area with minimum of 3 turns somewhere between 900 and 300 ft above the ground.

Due to the imprecision of the instruments at these heights, they can only be judged by eye (which forms a significant part of the training) and are complicated where the level of the topography is unknown (e.g. a field landing). A key part of the teaching process is to brief the pupil on the exercise to be carried out, perform the exercise and de-brief the pupil post flying to cover what was learned during the flight.

For circuits, where repeated flights are carried out, they need to be, where possible, consistent so the trainee is able to replicate what the instructor has demonstrated. Should these exercises be adversely affected by glint and glare the replication is lost as the trainee pilot is concentrating on reacting to those additional external images.

Furthermore, the Air Navigation Order 2016 (ANO) which is a statutory instrument states in section 224:

'A person must not exhibit in the United Kingdom any light which by reason of its glare is liable to endanger aircraft taking off from or landing at an aerodrome.'

NGC believes there is a significant glint and glare risk associated with the East Pye Solar Farm proposals.

Thermal Updrafts

What does it mean?

'Thermal updrafts' is a term used to describe the vertical movement of the air resulting from the differential heating of the ground causing instability in the air mass. On the principle of what goes up must also come down, the opposite to this is thermal downdrafts.

In gliding terms this is referred to as lift and sink and it is the efficient use of the lift that enables gliders to fly cross country.

Why is it a risk?

As stated above, when preparing an aircraft to land, the workload is high.

The complexity of the circuit, approach and landing is described above and the introduction of low-level thermal activity brings greater risk to the trainee pilot when he/she should be concentrating on the circuit and landing and not reacting to external forces.

NGC believes thermal updrafts from the East Pye Solar Farm will be an unnecessary risk to the gliders in the later stages of their circuits prior to landing.

Engine Failure After Take Off (EFATO)

What does it mean?

Strictly speaking the phrase 'Engine failure after take-off' means exactly what it says and applies to any powered aircraft or helicopter.

In gliding terms, the phrase is also used to describe an aborted aerotow.

Why is it a risk?

An 'aerotow' is a method of launching a glider by towing it behind a powered aircraft to an agreed height at which point the glider pilot releases the tow and continues his flight.

There are numerous causes for an aerotow to be aborted, some are tug aircraft related, some glider related and some tow rope related, amongst others.

Since 2000 the Air Accidents Investigation Branch (AAIB) improved their reports database which now allows for analysis of over 11,000 accidents. There is no requirement to report the majority of the aborted aerotow incidents to the AAIB but of the 175 powered aircraft reports where 'engine failure' was listed as a contributory cause, 75 occurred during take-off and of those 62% were reported as having been below 300ft.

It is generally accepted that under these circumstances the safest action is to land ahead but that is complicated by the fact that the tug/glider combination is some 200ft long with a correspondingly large turning circle.

Any emergency landing into a field comes with its associated risks but a controlled straight ahead landing into a poor field is preferred to the risk of losing control due to a badly coordinated turn in an attempt to avoid a solar farm and reach a suitable landing area.

It is a difficult and complicated task coaching trainee pilots, allowing them to practise, make and recognise their mistakes and correct them while the instructor remains responsible for safely managing the situation.

Guidance from the CAA advises that for training airfields such as Tibenham, the EFATO safety area should be a quadrant 50 degrees either side of the extended runway centreline and 3km from the runway threshold. A map of the airfield with the quadrants superimposed is shown in Appendix F.

NGC believes the location of the East Pye Solar farm site 1 will, by removing that quadrant, increase the EFATO type risks to pilots flying out of Tibenham.

Bird Strikes

What does it mean?

Again, as its name implies it is the coming together of one or more birds with the aircraft.

As a general rule it is usually the tug aircraft that suffers and the outcome can vary significantly.

Why is it a risk?

There is the risk of increased bird activity as they are attracted by the solar panels. They can attract birds which are thought to be drawn to the reflective surfaces, mistaking them for bodies of water. A phenomenon known as the 'lake effect'.

At one end of the scale the bird might just bounce off part of the aircraft but at the other where engines are involved it can result in engine failure.

Perhaps the most recent and widely publicised bird strike was that involving US Airways flight 1549 some 16 years ago in which the aircraft lost both engines having struck a flock of birds whilst departing from New York's LaGuardia airport. The pilot was able to glide and land the aircraft on the only piece of flat "land" available to him, the Hudson river. There were no fatalities and the whole process from bird strike to touchdown took 4 minutes but in a light aircraft that time can be reduced to less than 30 seconds.

With a jet engine, the bird is usually ingested but with propeller engines the spread of organic matter can also seriously limit the pilots view in addition to the risk of engine failure.

NGC believes the location of the Station Road Solar farm will increase the bird strike risks to pilots flying out of Tibenham as well as reducing the available emergency landing sites.

The background to our objection

Pager Power initially contacted Norfolk Gliding Club (NGC) in October 2024 with a request to determine guidelines to the flying operations from Tibenham airfield after they had produced their first assessment report which was dated May 2024.

Whilst the East Pye project in total is for a very large solar farm the proposal that is of concern to NGC is shown by them as site 1. The exact size and location of this site is difficult to determine since some drawings indicate that it overlaps another developer's site to the south and neither have provided us with definitive site drawings.

From October 2024 through to January 2025 we were in contact with Pager Power and members of the East Pye team by email together with an in-person meeting concerning their inability and that of the software they use to produce a realistic model of the flying operations from Tibenham.

In November 2024 our initial response to Pager Power concerning the East Pye proposals advised that:

Due to the proximity of the Priory Farm Airstrip and Tibenham village to the west of the airfield a proportion of all circuits are flown to the east in the area between the Norwich – Ipswich railway and the A140 at heights in the range of 300ft to 800ft. This would seem to be shown as sites 1 and 2 of this map.

In your emails your premise that circuits are flown within the precise guidelines as perhaps those obtained from various Civil Aviation Authority (CAA) Civil Aviation Publications (CAP) may well be correct for civil and military airports such as Norwich and Marham but gliders do not have the ability to abort and go round again. From the

moment a glider starts its downwind leg the pilot has to continually make adjustments to his track over the ground to cater for varying wind strengths, changes in the thermal lift, changes in the sink rate, other aviation traffic and obstacles in his selected landing area which may be the runway or any of the grass areas in the 160 acres of the airfield.

Additionally, any powered aircraft also in circuit at the same time would plan to fly a much wider circuit to avoid any collision risk with the gliders.

To complicate matters further, the railway line and A140 are used by many non Tibenham pilots as navigational aids whilst flying north or south past our airfield.

The subsequent volume and intensity of this traffic in this area means that it is essential that the pilots keep a good visual lookout and are not distracted by glint, glare and turbulence and other issues from the ground.

Despite this, the guidance and the diagrams produced at the in-person meeting in January, appear to have been ignored in the revised Glint and Glare report dated May 2025.

In talking to other members of the gliding community I discovered that they were also involved with the Burn Gliding Club at Burn airfield, near Selby which I queried again with respect to the East Pye site:

I had been given to understand that in Pager Power's discussions with Burn Gliding Club they had explained the range of decent angles modern gliders are capable of and your suggestion of a 10 degree descent gradient suggests that yet again this has not been understood. For example, modern gliders have a glide ratio of around 1 in 60 giving them a descent angle of about 1 degree.

As I mentioned in the presentation, the area shown by East Pye as sites 1 and 2 is also overflown by Tibenham based aircraft on the circuits for all other runways due to the proximity of Priory Farm airfield to our West and the need to ensure we maintain separation from their aircraft.

In their reply Pager Power stated:

The varied approaches towards the aerodrome are understood. For modelling purposes only, it is required to look at the most critical parts of circuits/approach to quantify the impact, as modelling 20 separate approaches out to 5 miles would not be feasible to understand the impact.

As you correctly mention, we've been in consultation with Burn Gliding Club in York for a separate development who had raised the same concerns as you have. Following consultation, we had agreed receptors that capture the most critical spaces and circuits for the aerodrome that accurately capture the activity at the airfield. This is what I'm also trying to achieve here. I had provided the bulleted list as an example of what assist me (sic) in drawing up a model and not to be taken literally. For example, reference to a 10-degree approach can be altered to 1.

Ideally, if you could define the receptors, I would be able to draw these out for you and revert back to you to confirm how these would look. Otherwise, I would recommend annotating aerial imagery to show areas areas/circuits. I'm also happy to do this with you via a Teams call if preferred.

At this point I contacted Burn Gliding Club to understand how they were faring and the first two paragraphs of their response to the Pager Power report states:

1. The latest Pager Power report does not, in our opinion, address all of the issues in the correct manner. Therefore, our position is unchanged by this late (only received in December) and slightly rehashed report AND it does not consider the effect of glint and glare or the combination of glint and glare, EFATO and thermal activity and turbulence.

2. We remain unconvinced that Pager Power understands fully a gliding site operation. We have invited the developers to come and visit us on site but they have not taken up our offer. We would wish to encourage Pager Power to visit us to gain a full understanding of our gliding operations.

Which is the very point NGC have been making in all of our communications with respect to the East Pye site – they (Pager Power) do not understand the complexities of a mixed powered aircraft and glider airfield nor do they appear interested in gaining that understanding in order to produce a realistic model of the activities.

The Burn team also suggested I contact the Civil Aviation Authority (CAA) with respect to any other airfields in which Pager Power had been involved. The CAA Airfield Advisory Team (AAT) provided a copy of their observations with regard to an application at Baxby aerodrome:

January 18 2023 Pager Power set out findings in a document dated January 2023 titled, 'Addendum to Solar Photovoltaic Glint and Glare Study'. This document sets out assessment parameters that were different to those discussed in the virtual meeting on 17th January 2023. Regrettably, this latest assessment fails to adequately assess and understand the potential risk to pilots operating at Baxby aerodrome.

Their addendum states that:

Some locations showing yellow glare were discounted as they were outside of the pilot's primary field of view.

CAA – We disagree.

This assumption cannot take into account the real-world look out that a pilot maintains in such an operating environment and therefore yellow glare has been wrongly discounted.

And:

Baxby Aerodrome is a dynamic environment where pilots are frequently handling hazards in the local environment. The solar reflections are not predicted to cause a hazard that would out of keeping with the current environment that would be exceptionally challenging for a pilot to handle.

CAA - We disagree.

The proposed scheme represents a significant change to the current environment, whereby a currently inadequately assessed amount of yellow glare, has the potential to cause visual disturbances to pilots including students, during the most critical and dynamic phases of flight.

And:

Overall, despite some 'yellow' being predicted towards pilots using the Baxby Aerodrome circuits and crosswind joins, the scenario in which glare will be experienced is not predicted to be operationally significant.

CAA - We disagree.

Assessments made throughout the process have been inadequate to assess the impact of the proposed scheme on Baxby aerodrome.

They (the CAA/AAT) then continued with

Key considerations

Safety is the key concern for Baxby Aerodrome. It is likely that glint and glare produced by the proposed scheme will adversely impact pilots, including students, at Baxby Aerodrome during the most critical and dynamic phases of flight.

Baxby Aerodrome is an important general aviation, flight training environment. At general aviation aerodromes, pilots use visual reference to fly safely and accurately. All successful landings are predicated on accurate flying within a circuit pattern.

Pager Power use the modelling software produced by Forge for their glint and glare analysis. The findings from such glint and glare assessments include determining how much red/yellow/green glare could be present because of a proposed scheme. Forge describe yellow and green glare as the following:

Yellow glare is defined as a source with potential to cause a temporary after-image. Green glare is defined as a source with low potential to cause a temporary after-image.

Glint and glare is known to adversely impact aviation operations. The assessments carried out in relation to the proposed scheme have not adequately assessed the potential impact on Baxby Aerodrome and therefore, safety is not assured.

Specific comments to the report and conclusions

Over recent years, Pager Power have been made well aware of the complexities of mixed glider and powered aircraft operations and the effect large solar panel sites will have on aviation safety yet, as can be seen from their reports and email responses they continue to ignore guidance provided to them.

Whilst Pager Power, when visiting NGC in January, were given information relating to our circuits over the East Pye Site 1, the proximity of Priory Farm and the fact that they fly to the West and we stay to the East in the interests of aviation safety, their report ignores it all and models flight paths that would put both airfields in conflict with each other.

The following comments relate to the specific sections of their report

Administration page

The initial issue is shown to have been produced in May 2024, some six months before Pager Power contacted NGC for guidance on our circuits.

The second issue is shown to have been produced in May 2025, three months after the in-person meeting at Tibenham where they were shown the circuits we fly and how the flight paths criss-cross the East Pye Site 1.

Whilst it can be understood that the 2024 report would be flawed in respect of the circuits flown, we believe there is no excuse for the guidance to be ignored in the 2025 report update

Executive Summary

Overall Conclusions

We disagree with Pager Power’s conclusions relative to NGC in that they have used inaccurate and incomplete data to produce the G&G model despite having been provided with full details for the assessment they were carrying out on the adjoining Station Road Solar Farm.

In addition, they have failed to address the other three aviation safety issues associated with solar farms located within close proximity to an airfield

Loss of EFATO safeguards

Potential for bird strike

Thermal updrafts

But all four issues have a similar potential for fatal accidents.

In terms of the other airfields included in the study, given the extent and magnitude of the errors within the Tibenham assessment, Island Green must surely question the integrity of those studies.

Appendix A shows the typical circuits flown by NGC gliders and powered aircraft when landing on runways 03, 21, 26 and 33 together with the flight paths of the transit aircraft using the Norwich – Ipswich railway line and A140 as navigational aids.

Assessment Results – Aviation

Given the errors and omissions that we have identified within their assessment of the G&G at Tibenham and their failure to use the guidance provided by NGC at the in-person meeting in January, we cannot agree with any part of this paragraph.

4.2.1 Aviation Receptors

The table identifies that the nearest panel area is 1.88km east though the figure is not qualified with where on the airfield the measurement is taken from.

Despite previous requests we have not been provided with any detailed drawings as to the location of the panels and buildings and therefore are unable to comment on the accuracy of the quoted figure.

At the in-person meeting however we did state that the EFATO safeguard requirements are such that panels should not be located less than 3km from the runway threshold. This is shown in the drawing Appendix F.

In Appendix G there are examples of other airfields where the developer has agreed to make provision for EFATO safeguarding or has had planning permission refused.

4.2.2 Runway Approach Path and Visual Circuits

In their report Pager Power state that:

‘It is not possible to assess every single location of airspace that an aircraft travels in flight’

Throughout all our communications with Pager Power in respect of East Pye they have continued to ignore the complexities of mixed glider and powered flying opting instead for the over simplified single line approach.

Though I am not familiar with the particular Forge software they are using, I have been involved with computerised analysis tools for many years and they are usually designed with the 'what if' question in mind in order to cater for multiple variations to the basic criteria. I find it difficult to believe that the Forge software does not have similar functionality.

The following comments were provided to Pager Power earlier this year following a similar G&G study they carried out on the adjoining Station Road Solar farm and have been repeated here for completeness.

We have assumed that this section is meant to be describing the movements of the powered aircraft using Tibenham and bears little resemblance to the circuits flown by our glider pilots.

Looking at the characteristics they have listed:

A 1-mile approach path with splay angle of 5 degrees, considering 2.5 degrees either side of the extended runway centreline:

As mentioned above, Tibenham has multiple runways, some of asphalt and some grass. The widest of these is runway 26 which comprises of 450m of grass and about 50m of asphalt so which centre line is being used?

Whilst it is true that most powered pilots would prefer to use the asphalt, we have a number of vintage aircraft who choose to use the grass, which the report would seem to ignore.

A descent angle of 5 degrees:

The angle of descent to the runway depends on a number of factors and varies between powered aircraft and gliders. Power pilots used to Visual Approach Slope Indicator lights (VASI) will operate in the range 3 to 3.25 degrees.

Whilst this is fine in theory the combination of power and gliders means that the powered aircraft may need to adopt a different descent profile to avoid conflict with the gliders.

Circuit width of 1 nautical mile from the runway centreline

Why is there a change of units of measure and what is meant by 'circuit width'?

Appendix B taken from the BGA Instructors Manual shows the elements of an ideal circuit which comprise:

The 'downwind leg' which is flown generally parallel (but not always) to the runway;

The 'diagonal leg' which cuts the corner at about 45 degrees between the downwind and base legs and enables the glider pilot to maintain a clearer view of the landing area;

The 'base leg' which is flown at right angles to the downwind leg;

The 'Approach' which is flown at right angles to the base leg, in an opposite direction to the downwind leg and ends with the landing.

Also on this diagram is the standard square power circuit but as will be seen in Appendix A with aircraft and pilots of varying capabilities together with the variation in wind strengths this is totally impractical and these ideal circuits are impossible to achieve.

Maximum altitude of 500ft above the average threshold altitude

At what point in the circuit, is he suggesting that the whole circuit is flown at 500ft?

Because our power pilots are in circuit with gliders to minimise the risk of conflict, they will fly a wider circuit to keep the slower gliders on one side

Figure 5 Illustrates the played approach and final sections

As will be seen from Appendices A, B and C this bears no relation to the circuits we teach our pilots at Tibenham

Page 23, figure 6 Modelled receptors for identified aerodromes

Although somewhat difficult to read, the circuits and receptors shown for Tibenham in the lower left of the picture bear no relation to the circuits we teach at NGC and the guidance we have been giving Pager Power since January 2025.

As a training organisation operating within the British Gliding Association (BGA) all our pupils are taught according to the methodology shown within the BGA Instructors Manual. Appendix B shows the elements of an ideal circuit and appendix C shows the variability in the circuits that our pilots are taught to handle.

5.2.2 Key considerations – Runway Approach Paths

From this and previous reports Pager Power frequently make reference to the ‘pilot’s primary field-of-view’ or ‘POV’ which may be considered acceptable in power flying but is contrary to the ‘scan cycle’ taught to glider pilots as can be seen in appendix E.

As mentioned earlier, this comment was also used by Pager Power in their report on Baxby airfield and received this response from the CAA

We disagree as this assumption cannot take in to account the real-world look out that a pilot maintains in such an operating environment and therefore yellow glare has been wrongly discounted

On page 30 the Pager Power footnote states when referring to the 2021 FAA guidance:

It is up to the airport to determine the safety requirements themselves.

Then fail to make reference to the Civil Aviation Authority’s (CAA) regulation 2018/1139 in which the question of safety is addressed by the CAA stating that:

*It is the aerodrome operator who is the **only** authority that can determine safety when it comes to the question of proposed obstacles around their airfield.*

They (Pager Power) conclude that

consultation with the aerodrome is recommended to understanding their position

but we have been attempting to do this all year and despite our guidance Pager Power have continued to ignore the complexities of our operations

5.2.3 Table 4 Geometric modelling results, NGC

As has been identified above, their assessment is flawed due to errors and omissions.

5.2.4 Further Analysis of Yellow Glare

Given the considerable number of inaccuracies we have identified in their report despite the guidance we have given them there seems little point in commenting about the content of the results but in the spirit of cooperation we would add the following comments.

The instances of 'yellow' glare

Because of the errors and omissions in the study we believe Pager Power have not identified all possible instances

Predicted when the sun is low

We disagree as simple geometry shows that G&G should be possible at most positions of the sun throughout the day. The key is the error Pager Power are making in only using what they refer to as the 'Pilot's primary field of view' and ignoring the BGA scan cycle shown in Appendix E.

Yellow glare only marginally exceeds threshold

Since their analysis is flawed this conclusion is not valid but the operators of Schiphol airport in Amsterdam find that it is anything but marginal and on safety grounds have to close one of their busy runways for two hours per day due to G&G.

The volume of air traffic is low

The number of movements (take-off and landings) at Tibenham frequently exceeds the nearby licensed aerodromes of Old Buckenham and Norwich.

Effects would be fleeting

When preparing an aircraft to land, the workload is high.

In addition to the physical manipulation of the aircraft, pilots will be speaking on the radio and making constant visual checks looking outside of the aircraft for other aircraft in the locality, as well as to ensure they are accurately positioned over the ground relative to their intended landing area as they sequence themselves for a successful landing. In the cockpit, the pilot will be frequently monitoring instruments and in particular, the airspeed indicator. This is vital to ensure the aircraft remains at flying speed. Low airspeed at low height can be very dangerous.

Therefore, any flash of light can cause a distraction that can take the pilot's concentration away from the job in hand – to safely land the aircraft, is an unnecessary safety risk.

7.3 Assessment Conclusions – Aviation

The report fails to consider accurately the four areas which represent aviation safety issues with respect to a solar panel installation in close proximity to an active airfield:

Glint and Glare – Their analysis is full of errors and omissions

EFATO safety thresholds – Their location is within the CAA guidelines of 3km from the runway threshold and is not even considered

Bird strike – Not considered

Thermal updrafts – Not considered

Appendix A – ‘An LPA should consider aircraft safety’

We fully agree and wonder why Pager Power does not practice what they preach?

Appendix A – ‘The NPS for renewable energy infrastructure EN3 sets out the primary policy for decisions by the Secretary of State’

We disagree. It is not just EN-3 as section 1.4.4 states

This NPS, together with EN-1, is the primary decision-making policy document for the Secretary of State on nationally significant onshore renewable.....

And in EN-1 section 5.5.5

It is essential that new energy infrastructure is developed collaboratively alongside aerodromes, aircraft, air systems and airspace so that safety, operations and capabilities are not adversely affected by new energy infrastructure

We believe the proposals for East Pye Site 1 conflict with these National Policy Statements

Appendix A - CAA Interim Guidance

Pager Power’s report states:

It is recommended that, as part of the planning application, the SPV developer provide safety assurance documentation (including risk assessment) regarding the full potential impact of the SPV installation on aviation interests.

Whilst we agree with the CAA recommendation, we believe that Pager Power have failed to carry out a full risk assessment on behalf of their client

Appendix A – Air Navigation Order (2016) (ANO)

Whilst making reference to key points in the ANO, it is noted that Pager Power do not comment on those points for example:

224.(1) A person must not exhibit in the United Kingdom any light which by reason of its glare is liable to endanger aircraft taking off from or landing at an aerodrome

But isn’t this exactly what their study results show and to what extent will it increase with the correct data?

240 A person must not recklessly or negligently act in a manner likely to endanger an aircraft, or any person in an aircraft

By not carrying out a full detailed analysis and risk assessment, are Pager Power being negligent?

Conclusion

Despite having had limited contact with Norfolk Gliding Club for the past six months concerning the East Pye Solar Farm, Pager Power would seem to have ignored all the guidance given to them at our in-person meeting in January on the complexities of a mixed gliding and powered aircraft airfield when putting together this assessment.

Some of the inaccurate circuits they chose to model, bearing in mind the proximity of Priory Farm Airfield to the West, are in reality hazardous and in some cases involve aircraft flying head-to-head against each other, with potentially fatal results.

Of the four aviation safety risks that can be introduced by solar panel installations of this size their expertise allows them to address only one, Glint and Glare. The other three merit only the briefest mention yet are just as dangerous to the pilots.

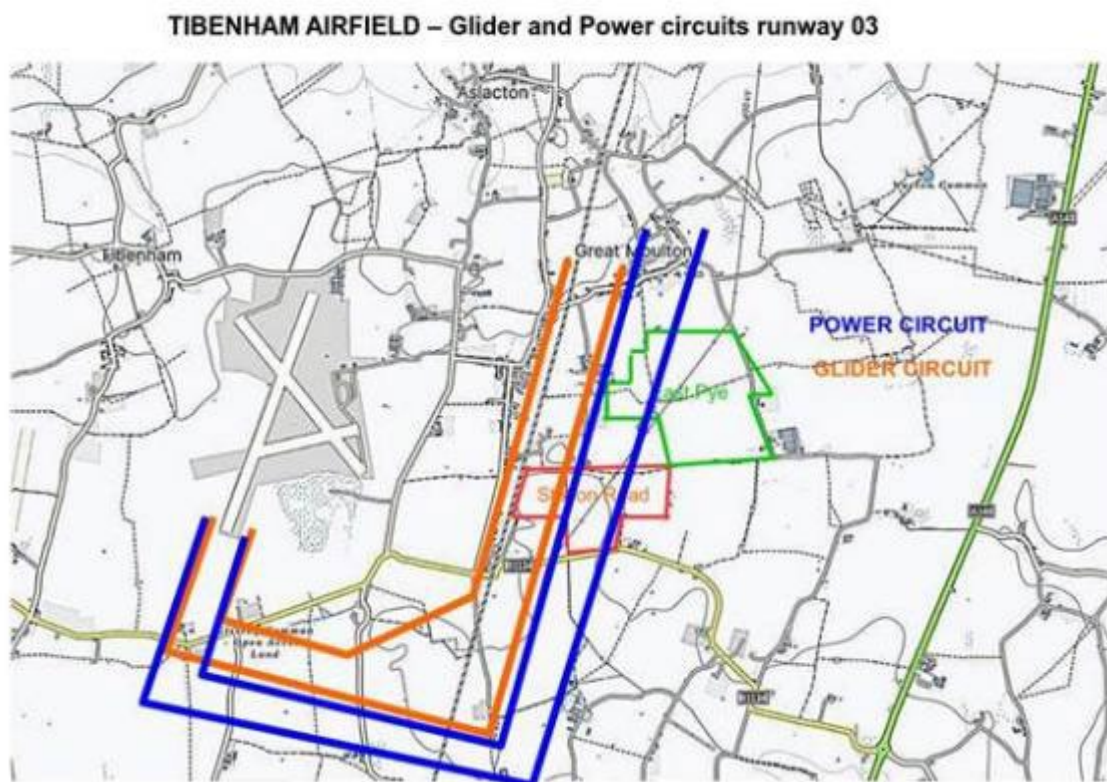
These views are not ours alone but are supported by the Civil Aviation Authority, the General Aviation Awareness Council, the British Gliding Association as well as other airfields who have found themselves in the same predicament.

The CAA's regulation 2018/1139 states that it is the aerodrome operator who is the only authority that can determine safety when it comes to the question of proposed obstacles around their airfield.

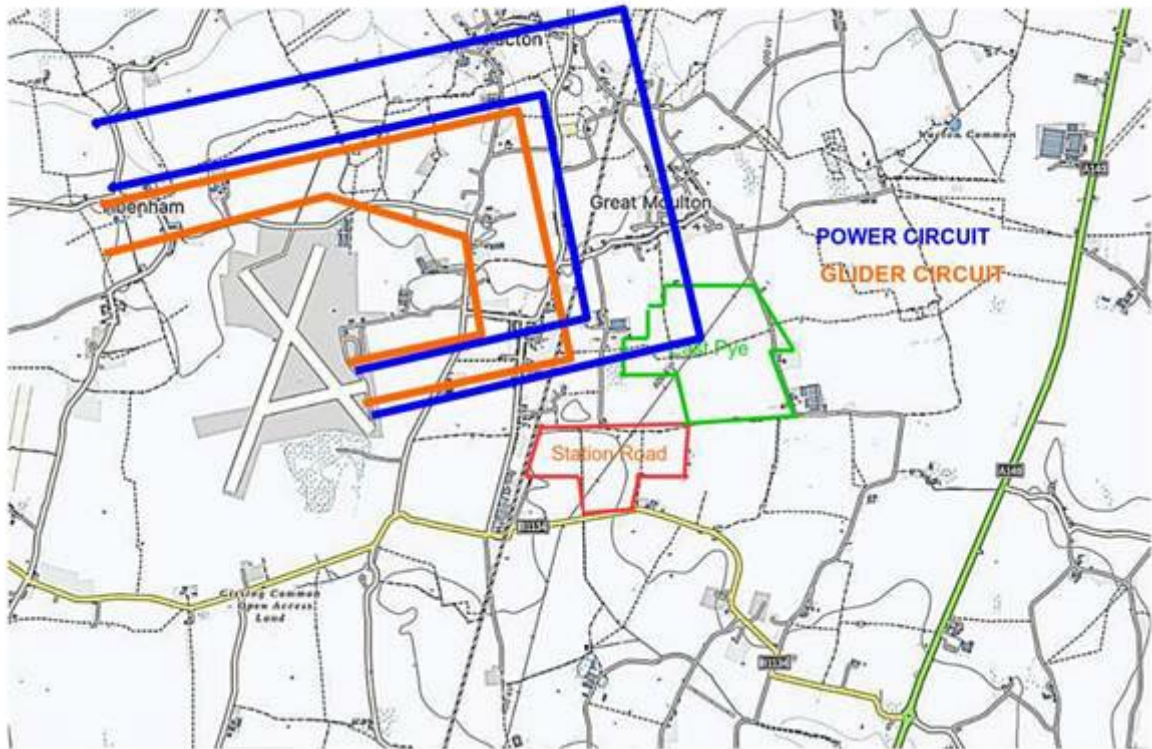
As the aerodrome operator Norfolk Gliding Club **strongly object to the East Pye Site 1 proposal** on the grounds of aviation safety.

Tony Griffiths Safeguarding Officer Norfolk Gliding Club

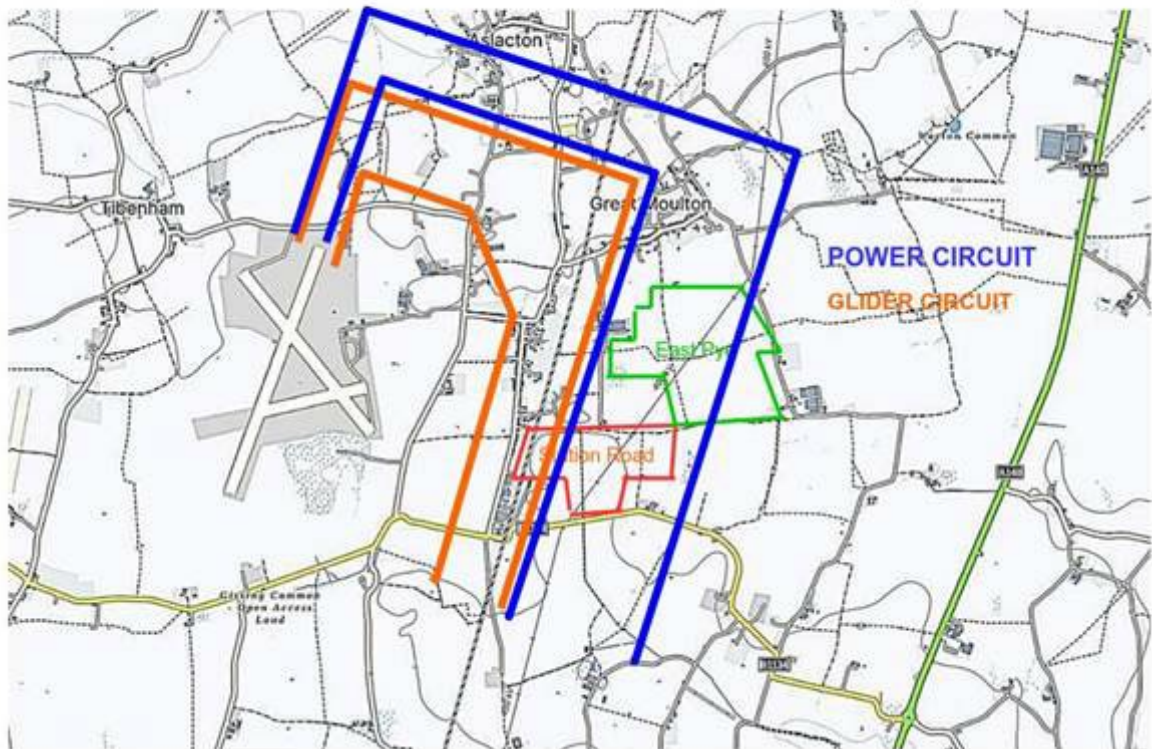
Appendix A – Tibenham circuit diagrams and transit traffic



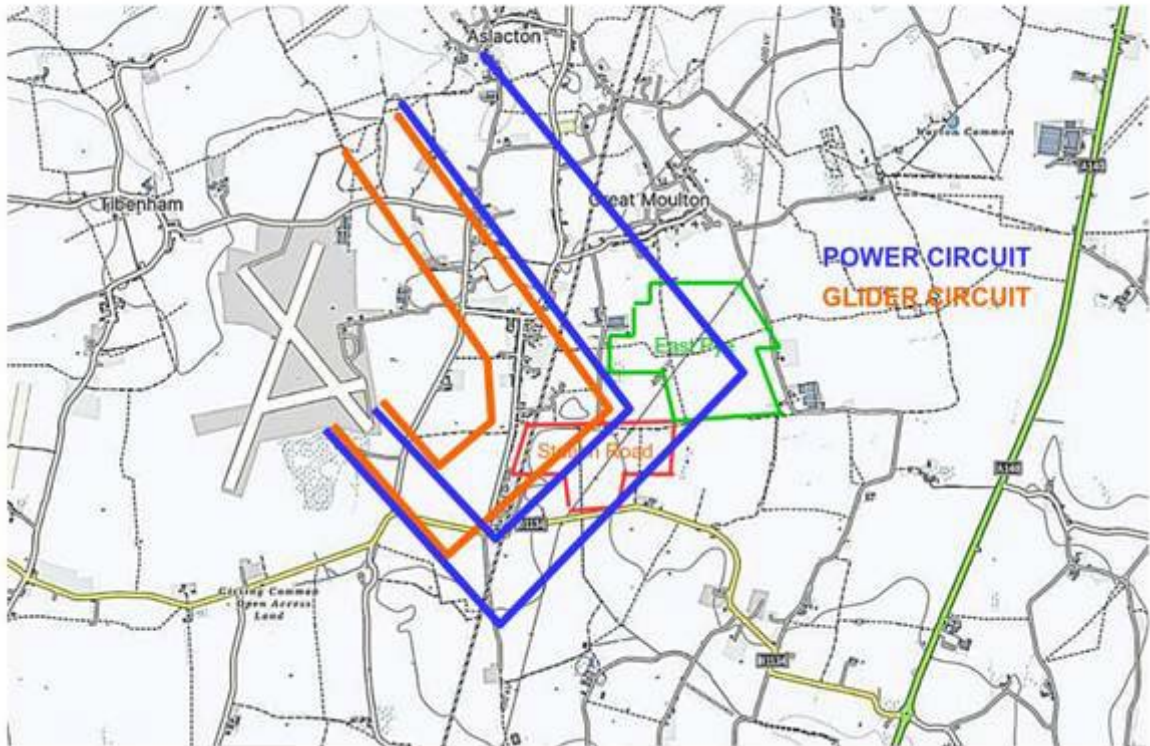
TIBENHAM AIRFIELD – Glider and Power circuits runway 26



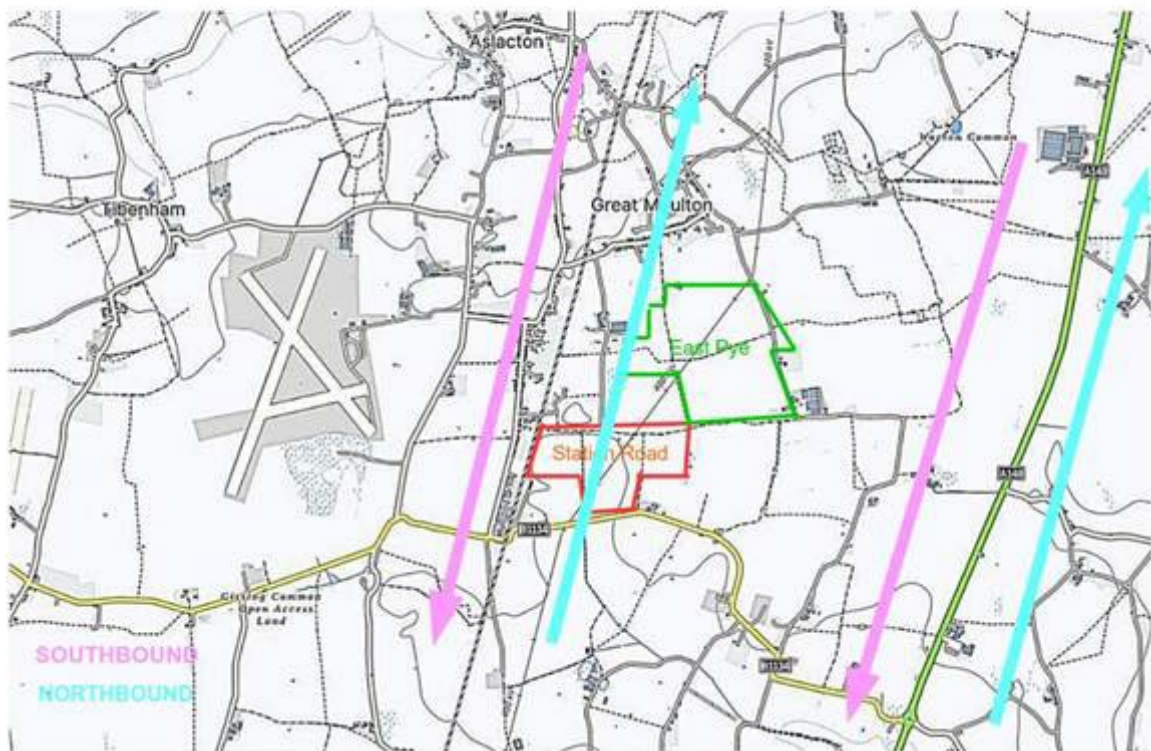
TIBENHAM AIRFIELD – Glider and Power circuits runway 21

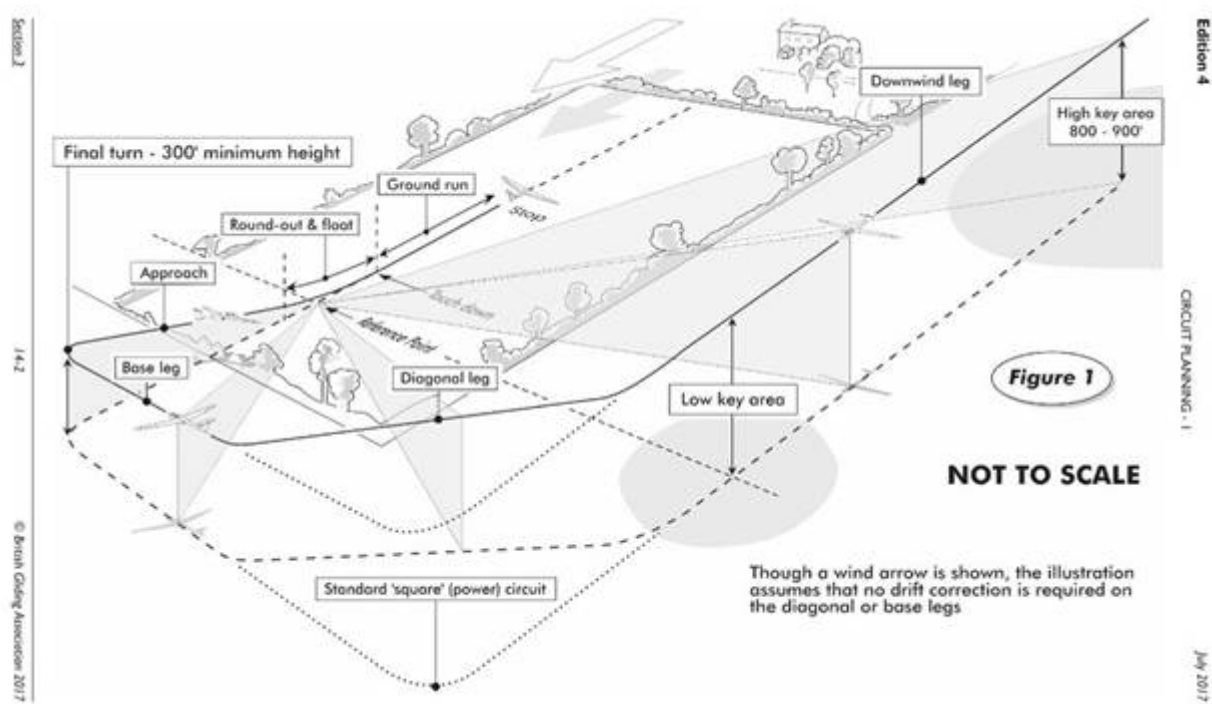


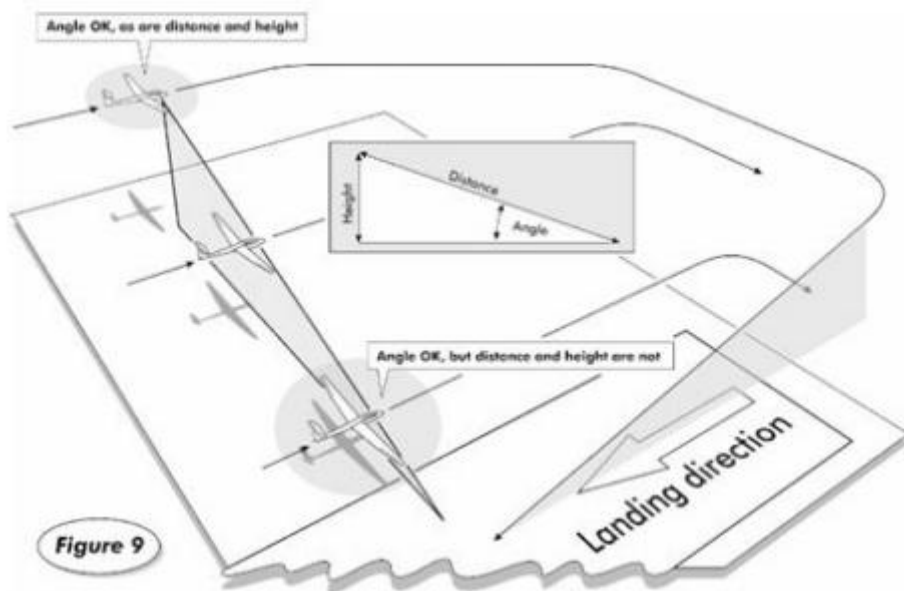
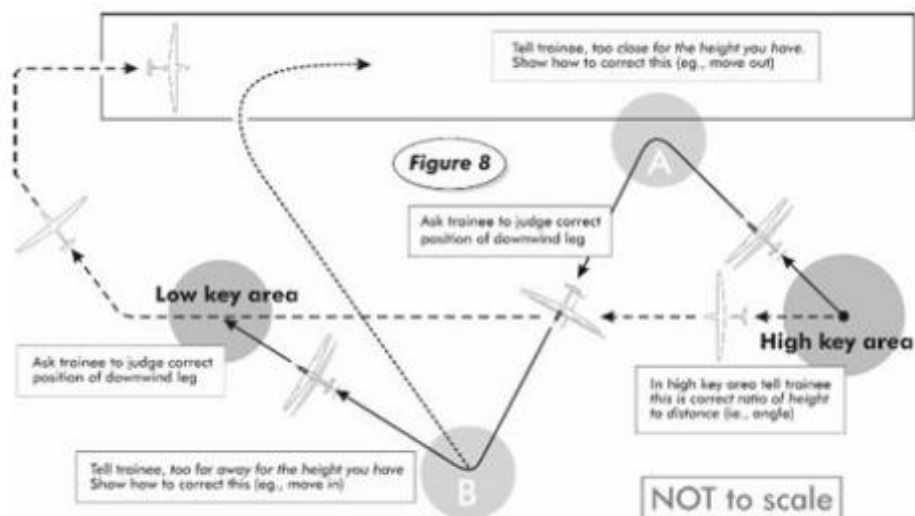
TIBENHAM AIRFIELD – Glider and Power circuits runway 33



TIBENHAM AIRFIELD – Transit traffic to the East







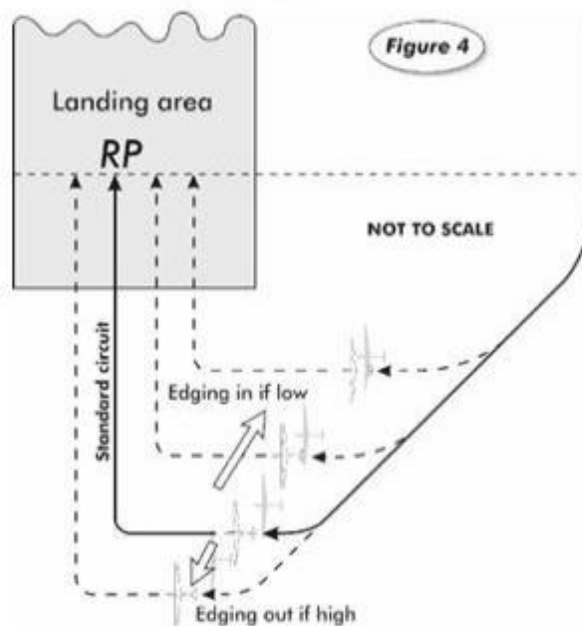
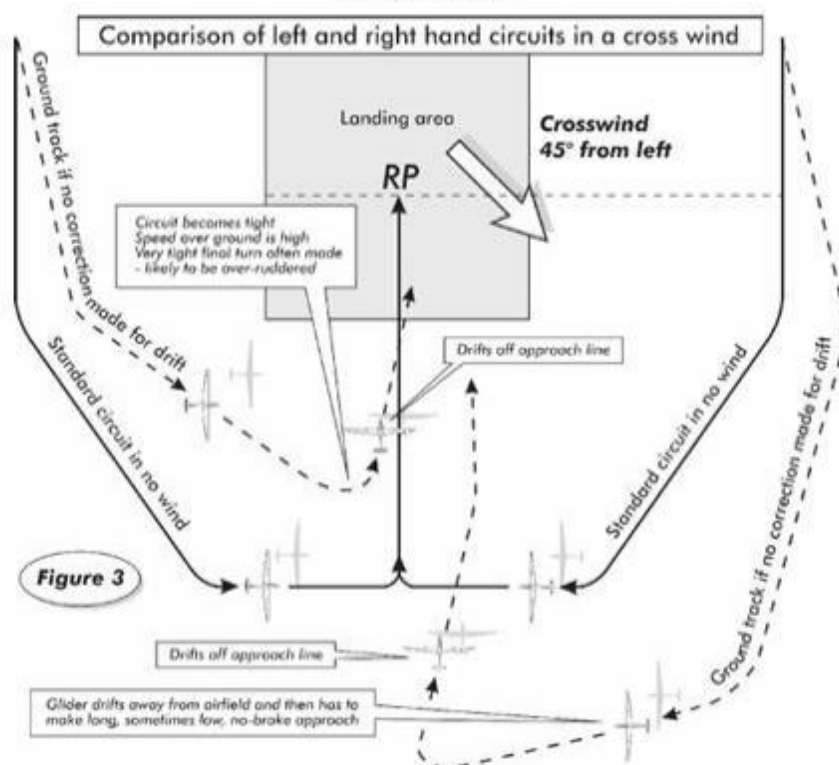
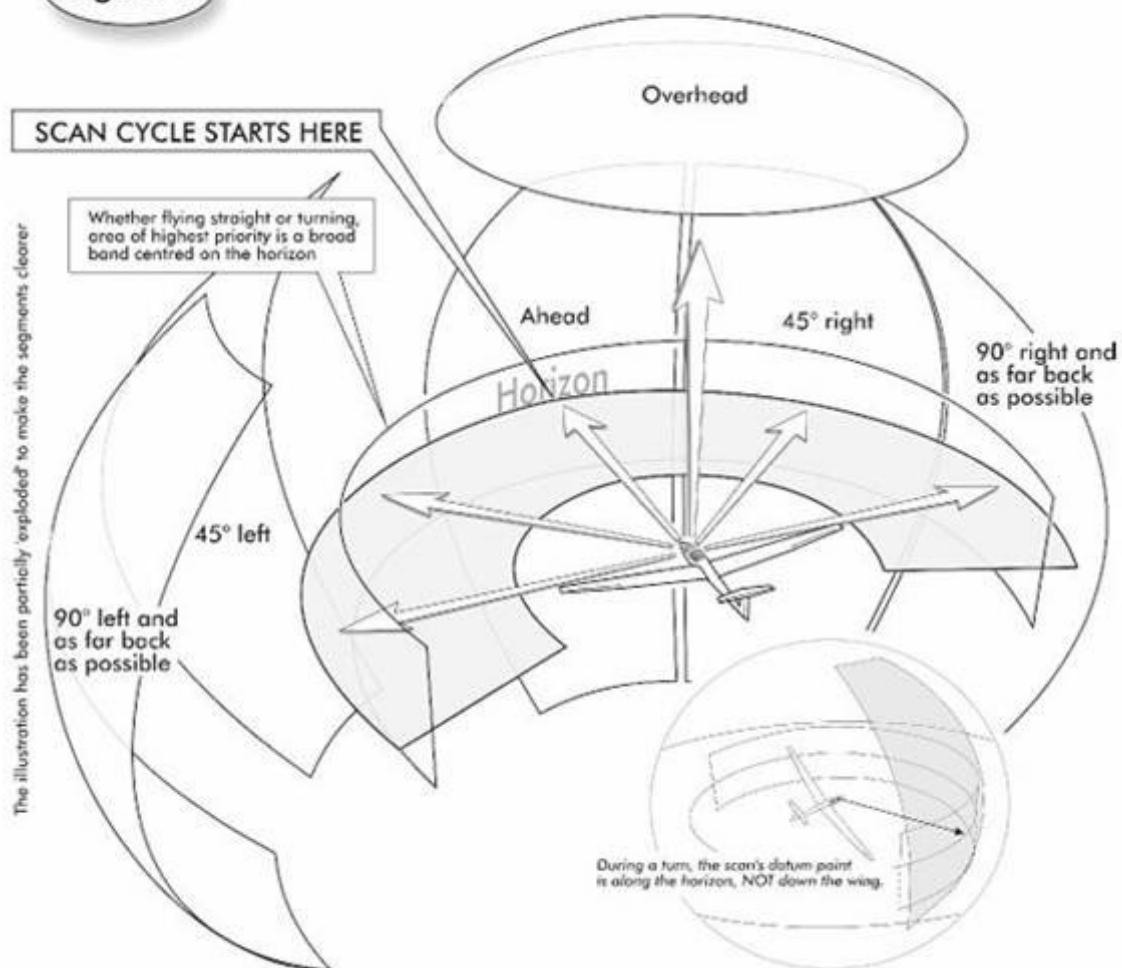
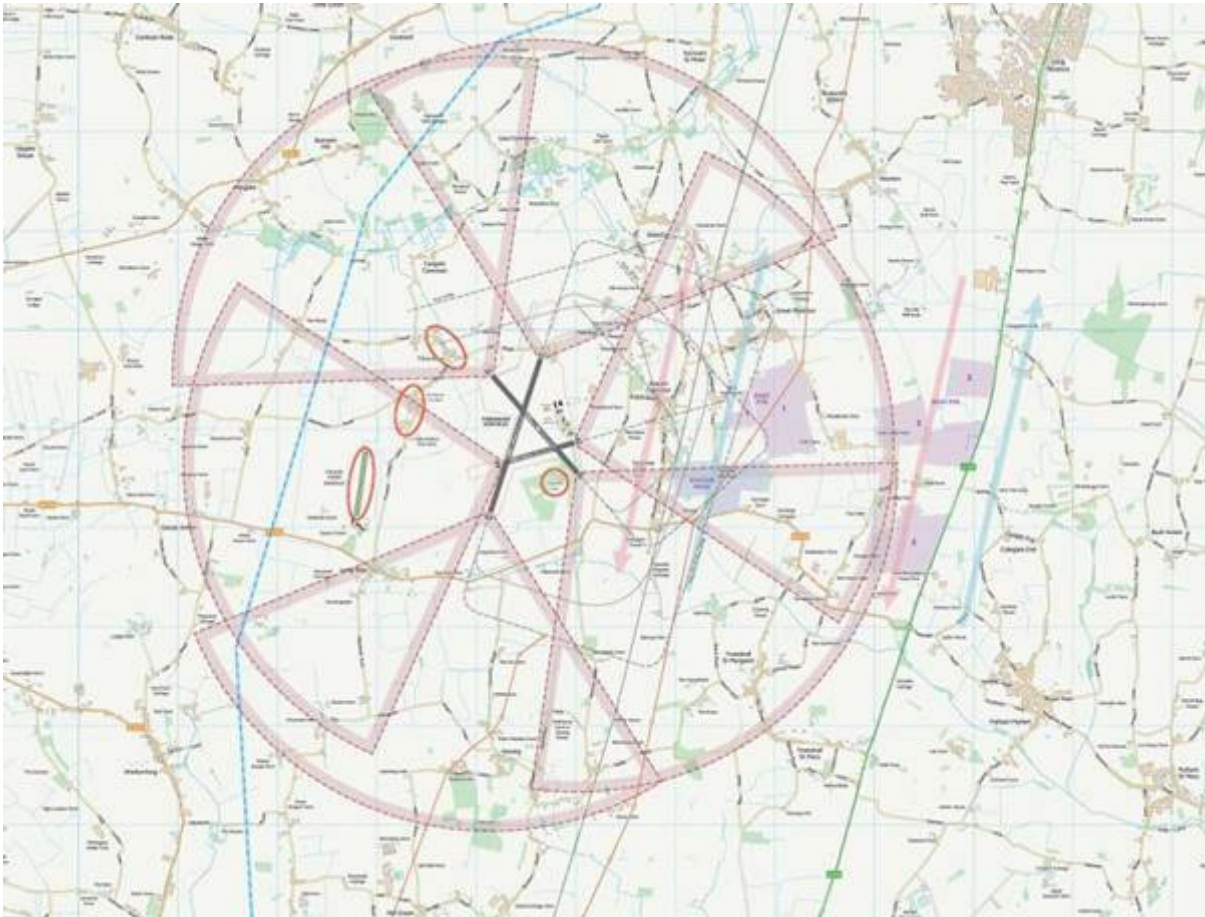


Figure 9 THE SCAN CYCLE: Lookout Attitude Instruments



Appendix F – Landing and take-off quadrants



Appendix G - Some Precedents

A solar farm application to Huntingdon District Council

This application was for 65,000 PV panels and was refused by the Council for, amongst other things, aviation safety

The application went to appeal and was again refused

This comment is reproduced from the appeal decision

“However, Peterborough Flying School has objected in detail following the appeal submission. They highlight that there has been no direct contact between the appellant and the School, despite page 3 of the CAST guidance stating that the benefit of early consultation with aerodrome authorities cannot be understated. The School identifies that the modelling used does not represent the Aerodrome’s specific flying activity patterns, with the ‘straight-in’ approach being too simplistic to replicate the real life situation. Air traffic typically enters its circuits from the south and east, proximate to the appeal site. Aircraft use a wider range of descent angles and approach lines than modelled, due to a wider variety of aircraft types, student pilots, helicopters, and regular parachuting activity”.

An application to York City Council for the construction of poultry sheds close to the end of the runway at Rufforth airfield

This application was for poultry sheds and associated buildings and was refused by the Council for, amongst other things, aviation safety.

The application went to appeal and was again refused.

This comment is reproduced from the appeal decision:

“From the evidence before me, both the Council’s (Dr Eddowes) and appellant’s (Mr Hinchcliffe/Osprey) aviation experts accept that in normal take off and landing situations, the proposed buildings would have very little effect upon aviation safety. However, the point of dispute arises over the effect of unforeseen pre-cursor events (UPCE), for example, engine failure after take off (EFATO), undershoot or bird strike.

Whilst these UPCE are not influenced by the presence of the proposal, the location of the poultry sheds would remove an area of land that could be used for forced landings. This effectively would lead to a change in the obstacle environment in an area where UPCE may occur, and this could then lead to an increased risk of the forced landing colliding with the proposal, causing serious injury or fatality. The primary concern for the Council is EFATO.

A large solar farm adjacent to Oxford Airport

The operators of the airfield were concerned about the risk of Engine Failure After Take-Off (EFATO) and the need to establish a designated EFATO safeguarded zone.

London Oxford Airport wrote to the Applicant alerting them of an EFATO incident and requesting an alteration to the proposed layout sufficient to safeguard an area of land under the approach and departure route south of the airport in order to allow for safe emergency landing. Pager Power on behalf of the Applicant prepared a Technical Aerodrome Safeguarding Report dated Oct 2024 including a proposed a EFATO safeguarding zone, running along the extended runway centreline.

After discussions a proposed solution was drafted which included the removal of 39ha of panels to create a safeguarding zone. The London Oxford Airport CEO agreed to present the proposal to the Local Runway Safety Team

This has been agreed.

THE END

Appendix 6

The General Aviation Awareness Council - PEIR



14 July 2025

East Pye Solar Project Team East Pye Solar Limited Island Green Power Limited

Dear Sir

East Pye Solar

Preliminary Environmental Information Report

I write on behalf of the General Aviation Awareness Council further to our letter of 5 April 2025.

We have received no acknowledgement of this letter which set out issues and concerns about the scope of and weight to be attributed to a range of critical EIA issues.

We note the Planning Inspectorate has provided a Scoping Opinion. However, this Scoping Opinion contains caveats.

We are not a listed ‘consultation body’ but as an interested party, acting on behalf of affected airfields we have and will continue to engage with the EIA and DCO processes.

The provisions of Section 55(3) of the Planning Act 2008 and Schedule 4 of the Infrastructure Planning (EIA) Regulations 2017 requires all significant effects to be addressed and open to statutory consultation.

At this point the Preliminary Environmental Information Report remains

flawed. Your Preliminary Environmental Impact Report:

Does not justify any evidenced need for the scheme. EN-1 does not require specific justification but requires all potential impacts on aviation and aviation safety to be addressed and, as we previously set out on 5 April, this has not been done and the EIA scoping does not properly address this; and

Therefore, your EIA Scope should be revised and reissued and as well as responding to the Planning Inspectorate you should extend its scope to properly address the issues we have raised (as well as issues raised by other interested parties).

Failure to do this would form the basis for a Procedural Objection on the basis that the provisions of Section 55(3) (e) and (f) of the Planning Act 2008 and Schedule 4 of the Infrastructure Planning (EIA) Regulations 2017 have not been complied with.

Would you please confirm your current position and proposed actions in response to these serious concerns.



Yours sincerely

Head of Planning

cc: [Redacted], Chairman, GAAC

Cc: Eastpyesolar@planninginspectorate.gov.uk

cc: Norfolk CC

cc: South Norfolk DC