
MORNINGTHORPE AND FRITTON PARISH COUNCIL

East Pye Solar – EN0110014***Summary of MFPC Written Statement and Response to OFH2 Action Point*****Status and purpose of this summary**

This document summarises the Written Statement submitted by Morningthorpe and Fritton Parish Council (MFPC), which exceeds 1,500 words. This summary is less than 10% of the word count of that document, referred to here as the MFPC Written Statement. It does not replace, amend or withdraw any part of the MFPC Written Statement. Its purpose is to draw the Examining Authority's attention to the principal points MFPC asks it to consider, while directing the Examining Authority to the relevant chapters, figures and appendices containing the supporting evidence.

MFPC does not oppose the principle of renewable energy generation or the transition to a low carbon electricity system. Its objection concerns the location, scale, design and assessed effects of the East Pye Solar Scheme, with particular emphasis on Site 5 (Sites 5A and 5B) as that sites wholly within the parishes of Morningthorpe and Fritton. MFPC's case is that Site 5 and its setting contains an unusually concentrated combination of sensitive residential, landscape, heritage, ecological, agricultural and water-environment receptors, yet the Applicant has not demonstrated that concentrating major power generating infrastructure there represents the least harmful or most appropriate solution. The full basis of that case is set out in the MFPC Written Statement, Chapters 1–20 and Appendices 1–3.

Artificial intelligence declaration

OpenAI ChatGPT was used to assist with summarising, structuring and cross referencing this submission. The source material supplied to the tool comprised the MFPC Written Statement and the documents used for this summary, including MFPC's Relevant Representation, the Applicant's response in PDA-011 and MFPC's OFH2 oral submission material. AI was used to draft and refine the summary text and cross-references; it was not used as a source of new factual evidence. MFPC has checked the text against the cited source material, has reviewed and approved the final wording, and accepts responsibility for the accuracy and appropriateness of the submission and for the responsible and lawful use of AI.

RESPONSE TO OFH2 ACTION POINT – OMITTED RESIDENTIAL RECEPTORS

At OFH2 MFPC stated that, applying the Applicant's own noise and vibration assessment distances, its review had identified 7 residential properties omitted from the construction-noise assessment, 4 receptors within the construction-vibration assessment distance, 6 residential properties within the construction traffic noise assessment distance, and approximately 70 residential properties within 500 metres of Site 5 for operational noise. The Examining Authority asked MFPC to provide the list of omitted residents/receptors referred to in the oral submission.

The requested information is provided below. The supporting analysis is in the MFPC Written Statement, Chapter 12: Noise and Vibration, particularly pp.206–229, and specifically pp.211–212 and Figure 12.5. MFPC has identified properties/receptors rather than individual occupants.

Construction noise – 300 metre assessment distance

The MFPC Written Statement identifies the following 7 residential properties as lying within 300 metres of proposed construction activities but not recognised in the Applicant's construction-noise assessment:

1. Boyland Hall
2. Boyland House
3. Willow Lodge

4. The Bungalow
5. Tanglewood
6. Spinney Lodge
7. Preston Barn

See MFPC Written Statement, Chapter 12, p.211.

Construction vibration – 100 metre assessment distance

The MFPC Written Statement identifies the following 4 receptors within the Applicant's stated construction vibration assessment distance:

1. Boyland Hall, including the historic underground brick tunnel beneath the property and road in front
2. Boyland House,
3. Willow Lodge
4. The Bungalow

MFPC also asks the Examining Authority to consider the potential sensitivity of the historic structures associated with Boyland Hall. See MFPC Written Statement, Chapter 12, p.211.

Construction traffic noise – 50 metres from the centre of the highway

The MFPC Written Statement identifies the following 6 residential properties within 50 metres of construction traffic routes:

1. Boyland Hall
2. Boyland House
3. Willow Lodge
4. The Bungalow
5. Tanglewood
6. Spinney Lodge

MFPC also raises concern that properties grouped by the Applicant under NSR28 include buildings abutting the highway and may therefore fall within the Applicant's own 50 metre criterion for construction traffic associated with Site 5 access points and traffic using The Krons for Sites 7 A-F. See MFPC Written Statement, Chapter 12, p.211.

Operational noise – 500 metres from the Site 5 Order Limits

Figure 12.5 of the MFPC Written Statement identifies 70 property entries within 500 metres of the Site 5 boundary, measured to residential curtilage. The table is reproduced below so that the information requested at OFH2 can be located immediately:

Boyland Hall	East View	Old Hall	10 Mill Road
Boyland House	The Nags	Oakwood	11 Mill Road
1 Mill Fields	Annex at Fritton Cottage	The Old Stables	12 Mill Road
2 Mill Fields	Fritton Cottage	The Old Rectory	Thatsit
3 Mill Fields	1 Rectory Bungalows	Sycamore Barns	The Elms
4 Mill Fields	2 Rectory Bungalows	1 Street Farm Cottage	Elm House
5 Mill Fields	Prestons Barn	2 Street Farm Cottage	Fern Cottage
6 Mill Fields	Iona	The Limes	Nevada
7 Mill Fields	Ferndale	Sycamore House	2 Wayside Cottage

8 Mill Fields	Tweenhills	Thistle Do	3 Wayside Cottage
9 Mill Fields	Meadow Brook	Baxendale House	Rose Cottage
10 Mill Fields	Bridge End	2 Council Houses	Greenwood
11 Mill Fields	The Haven	1 Council Houses	Meadow House
12 Mill Fields	River Cottage	The Old Rectory	Mabels Cottage
13 Mill Fields	Freemasons Cottage	Pittsfield	Sunnyside
14 Mill Fields	16 Mill Fields	Mill Bank	2 Mill Road
15 Mill Fields	Hill House	1 Mill Road	3 Mill Road
4 Mill Road	5 Mill Road		

The MFPC Written Statement states that these properties should have been included where they fall within the Applicant's own operational assessment criterion. It also states that the same receptors were omitted from the decommissioning assessment despite the equivalent assessment criterion. See MFPC Written Statement, p.212 and Figure 12.5.

MFPC additionally identifies concerns about the grouping of receptors under NSR28 and the grouping of surrounding Public Rights of Way under a single receptor, because this can obscure differences in distance, orientation, screening and exposure. The properties grouped under NSR28 are The Garth, Southgate Barn, Middle Barn, Barley Croft, Grain Barn, Rafters, Fritton Grange, Fox Barn and Lilypond Barn. See MFPC Written Statement, p.213.

MFPC therefore asks the Examining Authority to treat the OFH2 action point as answered by the four receptor subsections above and to consider whether the Applicant's assessment should be revisited using a complete and consistently defined receptor set.

1. THE CENTRAL ISSUE: WHY SITE 5?

The central question running through the MFPC Written Statement is not whether renewable electricity is needed nationally. It is why this concentration of major power generating infrastructure is proposed at Site 5, and whether the Applicant has demonstrated that the resulting harm is unavoidable or represents the least harmful reasonable solution.

Site 5 lies immediately beside Fritton Conservation Area and within the setting of the Grade I listed Church of St Catherine. It comprises predominantly high quality agricultural land and contains or connects mature hedgerows, trees, ponds, ditches, watercourses, ecological corridors and archaeological remains. It is crossed and surrounded by Public Rights of Way and lies close to homes, and businesses including a Children's Nursery. The proposed development would introduce a 400kV Project Substation, extensive solar arrays including the possibility of tracking panels, inverters and switching infrastructure, construction compounds, permanent and temporary access infrastructure, fencing, CCTV, lighting and underground cabling for an operational period of approximately 60 years. See MFPC Written Statement, Chapters 1, 3 and 4, pp.5–33.

MFPC's submission is that the significance of Site 5 arises from the interaction of these features. It is not simply agricultural land, a collection of ecological receptors, or the setting of isolated heritage assets. It is a living rural landscape in which settlement, farmland, churches, historic routes, mature vegetation, wildlife habitat and community use remain closely connected. The assessment should therefore reflect how those features function together and how the community will experience the Scheme as a whole.

2. ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

MFPC asks the Examining Authority to consider the methodological concerns in Chapter 2, pp.11–15, because they recur throughout the topic assessments.

MFPC identifies reliance on interdependent technical assessments; extensive use of outline mitigation and post-consent management plans; design flexibility under the Rochdale Envelope; limited sensitivity testing and treatment of uncertainty; insufficient Site 5 specific assessment; and inadequate consideration of effects from the receptor's perspective. A resident does not experience traffic, noise, vibration, visual change, lighting, loss of tranquillity and disruption to footpaths as separate technical chapters. Those effects can occur together and successively over an extended construction period and then be followed by a 60 year operational development.

MFPC also raises the adequacy and enforceability of monitoring and adaptive management. Where an assessment depends on future surveys, detailed design, management plans, monitoring or corrective action, MFPC asks the Examining Authority to establish the assumptions on which the present conclusion depends, the trigger for intervention, who will verify compliance, and what happens if the assumed mitigation does not work.

Finally, Chapter 2 raises equality, accessibility and meaningful public participation. MFPC accepts that the Applicant has described USB, library computer and hard copy arrangements in its response to Relevant Representations. The remaining concern is whether those arrangements enabled residents who lack digital skills or equipment to identify, navigate and understand the documents relevant to them. Availability of material is not necessarily the same as practical accessibility.

3. SITE AND SURROUNDINGS: A LIVING HISTORIC RURAL LANDSCAPE

Chapter 3, pp.16–24, explains why MFPC considers Site 5 exceptionally sensitive. Fritton, Morningthorpe and the historic manor of Boyland have medieval origins, and the present landscape retains the relationship between villages, churches, lanes, fields, hedgerows, trees and archaeological remains. The Grade I listed Church of St Catherine, Fritton Conservation Area and the historic approach to the village are experienced in the context of open agricultural countryside rather than in isolation.

MFPC relies on the survival of historic field patterns, routeways, mature hedgerows, veteran trees and archaeological evidence as part of the landscape's significance. It asks the Examining Authority to assess the effect of the proposed development on the relationship between those elements, not only whether an individual structure would remain visible from a selected viewpoint.

The detailed archaeological material supporting this part of the case is supplemented by Appendix 2, pp.349–387, which provides Site 5 archaeological details and records of finds in and around the area.

4. SCALE AND CHARACTER OF THE DEVELOPMENT AT SITE 5

Chapter 4, pp.25–33, draws attention to the fact that Site 5 would be more than a solar array. MFPC describes it as one of the Scheme's principal operational hubs. The proposed 400kV Project Substation occupies approximately 3.5 hectares, with structures up to approximately 13 m high, accompanied by associated electrical plant, access, construction and maintenance infrastructure. Solar panels may include single-axis tracking panels up to approximately 4.5 metres high. Security infrastructure includes fencing, CCTV, lighting and controlled compounds.

MFPC's concern is not only the size of individual components but the combined transformation of open agricultural countryside into a long-term electricity generation and transmission complex immediately adjoining

a historic village landscape. The final form of several elements remains subject to detailed design, which MFPC says limits the ability to verify the actual worst-case effects at the examination stage.

5. REASONABLE ALTERNATIVES, DESIGN EVOLUTION AND SUBSTATION SITING

Chapter 5, pp.34–45, is central to MFPC’s case. MFPC says Site 5 evolved from land presented predominantly for solar arrays into a major electrical infrastructure hub. The 400kV Project Substation was introduced during the consultation process and increased from approximately 2 hectares at Phase 2 to approximately 3.5 hectares in the submitted application, an increase of about 75%. Additional access and infrastructure were also introduced.

MFPC argues that the design evolution demonstrates intensification rather than successful avoidance of harm. Although some areas of solar development were removed or set back, the site acquired a major substation, compounds, offices/welfare functions, roads and other infrastructure. MFPC asks why the change in grid-connection strategy did not lead to a transparent reassessment of the overall layout and whether Site 5 remained the optimum location for the Project Substation and associated infrastructure.

The MFPC Written Statement also questions the weight placed on land availability and willing landowners. Those may be relevant commercial considerations, but MFPC says they do not demonstrate that Site 5 is the most appropriate planning location where substantial environmental constraints exist. It asks for a transparent comparison of alternative layouts, alternative substation locations and reduced development scenarios, applying the good design principles and siting approach relied on in Chapter 5.

The Applicant’s response to MFPC’s Relevant Representation in PDA-011, MFPC-003 and MFPC-004 does not, in MFPC’s view, remove this issue. The response relies on national and regional need, the existing Site Selection Assessment and the stated benefits of central siting and screening. MFPC’s objection is more specific: whether Site 5 and the final concentration of infrastructure were re-tested against reasonable alternatives after the project and grid-connection strategy evolved. That is the question addressed in Chapter 5.

6. CLIMATE CHANGE AND EXISTING CLIMATE FUNCTIONS

MFPC accepts the climate benefit of renewable electricity in principle. Chapter 6, pp.46–50, asks whether the Applicant has adequately assessed the existing climate and environmental functions of Site 5 when reaching its climate conclusions.

MFPC identifies active Countryside Stewardship agreements, mature hedgerows and trees, agricultural soils, habitat connectivity and natural drainage as existing climate related assets. It raises the carbon already stored in mature vegetation and soils, the consequences of construction disturbance and vegetation loss, and the time required for replacement planting to recreate carbon storage. It also questions whether a scheme wide carbon calculation adequately captures Site 5 specific losses and whether the carbon payback assessment is sufficiently transparent.

MFPC further asks the Examining Authority to consider climate adaptation: connected habitats, water management, soil condition, groundwater recharge and resilience to more intense rainfall, drought and extreme weather. Its case is that climate benefit should be assessed alongside the existing climate functions lost or altered by the development, rather than assuming that renewable generation alone resolves the site-specific climate balance.

7. LANDSCAPE, VISUAL AMENITY, RESIDENTIAL RECEPTORS AND PUBLIC RIGHTS OF WAY

The full landscape and visual case is set out in Chapter 7, pp.51–80. MFPC notes that the Applicant's own assessment identifies significant adverse landscape and visual effects at relevant Site 5 receptors. MFPC's concern is that the effects are greater and more extensive than the selected assessment points suggest.

The chapter addresses the existing landscape character; significant adverse effects; views from settlements and homes; Public Rights of Way, recreation and tranquillity; Important Hedgerows and trees; the residential receptor methodology; Zone of Theoretical Visibility limitations; and the difference between representative viewpoints and the lived experience of moving through the landscape.

MFPC identifies omissions in the residential visual assessment, including Boyland Hall and Prestons Barn, as well as questioning measuring separation to dwelling footprints rather than residential curtilage. It also raises the absence of meaningful assessment of views from upper-storey windows, which may extend above hedgerows relied on for screening. MFPC says that in some instances, screening can reduce some visibility but cannot preserve the existing open rural character once the land itself has changed use.

The Public Rights of Way are important to MFPC not simply as transport routes but because of the experience they provide: tranquillity, open views, wildlife, heritage and connection between settlements. Temporary closure or eventual reopening does not by itself preserve that experience. Appendix 1, pp.304–348, documents a footpath journey through and around Site 5 to support this point. Appendix 3, pp.388–396, similarly records the driven experience and views of Site 5 from surrounding roads, including the B1527.

8. ECOLOGY AND BIODIVERSITY

Chapter 8, pp.81–113, sets out MFPC's detailed ecological concerns. These are not limited to a single species. The chapter addresses:

- nationally important Barbastelle bats and other bat species;
- Skylark;
- Turtle Dove;
- Lapwing;
- Great Crested Newts;
- Badgers;
- the River Tas chalk-stream system;
- White-clawed Crayfish;
- hedgerows and significant/veteran trees;
- rare flora; and
- impacts on more common species and the wider ecological network.

MFPC's principal concern is habitat function and connectivity. Site 5 sits within a network of hedgerows, woodland edges, watercourses, ponds, field margins and agricultural habitats. The proposed arrays, substation, roads, fencing, lighting and construction activity would introduce fragmentation and disturbance into that network. MFPC questions whether BNG calculations and future habitat creation demonstrate that the established relationships supporting protected and priority species can be recreated or maintained throughout construction and operation.

For Barbastelle bats, the Applicant's response in PDA-011, MFPC-008 expressly recognises that roosting and foraging/commuting Barbastelle are of National importance. The issue for the Examination is therefore not whether the receptor is important; that is substantially common ground. The question is whether the survey

baseline, assessment of landscape connectivity, lighting and disturbance, and secured mitigation are sufficient to demonstrate no likely significant adverse effect.

For White-clawed Crayfish, MFPC acknowledges the Applicant's updated position in [PDA-007], including precautionary consideration of potential presence in the River Tas and hydrologically connected habitat, together with avoidance, biosecurity and pollution-control measures. However, the original surveys were habitat-suitability assessments undertaken in unusually dry conditions, not targeted presence/absence surveys. MFPC therefore asks the ExA to consider whether the available evidence and secured controls are sufficient to justify the Applicant's conclusion that significant effects are not anticipated and that no further targeted survey is required.

9. WATER ENVIRONMENT, PRIVATE DRAINAGE AND DRINKING WATER

Chapter 9, pp.114–137, addresses rivers, streams, ditches and culverts; flood risk; private foul drainage including resident's private sewage treatment systems which replace the older septic tanks; public drinking water supplies; and private drinking water supplies. MFPC's concern is the completeness of the baseline and the accuracy with which Site 5's local drainage and watercourse network has been represented.

MFPC identifies the eastern and western watercourses at Site 5 and their hydrological connection with the River Tas catchment, including the historic brick culvert associated with Boyland Hall. In [PDA-011, MFPC-010], the Applicant acknowledges that the western watercourse flows into Hempnall Beck and is treated as a "Very High" sensitivity receptor in the Water Environment assessment [APP-045]. MFPC relies on that acknowledgement as confirmation of the sensitivity and connectivity of these receptors, but questions whether this has been applied consistently across the wider assessment, particularly where the Water Framework Directive Assessment [APP-163] characterises proposed crossings as involving "field drains that have minimal dynamics". The remaining issue is whether the mapping, modelling, crossing design, culvert capacity, runoff assumptions, sediment and pollution controls, and downstream assessment are sufficiently site specific to demonstrate that effects would be acceptable.

MFPC also raises private foul drainage systems. Septic tanks and package treatment systems around Site 5 depend on stable soil, groundwater and drainage conditions. Chapter 9 asks whether piling, trenching, soil compaction and changed surface-water pathways could affect those systems and their receiving environment.

For drinking water, MFPC identifies nearby private supplies, including Boyland Hall and Boyland House, and relies on BGS information concerning boreholes/extraction points. It asks for a site-specific hydrogeological assessment of effects on water quantity, water quality, groundwater movement and recharge, together with pollution prevention and contingency arrangements.

This concern is reinforced by the Applicant's own PDA-011 response MFPC-011, which relies on assumptions about the depth and geology of private abstractions and states that ground investigation will be undertaken before construction to confirm assumptions and inform detailed design. MFPC asks the Examining Authority to consider whether information material to the assessment of risk should instead be established during the Examination, particularly where residents rely on the affected supply for domestic water.

10. CULTURAL HERITAGE AND ARCHAEOLOGY

The detailed heritage case is in Chapter 10, pp.138–163, supported by Appendix 2. MFPC asks the Examining Authority to consider Site 5 as part of the setting of a surviving historic landscape, rather than treating setting principally as a question of visibility.

The chapter addresses Fritton Conservation Area; the relationship between the Conservation Area and surrounding countryside; the Grade I listed churches of St Catherine and St John the Baptist; the concentration

of listed buildings around Site 5; impacts on Grade II listed buildings; archaeology; and the relationship between cultural heritage, community identity and wellbeing.

MFPC says the open agricultural land north of Fritton contributes directly to the historic approach to the Conservation Area and the setting of St Catherine's Church. The 400kV Project Substation and associated infrastructure would alter that relationship for the operational life of the Scheme. Planting may eventually obscure parts of the development, but MFPC's case is that screening is not equivalent to conserving setting: the land use and character of the setting would already have changed.

MFPC also raises incomplete archaeological evaluation and the possibility of further remains within Site 5. Historic England's representation is relied upon as evidence that effects on designated heritage assets and their settings require continuing scrutiny.

11. TRANSPORT AND ACCESS

Chapter 11, pp.164–205, addresses the suitability and safety of the highway network, Public Rights of Way, pedestrians, children and cyclists, and nearby aviation interests. MFPC relies not only on local observations but also on unresolved issues identified by National Highways and Norfolk County Council.

The Site 5 construction route uses the B1527 and local roads including The Street and The Krons. MFPC describes narrow carriageways, bends, existing accesses, agricultural traffic, pedestrians, cyclists, horse riders, businesses and residential properties. It challenges whether the traffic baseline and forecast adequately represent the concentration and duration of construction traffic associated with the substation and other Site 5 works.

A central issue is abnormal indivisible loads. MFPC's Relevant Representation raised the stated requirement for 317 tonne, 69.6 metre AILs, including the suitability of local roads, access geometry and historic structures. In PDA-011, MFPC-007, the Applicant states that NCC identified structures on the B1527 as being in good condition and capable of carrying normal traffic and traffic up to 40/44 tonnes, and then relies on an AIL report and traffic-management arrangements for the abnormal loads. MFPC asks the Examining Authority to distinguish between traffic management and evidence of physical/structural capacity for the much heavier AIL raised in the representation. The Chapter 11 evidence should be read with this response.

MFPC also raises the proposed accesses near Jack in the Box Nursery, including the effect on babies and young children using the nursery's outdoor areas throughout the day, not only at drop-off and collection times. It raises access geometry, visibility splays, the historic brick culvert and the interaction between HGVs/AILs and vulnerable road users.

Norfolk County Council's preference for a single construction access from the B1527 with internal routing between Site 5A and 5B is also highlighted. MFPC asks why multiple access points remain necessary where they increase interaction with an already constrained network.

Public Rights of Way are addressed both as safety receptors and as recreational assets. MFPC raises diversions that could direct walkers onto sections of the B1527 and The Street which the Applicant's own assessment identifies as producing extreme pedestrian intimidation, and asks the ExA to consider the interaction between diverted users and construction accesses.

The chapter also raises potential aviation effects and whether nearby general-aviation operations, including Tibenham Aerodrome, have been adequately assessed.

12. NOISE AND VIBRATION

The receptor omissions responding to the OFH2 action are set out at the beginning of this summary. The wider case is in Chapter 12, pp.206–229.

MFPC questions the completeness of the receptor schedule; the representativeness of baseline monitoring; the grouping of residential and PRow receptors; cumulative construction noise; vibration from piling, excavation and HGV/AIL movements; possible effects on historic structures and the brick culvert; and long term operational noise from the 400kV substation, transformers, inverters, switching plant and possible tracking motors.

MFPC also challenges whether the Applicant's assumed operational sound levels represent a robust worst case in the absence of final equipment specifications and layout. It raises low frequency sound and ecological receptors, particularly bat species, and reliance on vegetation as an acoustic mitigation measure over a 60-year period when hedgerows and trees may be altered, removed, damaged, diseased or otherwise change.

The essential point is that if receptors falling within the Applicant's own criteria have been omitted or grouped in a way that obscures different exposure, the resulting conclusions need to be checked before reliance is placed on them.

13. AIR QUALITY

Chapter 13, pp.230–237, challenges the conclusion of no significant air quality effects for Site 5. MFPC's concerns are principally construction dust, HGV and other vehicle emissions, vehicle idling, prolonged earthworks and the construction of the 400kV Project Substation.

MFPC asks the ExA to consider nearby residential properties, Jack in the Box Children's Nursery, businesses and users of Public Rights of Way as sensitive receptors. It also says that uncertainty in the transport assessment carries through into the air quality assessment because vehicle numbers, routing and duration are key inputs. The proposed construction period may be temporary in planning terms, but MFPC says a period of about two years is a substantial period for those exposed daily.

The chapter also questions whether monitoring, trigger levels and enforceable intervention measures are sufficiently defined, and whether cumulative dust and vehicle emissions from overlapping activities have been adequately assessed.

14. SOCIO-ECONOMIC EFFECTS, RURAL BUSINESSES AND COMMUNITY WELLBEING

Chapter 14, pp.238–246, addresses tourism, local businesses and the labour market, agricultural contractors and the wider rural economy, and residential amenity, mental wellbeing and community effects.

MFPC does not dispute that construction can generate employment and expenditure. Its concern is the weight attached to benefits that are temporary, uncertain or dependent on specialist labour from outside the area, when long term operational employment is limited. MFPC asks for equal scrutiny of established local economic activity that depends on agriculture, heritage, tranquillity, countryside recreation and visitor experience.

The chapter also raises the effect on agricultural contractors, suppliers and other rural businesses if productive land is removed from agricultural use for approximately 60 years. It asks whether the socio-economic assessment adequately captures those indirect effects.

MFPC's wellbeing case is not confined to a standalone mental-health effect. It concerns the combined experience of landscape change, construction traffic, noise, dust, vibration, access disruption on current

businesses, altered recreational routes and loss of tranquillity, together with the scale and duration of change imposed on a small rural community.

15. SOILS AND AGRICULTURAL LAND

The detailed case is in Chapter 15, pp.247–257. MFPC places particular weight on the predominantly Grade 2 Best and Most Versatile agricultural land at Site 5 and questions whether its soil structure, productive capability and wider environmental functions can be maintained or fully restored after an operational period of approximately 60 years.

The chapter addresses soil quality, compaction, contamination, microcracking and degradation of panels, glass fragmentation and possible contaminant leaching, land management detail, the absence of measurable soil recovery criteria, and the absence of a financial guarantee and decommissioning bond specifically securing full restoration.

MFPC asks for measurable restoration standards, independent verification and long-term monitoring rather than reliance on outline soil management principles. It also asks the ExA to consider soil as more than a medium for agriculture: it contributes to carbon storage, infiltration, drainage, groundwater recharge and ecological function, linking Chapter 15 to the climate, water and ecology cases.

16. GROUND CONDITIONS

Chapter 16, pp.258–261, focuses on the sensitivity of the hydrogeological setting and the extent to which the assessment relies on future investigation. MFPC identifies the Secondary and Principal Aquifers, field drains and watercourses, groundwater vulnerability, nearby private water supplies and the potential for contamination to migrate beyond the site.

The development introduces potential sources and pathways through earthworks, trenching, construction compounds, transformers, insulating oils, hardstandings and long term electrical infrastructure. MFPC asks whether site investigation, quantitative risk assessment and mitigation should be sufficiently advanced before consent rather than left substantially to post-consent ground investigation and management plans.

The chapter also calls for long-term groundwater monitoring, independent verification and defined intervention measures over the operational period.

17. ELECTROMAGNETIC FIELDS

Chapter 17, pp.262–264, challenges whether the EMF assessment is sufficiently Site 5-specific. The concern is not simply compliance of individual items of equipment with generic standards, but the combined operation of the 400kV Project Substation, transformers, inverters, switching equipment and underground cable network in a concentrated area.

MFPC asks for appropriate consideration of nearby homes, Public Rights of Way, Jack in the Box Children's Nursery, business and ecological receptors, and questions reliance on generic ecological literature rather than the habitats and species actually present at Site 5. It also raises the absence of a clear commitment to post-construction monitoring, reporting, trigger levels and corrective action if measured fields differ from those predicted.

18. OTHER ENVIRONMENTAL MATTERS: UTILITIES, GLINT AND GLARE, WASTE, HUMAN HEALTH AND EQUALITY

Chapter 18, pp.265–288, brings together several issues which MFPC says remain insufficiently resolved.

Utilities

MFPC identifies existing water and other utility infrastructure in and around Site 5 and questions whether proposed access crossings, heavy vehicles, vibration, compaction and construction activity can be undertaken without unacceptable risk to buried assets. It relies on outstanding matters raised by statutory undertakers, including Anglian Water and National Gas Transmission. MFPC asks for the engineering interfaces, protective measures, access for maintenance and responsibility for failures to be established rather than assumed to be resolvable later.

Glint and glare

MFPC raises the interaction between the glint and glare assessment and the actual highway journey along the B1527, including sequential and cumulative exposure rather than isolated receptor points. It also identifies a potential inconsistency where screening is relied upon along the Site 5 frontage while permanent access points, visibility splays and vegetation removal and height restrictions may create gaps in that screening. MFPC asks for the glint and glare assumptions to be reconciled with the access design and final panel configuration, including the operation of trackers and any backtracking controls.

Waste

MFPC questions broad assumptions about future waste generation, recycling rates and available treatment and recycling capacity, particularly over a 60-year lifespan and at decommissioning. It asks the ExA to distinguish between materials being technically recyclable and there being secured, practicable capacity and responsibility to manage them when waste arises.

Human health and equality

MFPC says the health assessment inherits weaknesses from the underlying noise, traffic, air-quality, landscape, recreation and socio-economic assessments. It asks for the combined experience of those effects to be considered for residents closest to Site 5. The Equality Impact Assessment and consultation arrangements should also be considered in light of the practical difficulties faced by older and digitally excluded residents in navigating the application and Examination material.

19. CUMULATIVE AND IN-COMBINATION EFFECTS

Chapter 19, pp.289–301, asks the Examining Authority not to consider Site 5 or East Pye Solar in isolation. MFPC raises cumulative effects at two scales.

First, at the regional level, the Scheme forms part of a wider concentration of solar generation, battery storage, grid reinforcement and other nationally significant energy infrastructure across East Anglia. MFPC questions whether the interaction with existing, consented and proposed infrastructure, transmission constraints and the cumulative transformation of rural landscapes has been adequately assessed.

Second, at the local level, residents experience a single environment. Site 5, cable corridors, nearby Sites, construction traffic, road accesses and other elements of East Pye affect the same communities and routes. MFPC therefore asks the ExA to consider combined effects on landscape, heritage, ecology, agricultural land, water, traffic, Public Rights of Way, noise, air quality, residential amenity, health and wellbeing.

MFPC says the cumulative assessment is only as reliable as the topic assessments feeding into it. If receptors have been omitted, baselines are incomplete, effects understated or mitigation assumed without sufficient detail, those weaknesses carry into the cumulative conclusion. Retaining a footpath, for example, does not mean the recreational effect is absent if its tranquillity, views and setting change substantially.

The chapter also questions whether temporary construction employment and broad strategic benefits have been weighed consistently against long-term local burdens lasting approximately 60 years.

20. OVERALL PLANNING BALANCE AND MFPC'S CASE

Chapter 20, pp.302–303, draws the preceding evidence together. MFPC's position is that Site 5 combines a particularly sensitive historic landscape, Grade 2 Best and Most Versatile agricultural land, important ecological networks, water and groundwater receptors, valued Public Rights of Way and a settled rural community, while also being proposed for one of the Scheme's largest concentrations of power generating infrastructure.

MFPC asks the Examining Authority to give particular attention to the following matters when considering the weight to be attached to the Applicant's conclusions:

- whether the Applicant has demonstrated why Site 5 is necessary and why a less harmful layout or substation location is not reasonably available;
- whether the Environmental Statement is sufficiently Site 5-specific where important conclusions rely on outline mitigation, future investigation, detailed design or management plans;
- whether all relevant residential and other sensitive receptors have been identified and consistently assessed, including the omissions listed in response to the OFH2 action above;
- whether the 317 tonne/69.6 metre AIL case, access geometry, structures, nursery location and constrained rural highway network have been demonstrated to be physically and safely deliverable, rather than merely manageable through traffic controls;
- whether effects on the historic landscape, Fritton Conservation Area, Grade I listed churches, listed buildings and archaeology have been assessed through setting and landscape character rather than visibility alone;
- whether the nationally important Barbastelle resource and other protected/priority species can be safeguarded while maintaining functional habitat connectivity throughout construction and operation;
- whether the River Tas catchment, Site 5 watercourses, historic culvert, groundwater, public/private water supplies and private foul drainage have been assessed using a complete and verified baseline;
- whether the long-term consequences for Grade 2 BMV land, soils, agricultural capability, carbon storage, drainage and restoration have been adequately demonstrated and secured;
- whether Public Rights of Way, recreation, tranquillity, residential amenity and community wellbeing have been assessed as lived and cumulative effects rather than as isolated technical receptors;
- whether the interfaces with existing utilities, together with glint and glare, waste, EMF and other environmental matters, are sufficiently resolved before consent; and
- whether the cumulative and in-combination effects of the Scheme and other infrastructure have been given appropriate weight.

MFPC's objection is not based on any single impact, but on the cumulative case that the Scheme as a whole, including Site 5, gives rise to significant adverse effects, has intensified through its evolution, and remains supported in important respects by assessments that contain gaps or defer necessary information until later stages. In the planning balance, MFPC recognises that the Scheme's contribution to renewable energy carries substantial weight, but that weight is not determinative and cannot simply override site-specific and cumulative harm.

Unlike infrastructure whose purpose fixes it to a particular corridor or location, such as a road or railway, the Applicant has not demonstrated that this solar development must be located in this locality. The issue is

therefore not simply whether a particular field or part of Site 5 could be avoided, but whether the Scheme's claimed national benefits require these particular communities and landscapes to bear the identified harms at all. National need for renewable energy does not establish a need for this Scheme in this location.

MFPC considers that the Applicant has not demonstrated that the Scheme, including the infrastructure proposed at Site 5, is necessary in its proposed location and form, that reasonable alternatives at a wider geographical scale have been properly considered, or that harm has been avoided and reduced as far as reasonably possible. Those unresolved locational and environmental harms must therefore carry substantial weight against the grant of consent.

MFPC respectfully asks the Examining Authority to read this summary together with the full MFPC Written Statement, including its figures and Appendices 1–3, and to require any information necessary to resolve the identified uncertainties during the Examination rather than leaving matters material to the assessment of likely effects to post-consent investigation or detailed design.

Written Representation

Objections submitted in response to East Pye Solar

PINS Reference: EN0110014

Submitted by Morningthorpe and Fritton Parish Council

Use of Artificial Intelligence

This Written Representation has been prepared by local residents in response to a Development Consent Order application comprising many thousands of pages of technical reports, Environmental Statement chapters, plans and consultation responses. Given the scale and complexity of the application, **OpenAI's ChatGPT** and **Adobe Acrobat AI Assistant** were used as drafting and document review tools to assist with summarising documents, improving clarity and cross-referencing information. **Any images included within this Written Representation that have been adapted from the Applicant's documents were edited manually by the authors and were not created or modified using artificial intelligence.**

All arguments, conclusions and opinions contained within this Written Representation have been reviewed and approved by the authors, who accept full responsibility for its contents.

Contents

<i>Executive Summary</i>	3
<i>Chapter 1: Introduction</i>	5
<i>Chapter 2: Environmental Impact Assessment Methodology</i>	11
<i>Chapter 3: Site and Surroundings</i>	16
<i>Chapter 4: Scheme Description (Site 5)</i>	26
<i>Chapter 5: Reasonable Alternatives and Design Evolution</i>	35
<i>Chapter 6: Climate Change</i>	47
<i>Chapter 7: Landscape and Visual</i>	52
<i>Chapter 8: Ecology and Biodiversity</i>	82
<i>Chapter 9: Water Environment</i>	114
<i>Chapter 10: Cultural Heritage</i>	136
<i>Chapter 11: Transport and Access</i>	161
<i>Chapter 12: Noise and Vibration</i>	202
<i>Chapter 13: Air Quality</i>	226
<i>Chapter 14: Socio-Economics</i>	234
<i>Chapter 15: Soils and Agriculture</i>	243
<i>Chapter 16: Ground Conditions</i>	254
<i>Chapter 17: Electromagnetic Fields</i>	258
<i>Chapter 18: Other Environmental Matters</i>	261
<i>Chapter 19: Cumulative and In-Combination Effects</i>	285
<i>Chapter 20: Overall Planning and Case for Refusal</i>	298
<i>Appendix 1 Footpath Journey Through and Around Site 5</i>	304
<i>Appendix 2 Archaeological Details For Site 5</i>	349
<i>Appendix 3 Driven Experience. Views of Site 5</i>	388

Executive Summary

This Written Representation is submitted by **Morningthorpe and Fritton Parish Council** in respect of the proposed **East Pye Solar Development Consent Order**. It has been prepared following consideration of the Applicant's Environmental Statement, supporting application documents, relevant national and local planning policy, and the representations made by statutory consultees.

The Parish Council objects to the proposed East Pye Solar development as a whole. However, it recognises that the Scheme extends across a wide geographical area and that its most direct and significant impacts upon the Parish of Morningthorpe and Fritton arise from **Land Parcel 5 (Sites 5A and 5B)**. Accordingly, whilst this Written Representation comments on the wider proposal where relevant, it necessarily focuses upon Site 5 and the effects that this part of the Scheme would have on the Parish, its residents, landscape, heritage, environment and local infrastructure.

The Parish Council does not oppose the principle of renewable energy generation or the transition to a low-carbon electricity system. Its objection is founded upon the location, scale and design of the proposed development and the Applicant's failure to demonstrate that Site 5 represents an appropriate or least harmful location for one of the Scheme's largest concentrations of permanent infrastructure, including the proposed 400 kV Project Substation, associated electrical compounds, extensive solar arrays and supporting infrastructure.

A recurring theme throughout the Applicant's Environmental Statement is that the Scheme has been designed to avoid or minimise significant environmental effects wherever reasonably practicable. The Applicant's Site Selection Assessment identifies a preference to avoid Best and Most Versatile agricultural land, designated heritage assets, areas of ecological importance, sensitive landscapes and residential receptors. The evidence presented throughout this Written Representation demonstrates that Site 5 contains precisely this combination of environmental constraints, yet the Applicant has not adequately explained why this location was selected in preference to less constrained alternatives or why further design changes were not pursued to reduce environmental harm.

Site 5 occupies one of the most environmentally and historically sensitive locations within the East Pye Solar Scheme. It lies immediately adjacent to Fritton Conservation Area, within the setting of the Grade I listed Church of St Catherine, comprises predominantly Grade 2 Best and Most Versatile agricultural land, and supports an established ecological network of mature hedgerows, trees, ponds, ditches and field margins providing habitat for protected, Priority and Red List species. These environmental assets are complemented by an extensive network of Public Rights of Way which contribute significantly to the rural character, recreational value and setting of the parish.

The chapters that follow examine the Applicant's assessment across the principal environmental disciplines, together with the concerns raised by statutory consultees, insofar as they affect Morningthorpe and Fritton. They demonstrate that the Environmental Statement repeatedly relies upon assumptions, outline mitigation and matters deferred until after development consent, resulting in a consistent underestimation of likely environmental effects and the planning weight that should properly be attached to them.

The principal conclusions reached in this Written Representation are that:

- The Applicant has not demonstrated that the East Pye Solar Scheme has been designed to avoid or minimise environmental harm so far as reasonably practicable.
- Site 5 is not the least environmentally harmful location for the concentration of the proposed infrastructure and would result in disproportionate adverse effects on the Parish of Morningthorpe and Fritton.
- The Environmental Statement consistently underestimates the significance of likely effects, particularly in relation to landscape, heritage, ecology, Best and Most Versatile agricultural land, human health and cumulative impacts.
- The proposed 400 kV Project Substation has not been shown to accord with the good design principles of National Policy Statement EN-5, which require adverse environmental effects to be minimised through careful siting and design.
- The proposal would result in significant and enduring harm to the historic rural landscape, including the setting of designated heritage assets, productive agricultural land and the established ecological network supporting protected, Priority and Red List species.
- The cumulative effects upon local communities, Public Rights of Way, recreation, health, wellbeing and the rural economy have been materially underestimated.
- The Applicant has not demonstrated that the communities affected by the Scheme, including Morningthorpe and Fritton, would receive meaningful or enduring socio-economic benefits sufficient to outweigh the significant environmental, social and economic impacts arising over the proposed operational life of approximately sixty years.

This Written Representation concludes that the Applicant has failed to demonstrate that the East Pye Solar proposal accords with the requirements of the relevant National Policy Statements or that its adverse impacts have been avoided, minimised or clearly outweighed by the benefits of the Scheme. In particular, the Applicant has not demonstrated that the inclusion of **Land Parcel 5 (Sites 5A and 5B)** represents the least environmentally harmful solution or that the significant long-term adverse effects on the Parish of Morningthorpe and Fritton are justified. The Parish Council therefore respectfully invites the Examining Authority to recommend that development consent for the proposed East Pye Solar Development Consent Order should be refused.

Chapter 1: Introduction

The Joint Parish of Morningthorpe and Fritton lies in the heart of the South Norfolk countryside, approximately 12 miles south of Norwich between the market town of Long Stratton and the village of Hempnall. Covering just three square miles, the parish is characterised by gently undulating agricultural land, ancient hedgerows, mature woodland, historic lanes and scattered farmsteads that have changed little over centuries. It is a landscape defined not by modern development but by its continuity, tranquillity and strong connection with its agricultural and historic past.

With a resident population of only 319 people (2021 Census), Morningthorpe and Fritton remains a small rural community whose identity is closely linked to farming, the historic landscape and its nationally important heritage assets. Community life centres upon the parish churches, local farms and a close-knit rural population. The absence of major roads, limited public transport, dark night skies and extensive open views all contribute to the distinctive character of the parish and the wellbeing of those who live within it.

Morningthorpe has medieval origins and is centred on the Grade I listed Church of St John the Baptist, one of Norfolk's distinctive round-tower churches. Fritton is an equally historic settlement focused upon the Grade I listed Church of St Catherine, whose prominent position within the landscape has formed the visual and cultural focus of the parish for centuries. The surrounding countryside retains the historic field pattern associated with the former Boyland Manor, recorded in the Domesday Book, together with surviving ancient hedgerows, mature trees, historic lanes and archaeological features that continue to define the area's rural character.

The significance of this landscape extends beyond its heritage assets. The parish is dominated by productive Grade 2 Best and Most Versatile agricultural land, interconnected habitats, streams feeding the River Tas, mature hedgerows supporting protected species and an extensive network of Public Rights of Way that allow residents and visitors to experience an open and tranquil countryside. The historic relationship between agriculture, ecology, settlement and heritage remains largely intact.

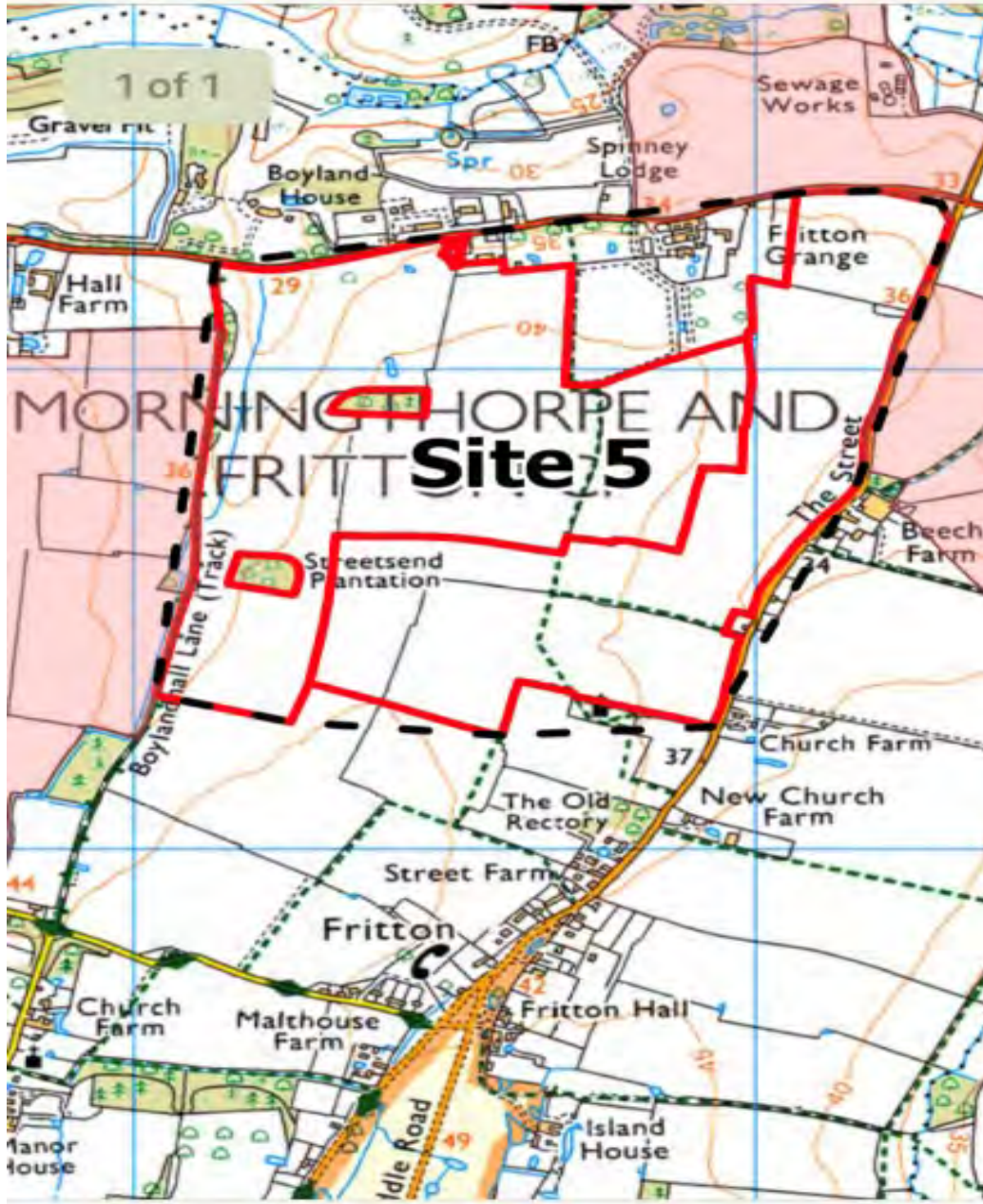


Figure 1.1 – Location Map of Morningthorpe and Fritton showing the location of Site 5 within the parish taken from East Pye Solar Documents

Against this backdrop, the East Pye Solar proposal represents development of an entirely different character and scale.

The East Pye Solar Scheme extends across approximately 1,100 hectares (2,718 acres) over almost 15 kilometres (9.3 miles), making it one of the largest Nationally Significant Infrastructure Projects for solar generation currently proposed in England.

Within this wider proposal, **Site 5 (including Sites 5A and 5B)** occupies one of the most environmentally and historically sensitive locations in the Scheme. Covering more than 104 hectares (257 acres), Site 5 forms the northern gateway to the Conservation Village of Fritton, immediately adjoining the Conservation Area and lying in close proximity to the Grade I listed Church of St Catherine, numerous Grade II listed buildings, historic farmsteads, archaeological remains and Fritton Common Site of Special Scientific Interest (SSSI).

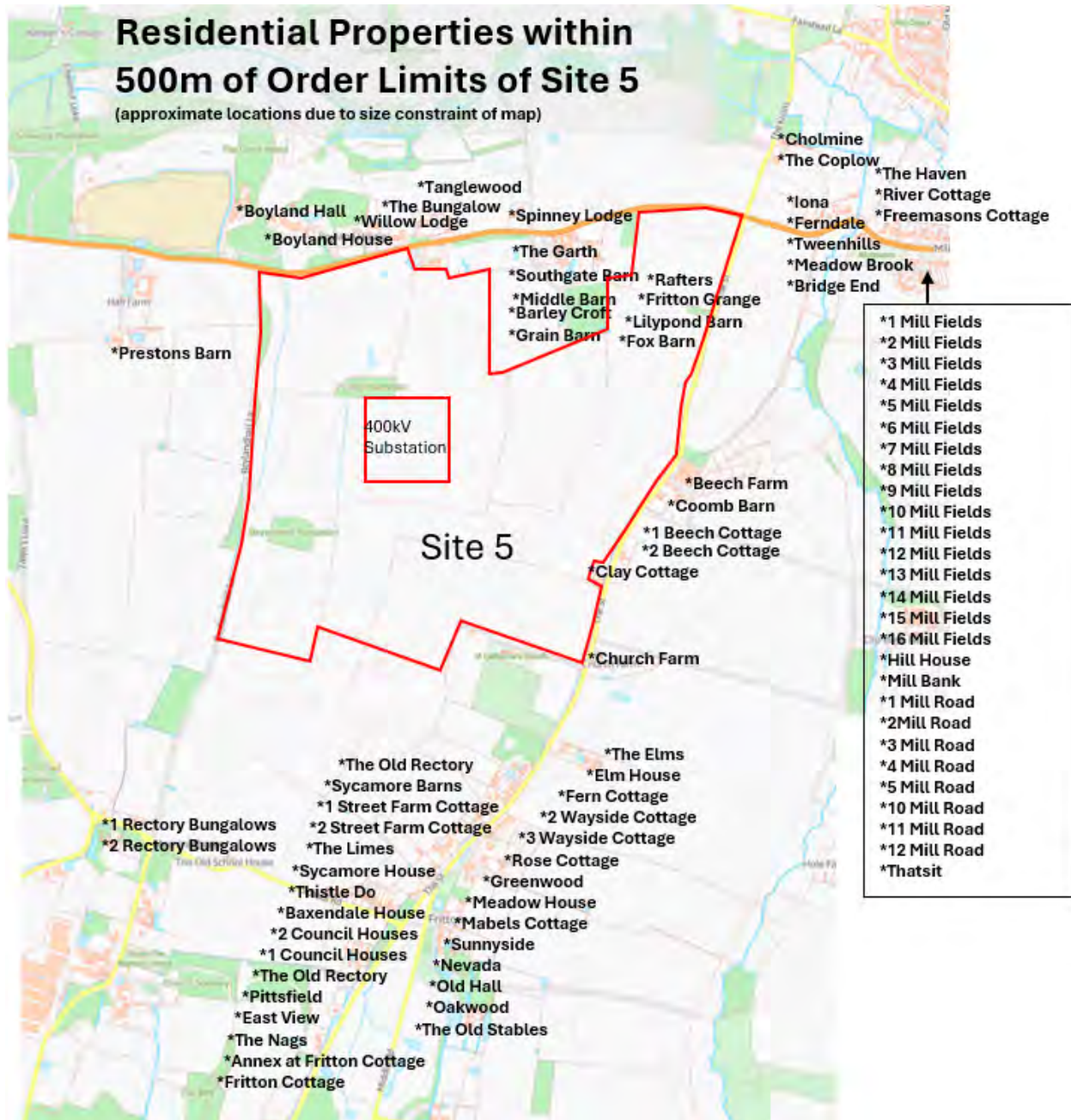


Figure 1.2 Map showing locations of residential properties within 500m of Proposed Site 5

Unlike many parts of the wider Scheme, Site 5 is not simply proposed for solar arrays. It would accommodate one of the Scheme's largest concentrations of permanent industrial infrastructure, including a **400kV Project Substation approximately 13 metres in height**, associated electrical compounds, offices, welfare facilities, permanent access roads, construction compounds, security fencing, lighting and extensive underground cabling in addition to solar arrays.

The proposed development would fundamentally alter the character of the northern approach to Fritton. Visitors travelling south from the B1527 would no longer experience open agricultural countryside leading towards the historic village and St Catherine's Church. Instead, the approach would be dominated by industrial-scale energy infrastructure extending across the eastern side of the road from Boylandhall Lane to the edge of the Conservation Area.



Figure 1.2 Satellite View of Proposed Site 5 with Fritton Village to the South and Hempnall Village to the East



Figure 1.3 Aerial Photograph Looking North Over Fritton showing Site 5 in top left and Fritton Common in foreground

Approaching Fritton from the north currently provides expansive views across open farmland towards the medieval church tower and surrounding countryside. Under the proposed development, these views would be replaced by extensive solar arrays, security fencing, electrical infrastructure and the proposed 400kV Project Substation occupying elevated ground immediately outside the Conservation Area.

The environmental sensitivity of Site 5 is heightened by the presence of Grade 2 Best and Most Versatile agricultural land, the River Tas catchment, private water supplies, historic hedgerows, ancient woodland connections, protected species, Public Rights of Way and the National Gas Transmission high-pressure pipeline crossing the site. These constraints combine with the proximity of nationally designated and non-designated heritage assets to create a landscape with very limited capacity to accommodate industrial-scale infrastructure without significant and lasting harm.

This Written Representation has been prepared in response to the Development Consent Order application for East Pye Solar. Whilst it focuses on Site 5, it recognises that the proposal cannot be considered in isolation. The parish is already subject to cumulative pressures arising from other solar energy proposals, battery storage developments, strategic electricity transmission reinforcement associated with the Norwich–Tilbury project, planned housing growth within surrounding settlements and wider infrastructure expansion across South Norfolk.

Accordingly, this document considers the likely significant environmental, social, heritage, agricultural and human health effects of the proposal, both individually and cumulatively. Drawing upon the Applicant's own Environmental Statement, supporting technical documents, consultation responses and representations from statutory consultees, it demonstrates that the impacts upon Site 5 would be substantial, long-term and, in many respects, irreversible.

The evidence presented throughout this Written Representation demonstrates that the proposal conflicts with national planning policy, fails to adequately avoid or minimise environmental harm, and has not demonstrated that Site 5 represents the least harmful or most appropriate location for this nationally significant infrastructure.

The following chapters examine the principal areas of concern, including:

- The unjustified scale and location of development within Site 5.
- Inadequate assessment of reasonable alternatives and design evolution.
- Harm to landscape character, visual amenity and the setting of heritage assets.
- Loss of Best and Most Versatile agricultural land.
- Impacts on biodiversity, ecology and protected species.
- Risks to watercourses, private water supplies and the River Tas catchment.
- Effects on Public Rights of Way, local highways and transport infrastructure.
- Impacts on local businesses, tourism and the rural economy.
- Human health, wellbeing and quality of life.
- In-combination and cumulative environmental effects.

Chapter 2: Environmental Impact Assessment Methodology

The Environmental Impact Assessment supporting the East Pye Solar Scheme does not provide a sufficiently robust, transparent or site specific assessment of the likely significant environmental effects of the proposed development, particularly in relation to Site 5. Whilst the Environmental Statement follows the general structure required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, the methodology adopted throughout the assessment raises significant concerns regarding the reliability of its conclusions and the confidence that can be placed upon them.

The concerns identified below are not isolated to individual technical chapters but demonstrate recurring methodological weaknesses throughout the Environmental Statement.

2.1 Reliance on Interdependent Assessments

The Environmental Statement relies upon individual topic based assessments before combining their conclusions within Chapters 18 (Human Health), 19 (In-Combination Effects) and 20 (Summary of Residual Significant Effects). This methodology assumes that each preceding assessment is complete, accurate and robust.

However, elsewhere in this Written Representation the Applicant's assessments of landscape and visual effects, noise and vibration, traffic and transport, socio-economic effects, human health and cumulative impacts have been challenged. If those assessments underestimate adverse effects or overstate mitigation, the conclusions reached in Chapters 18, 19 and 20 are similarly undermined because they are dependent upon the earlier technical chapters.

2.2 Reliance on Outline Mitigation

A recurring weakness throughout the application is the reliance upon outline management plans to demonstrate that environmental effects can be mitigated.

These include the Outline Construction Environmental Management Plan, Outline Construction Traffic Management Plan, Outline Landscape and Ecology Management Plan, Outline Battery Safety Management Plan and Outline Employment, Skills and Supply Chain Strategy.

These documents establish broad principles rather than detailed mitigation measures, with much of the detail deferred until after development consent has been granted. Consequently, the Environmental Statement assumes successful mitigation before the measures have been fully designed, independently assessed or secured through enforceable requirements. The Environmental Statement therefore explains the effects of the proposed design more fully than it

demonstrates how environmental considerations influenced the evolution of that design. Across a number of environmental topics, the assessment relies upon mitigation after the principal layout has been established rather than demonstrating that environmental harm has first been avoided or minimised through site selection and design. This reduces confidence that the mitigation hierarchy has been fully applied.

2.3 Design Flexibility and the Rochdale Envelope

The Applicant seeks considerable flexibility through the Rochdale Envelope approach, allowing aspects of the detailed design to evolve following consent.

Whilst flexibility is recognised within the DCO process, it also increases uncertainty because the Environmental Statement assesses an indicative scheme rather than the final development.

For Site 5 this is particularly relevant to the positioning of the 400Kv substation components within the identified 3.5ha area, inverter stations, internal infrastructure, cable routes, construction compounds, access roads, Solar PV arrays, fencing and landscaping, all of which could materially influence environmental effects experienced by nearby residents and heritage assets.

2.4 Limited Assessment of Uncertainty

Environmental Impact Assessment should identify not only likely environmental effects but also the degree of confidence associated with those predictions.

Throughout the Environmental Statement there is limited discussion of uncertainty, sensitivity testing or alternative outcomes should mitigation prove less effective than predicted. Many conclusions depend upon future design decisions, operational practices and management plans that have yet to be prepared, yet residual effects are presented with a degree of certainty that is not justified by the available evidence.

2.5 Failure to Assess Effects from the Receptor Perspective

The Environmental Statement assesses environmental topics individually rather than considering how people actually experience environmental change.

Residents living adjacent to Site 5 will not experience landscape effects, traffic, noise, vibration and loss of tranquillity independently. They will experience these effects simultaneously over the proposed sixty-year operational life of the Scheme across a large area of South Norfolk.

The methodology therefore fails to provide a realistic assessment of the cumulative burden placed upon residents, particularly when considering impacts upon residential amenity, mental wellbeing and quality of life.

2.6 Lack of Site Specific Assessment

Many conclusions are presented at Scheme level rather than reflecting the specific sensitivities of Site 5.

Site 5 contains a unique combination of nearby residential properties, Public Rights of Way, productive agricultural land, heritage assets including Fritton Conservation Area and listed buildings, archaeological features and valued rural landscape.

These characteristics justify a more detailed, receptor specific assessment than has been provided.

Balance Between Harm and Benefits

The Environmental Statement presents local employment and supply chain opportunities as benefits of the Scheme.

However, these benefits remain largely aspirational and are not supported by binding commitments guaranteeing local employment or procurement. They are also short term and limited in nature as the Applicant states the majority of the workforce will come from outside of Norfolk.

Elsewhere within this Written Representation these socio economic conclusions have been challenged. Consequently, uncertain economic benefits should not be relied upon to offset environmental effects that are more certain and directly experienced by local communities.

2.7 Assessment of Alternatives

Whilst the Environmental Statement describes the strategic site selection process, it provides limited explanation as to why Site 5 remained within the Scheme despite its concentration of sensitive receptors.

There is insufficient evidence that alternative layouts, larger buffer distances or the removal of the most sensitive areas were fully considered before the application was finalised.

2.8 Monitoring and Adaptive Management

Many conclusions rely upon future monitoring and adaptive management.

However, the Environmental Statement provides insufficient detail regarding monitoring methodologies, trigger levels for intervention, reporting requirements, enforcement mechanisms and remedial actions should impacts exceed those predicted.

Without clearly defined and enforceable monitoring arrangements there is limited confidence that adverse effects will remain within predicted levels.

2.9 Equality, Accessibility and Public Participation

The Applicant's Equality Impact Assessment identifies that the local population contains a significant proportion of older residents and recognises that vulnerable groups may require additional support to participate effectively.

Despite this, the Environmental Impact Assessment methodology assumes that affected communities possess reliable internet access, appropriate computer equipment and sufficient technical knowledge to locate and interpret hundreds of documents submitted through the Planning Inspectorate's online portal.

Concerns regarding accessibility have been raised directly with both East Pye Solar and the Planning Inspectorate. There was no straightforward provision to access free comprehensive hard copies of the Environmental Statement within the local community, requiring many residents either to rely upon digital systems or incur considerable expense in printing documents themselves.

The process also assumes an understanding of the Development Consent Order regime and the ability to interpret complex technical documentation. Given the demographic characteristics identified by the Applicant itself, this assumption raises concerns regarding whether consultation and public participation have been genuinely inclusive.

Conclusion

Taken as a whole, the Environmental Impact Assessment does not provide a sufficiently robust or reliable basis on which to assess the likely significant environmental effects of the East Pye Solar Scheme, particularly in relation to Site 5. The assessment is characterised by recurring methodological weaknesses that reduce confidence in its conclusions and create significant uncertainty over the true extent of environmental harm.

The most significant concerns are:

- Reliance on interdependent assessments, meaning that weaknesses in individual technical chapters undermine the conclusions on human health, cumulative impacts and residual effects.
- Dependence on outline mitigation measures that have not been fully designed, independently assessed or secured through enforceable requirements.
- Extensive use of the Rochdale Envelope, resulting in the assessment of an indicative rather than final scheme and increasing uncertainty over likely impacts.
- Insufficient consideration of uncertainty, with conclusions presented more confidently than the available evidence justifies.

- Failure to assess impacts from the perspective of affected residents, who will experience multiple environmental effects simultaneously over the Scheme's proposed 60-year lifespan.
- A lack of detailed, site-specific assessment for Site 5, despite its concentration of sensitive residential, heritage, landscape and environmental receptors.
- Uncertain socio-economic benefits being relied upon to offset environmental harms that are more certain, direct and locally experienced.
- Limited assessment of reasonable alternatives, including whether less harmful layouts or the exclusion of the most sensitive parts of Site 5 were adequately explored.
- Insufficient detail on monitoring, enforcement and adaptive management, reducing confidence that predicted impacts can be effectively controlled throughout the Scheme's lifetime.
- Concerns over equality, accessibility and meaningful public participation, particularly given the Applicant's own acknowledgement of an ageing local population and the practical barriers to engaging with the extensive documentation.

Collectively, these deficiencies indicate that the Environmental Statement does not fully satisfy the purpose of Environmental Impact Assessment, namely to provide decision-makers with a comprehensive, transparent and evidence-based understanding of the likely significant environmental effects of the proposed development. Consequently, the Examining Authority should attach limited weight to the Applicant's conclusions where they rely upon assumptions, deferred mitigation or unresolved uncertainty.

Chapter 3: Site and Surroundings

3.1 A Historic Rural Landscape

Site 5 occupies one of the most historically and environmentally sensitive locations within the East Pye Solar Scheme. It lies immediately north of the Conservation Village of Fritton within the Joint Parish of Fritton and Morningthorpe, a rural community whose landscape has remained predominantly agricultural for centuries.

The parish lies approximately 11 miles south of Norwich, between Long Stratton and Harleston, with parts sitting in the Great Moulton Plateau Farmland landscape character area identified by South Norfolk Council. This landscape is characterised by gently undulating arable farmland, mature hedgerows, commons, historic lanes, scattered farmsteads, ancient woodland and medieval settlement patterns. Unlike many rural areas that have experienced gradual suburbanisation, Morningthorpe and Fritton retains a remarkably intact historic landscape where the relationship between farmland, heritage assets and the surrounding countryside remains clearly legible.

Although the parish had a population of only 319 residents at the 2021 Census, its historic significance extends far beyond its size. The community continues to derive much of its identity from agriculture, its medieval origins and the close relationship between the villages and their surrounding countryside.



Figure 3.1 Fritton Village sign located on Fritton Common a Site of Special Scientific Interest



Figure 3.2 Aerial view of Fritton with The Common (SSSI) to the bottom of the photo and proposed Site 5 to the top left side of the photo

3.2 The Historic Relationship Between Village and Countryside

One of the defining characteristics of the parishes of Morningthorpe and Fritton are that the surrounding farmland remains an integral part of the villages' historic settings.

In Fritton, the majority of the settlement lies around The Street and Fritton Common, with properties dispersed amongst mature trees, wide grass verges and agricultural land. The village has never been separated from its countryside by modern development. Instead, open fields extend directly from the historic settlement, creating uninterrupted views towards the wider landscape.

Morningthorpe, whilst small, is characterised by small pockets of dwellings scattered through the parish, wooded areas and quiet countryside spaces. The Grade I listed 14th Century St John's the Baptist church is a focal point with Morningthorpe Common being situated towards the south of the parish.

The relationship with rural countryside is fundamental to the character of the villages.

Approaching Morningthorpe and Fritton from the north along the B1527, visitors experience expansive views across open farmland before reaching Fritton Conservation Area centred on the Grade I listed Church of St Catherine. The surrounding agricultural fields are therefore not simply productive farmland but form the historic foreground to the parishes and their nationally important heritage assets.

The proposed Site 5 would fundamentally alter this historic relationship by replacing open countryside with industrial-scale energy infrastructure immediately adjacent to Fritton's Conservation Area.

3.3 Heritage Significance

The parish contains an exceptional concentration of heritage assets that collectively illustrate over one thousand years of settlement.

Morningthorpe is centred upon the Grade I listed Church of St John the Baptist, one of Norfolk's distinctive medieval round-tower churches.

Fritton is dominated by the Grade I listed Church of St Catherine, whose Norman round tower dates from the twelfth century. The church retains important medieval features including fifteenth-century additions, an embattled parapet, a medieval font and surviving thirteenth-century wall paintings. For centuries it has acted as both the visual and spiritual focus of the surrounding countryside.

The historic significance of the church derives not only from the fabric of the building itself but also from its setting within an open agricultural landscape that has remained largely unchanged for generations.



Figure 3.3 – St Catherine's Church viewed across Site 5



Figure 3.4 – St Catherine's Church which borders Site 5

The Conservation Area, first designated in 1976, deliberately encompasses not only the historic buildings but also the landscape surrounding Fritton Common, The Street, Church Farm and St Catherine's Church. This reflects the recognition that the significance of the Conservation Area lies equally in its historic landscape setting.

Under Sections 66(1) and 72(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, decision-makers are required to give special regard to preserving the setting of listed buildings and special attention to preserving or enhancing the character and appearance of Conservation Areas. These statutory duties are reinforced by the National Planning Policy Framework and South Norfolk Council's Fritton Conservation Area Character Appraisal and Management Guidelines (2019)



Figure 3.5 St John The Baptist Church, Morningthorpe which lies 770m South of Site 5

3.4 Boyland – A Landscape with Medieval Origins

Site 5 encompasses land forming part of the historic manor of Boyland, recorded in the Domesday Book as *Boieland*.

The Boyland estate has influenced the landscape for almost one thousand years. Following the settlement of Ralph Bainard during the twelfth century, successive generations shaped the field pattern, routeways, woodland and agricultural landscape that survives today.

The sixteenth-century Boyland Hall, rebuilt during the nineteenth century before its demolition in 1947, occupied land immediately adjacent to the proposed Site 5. Although the principal house no longer survives, the surrounding landscape still reflects the former estate through its historic boundaries, mature trees, parkland and surviving archaeological remains.

The significance of Site 5 therefore extends beyond individual listed buildings. It forms part of a wider historic landscape whose character has evolved continuously over many centuries.



Figure 3.6 – Aerial view from the current Boyland Hall across Site 5 showing views that would not be dissimilar to its historical predecessors. Open field in centre of image proposed site for Solar Arrays, with 400kV Substation situated top-middle left.

3.5 Historic Features Within Site 5

Numerous historic landscape features survive within Site 5 itself.

Heritage Norfolk records the surviving mediaeval brick culvert (NHER 10168) beneath the B1527, through which the original watercourse still flows towards the River Tas. Historic mapping from the nineteenth century confirms the long-established presence of this stream and demonstrates the remarkable continuity of the landscape.



Figure 3.7 16th Century Brick culvert entrance situated in Site 5 running under B1527 to river Tas.

The western boundary of Site 5 follows Boylandhall Lane, a historic route linking Boyland Hall with Morningthorpe Church. Today it survives as Restricted Byway RB4 and remains an unmetalled rural track lined with mature trees, many of which have been identified by the Woodland Trust as Veteran or Notable Trees and are protected by Tree Preservation Orders.

The lane is much more than a public right of way; it is a surviving element of the historic estate landscape and provides one of the most distinctive approaches through the parish.



Figure 3.8 Boylandhall Lane Facing South (Trees with TPOs shown on left of track)



Figure 3.9 Entrance to Boylandhall Lane from B1527 (Towards Hempnall) Looking over Site 5.

3.6 Archaeological Importance

The wider area surrounding Site 5 contains evidence of continuous human occupation extending back many centuries.

Heritage Norfolk records numerous archaeological sites in the vicinity, including the nationally significant Early Saxon cemetery (NHER 1120), where important discoveries now displayed in Norwich Castle Museum demonstrate the archaeological richness of the area.

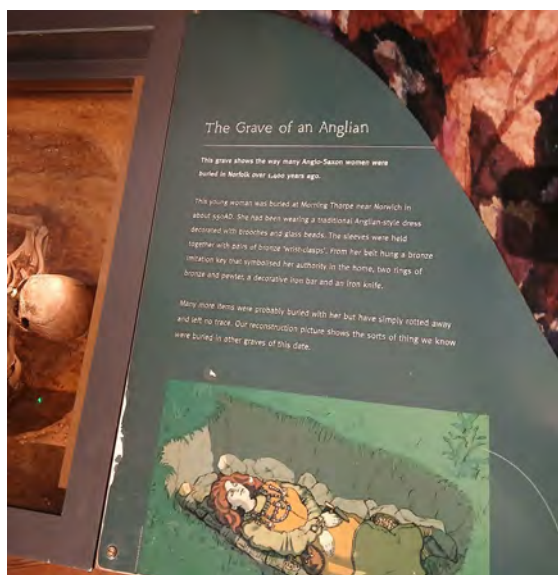


Figure 3.10 Finds from Early Saxon Cemetery less than 100m from Site 5 displayed in Norwich Castle Museum

The medieval settlement of Boyland, historic moated sites, surviving field systems and archaeological remains collectively illustrate the long development of the parish.

This concentration of archaeological interest reinforces the exceptional historic sensitivity of Site 5 and the need for great caution when introducing permanent infrastructure into the landscape.

3.7 Why Site 5 Is Exceptionally Sensitive

The significance of Site 5 lies not simply in the presence of individual heritage assets but in the survival of an historic rural landscape where agriculture, ecology, archaeology and settlement continue to exist in their traditional relationship.

The open farmland provides the setting for the Grade I listed Church of St Catherine and the Fritton Conservation Area. Historic lanes such as Boylandhall Lane continue to connect settlements as they have for centuries. Ancient hedgerows, mature trees and watercourses support ecological connectivity whilst also preserving the historic field pattern established through generations of farming.

The proposed East Pye Solar development would introduce infrastructure of an entirely different character into this landscape, including a 13m high 400kV Project Substation, extensive solar arrays, security fencing, construction compounds, lighting, permanent access roads and associated electrical infrastructure immediately adjacent to the Conservation Area.

This would fundamentally alter the historic relationship between village and countryside that has defined Fritton and Morningthorpe for centuries.

Conclusion

Site 5 is not simply an area of agricultural land but a living historic landscape, where the relationship between the countryside, heritage assets, archaeology and rural settlement has survived largely intact over many centuries. It is this collective historic character, rather than any single feature, that makes the site exceptionally sensitive to large scale development.

The principal reasons why Site 5 is exceptionally sensitive are:

- Its immediate relationship with the Grade I listed Church of St Catherine and Fritton Conservation Area, where the surrounding open farmland forms an essential part of their historic setting and significance.
- The survival of a living historic landscape, with medieval field patterns, historic lanes, mature hedgerows, veteran trees and open agricultural land continuing to define the character of Fritton and Morningthorpe.
- The concentration of designated and non-designated heritage assets, together with significant archaeological remains demonstrating centuries of continuous occupation and landscape evolution.
- The important contribution Site 5 makes to the rural character and identity of the parish, preserving the historic transition between the villages and the surrounding countryside.
- The statutory duty to preserve the setting of listed buildings and the character and appearance of the Conservation Area, requiring considerable weight to be given to the conservation of these heritage assets.

Taken together, these characteristics demonstrate that Site 5 represents a living historic landscape, not simply a collection of individual heritage assets. The proposed development would fundamentally alter the long-established relationship between Fritton, its heritage assets and the surrounding countryside, eroding a landscape whose significance lies in the continued survival of its historic character, openness and agricultural setting.

Chapter 4: Scheme Description (Site 5)

Environmental Statement Volume 1 Chapter 4 ("The Scheme"), together with the Works Plans and Draft Development Consent Order, confirms that Site 5 is not simply a field of solar panels. It is proposed to become one of the principal operational hubs for the entire East Pye Solar development, accommodating major electrical infrastructure together with the facilities required for the construction and long term operation of the Scheme.

Within approximately 90.5 hectares (224 acres) of productive agricultural land immediately adjoining the boundary of Fritton Conservation Area, the Applicant proposes to construct an extensive industrial complex comprising:

- ground-mounted solar photovoltaic arrays (up to 4.5m high where tracking panels are used);
- a 3.5 hectare 400kV Project Substation incorporating transformers, switchgear, busbars, circuit breakers, reactive compensation equipment and associated electrical infrastructure;
- substation control buildings incorporating offices, welfare facilities, workshops and storage;
- a permanent maintenance compound;
- a large temporary construction compound including parking, laydown areas, material storage, site offices, drainage, utilities and security infrastructure;
- permanent internal access roads and tracks;
- underground electrical and communications cabling;
- inverter and transformer stations;
- fencing, gates and security infrastructure;
- CCTV, weather monitoring equipment and operational lighting.

Unlike many of the other East Pye Solar land parcels, Site 5 is therefore proposed to contain multiple layers of permanent infrastructure, combining electricity transmission infrastructure, construction logistics and solar generation within one location.

4.1 A Permanent Industrial Development

Although described as a temporary solar farm, the proposed operational life is 60ys. Demographic and genealogical research generally regards a human generation as approximately 25–30yrs, making the length of time the proposed infrastructure will be in place equal to approximately 2 generations.

This exceeds the operational life of numerous major industrial developments including Battersea Power Station, Didcot Power Station and many large commercial developments that have never been regarded as temporary.

For the majority of a human lifetime, Site 5 would therefore cease to function as open agricultural countryside and instead operate as an electricity transmission and energy generation complex.

The proposal represents a fundamental and long term change to the character of this historic rural landscape.

4.2 The 400kV Project Substation

The dominant feature within Site 5 would be the proposed 400kV Project Substation, occupying approximately 3.5 hectares.

This represents a 75% increase from the approximately 2 hectare substation presented during the Phase 2 consultation, demonstrating that one of the most significant pieces of infrastructure within the Scheme expanded considerably after consultation with local communities.

The substation would be served by a 6 metre wide access road, constructed using hardcore and engineered foundations, extending across what is currently productive agricultural land.

The Environmental Statement identifies the highest electrical structures (busbars) as reaching 13 metres above ground level.

This is broadly equivalent to a modern three-storey building and exceeds the height of all the buildings within the surrounding villages, including the historic skyline dominated by the Grade I listed St Catherine's Church.



Figure 4.1 Adapted from photos(Image 4.9) supplied in 6.1.4 *Environmental Statement Vol 1 Chapter 4 The Scheme* (people superimposed to aid scale). For illustrative purposes only

The Applicant has not produced a detailed visual representation of the specific Site 5 substation.

Instead, only generic examples of air-insulated substations have been provided despite the Environmental Statement confirming that either an air insulated or gas insulated design could ultimately be constructed.

Consequently, residents and the Examining Authority are asked to assess the visual impacts of infrastructure whose final appearance has not yet been determined.



Figure 4.2 Adapted from photos(Image 4.6) supplied in 6.1.4 *Environmental Statement Vol 1 Chapter 4 The Scheme* (people superimposed to aid scale).
For illustrative purposes only



Figure 4.3 Environmental Statement Image 4.10 (Illustrative Air Insulated 400kV Substation)

Only generic illustration provided by the Applicant for the principal infrastructure proposed within Site 5.

4.3 Security Infrastructure

The Project Substation would be enclosed by approximately 3 metre high palisade security fencing, together with 2.5 metre high deer fencing surrounding wider areas of Site 5.

Pole mounted CCTV, security equipment and operational lighting would also be installed.

The Environmental Statement describes the operational lighting for the exits of the 400kv Substation as being similar to street lighting operating during hours of darkness, and security lighting on the surrounding Site 5 fencing as on motion sensors introducing permanent artificial lighting into what is presently a rural landscape characterised by dark skies.

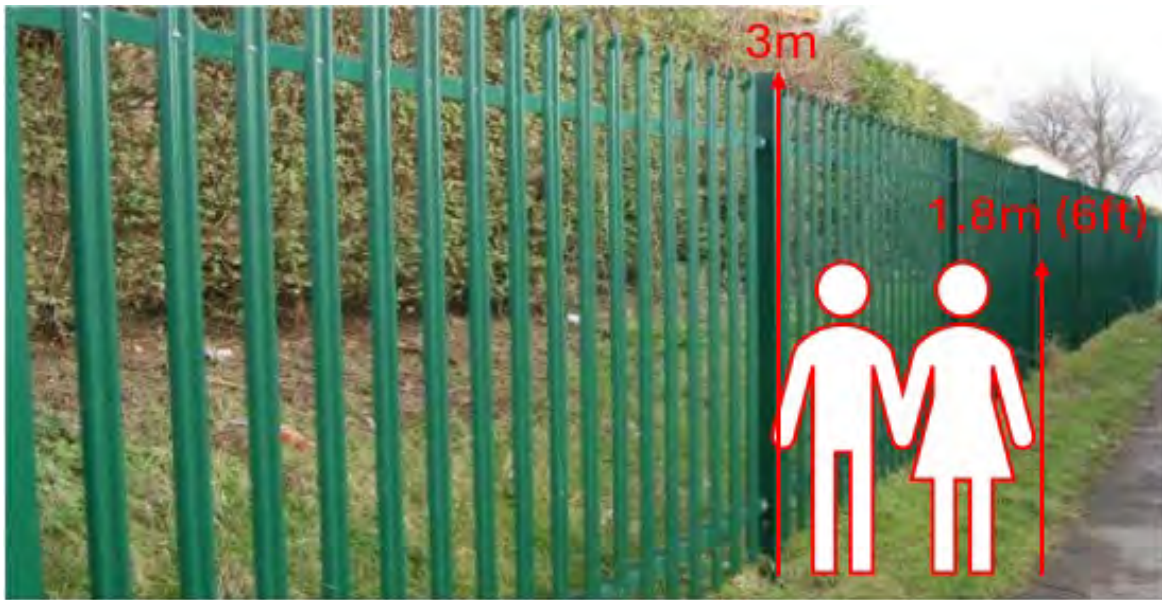


Image 4.14: Steel Palisade Fence

Figure 4.4 Adapted Environmental Statement Image 4.14 (Palisade fencing with scale comparison) For illustrative purposes only.



Image 4.13: Typical Deer Fencing

Figure 4.5 Adapted Environmental Statement Image 4.13 (Deer fencing with scale comparison) For illustrative purposes only.

The Applicant's illustrations significantly understate the apparent scale of these features because they contain few reference objects.

When compared with a standing person, the industrial nature of the security infrastructure becomes much clearer.

4.4 Solar Arrays

Site 5 will also contain extensive solar arrays.

The Applicant has not confirmed whether this land parcel will ultimately accommodate:

- fixed arrays up to 3.5 metres high; or
- single-axis tracking arrays up to 4.5 metres high.

This uncertainty makes it difficult to accurately assess impacts including visual, noise, vibration, glint and glare.

The illustrative images included within Environmental Statement Chapter 4 similarly lack meaningful scale references.

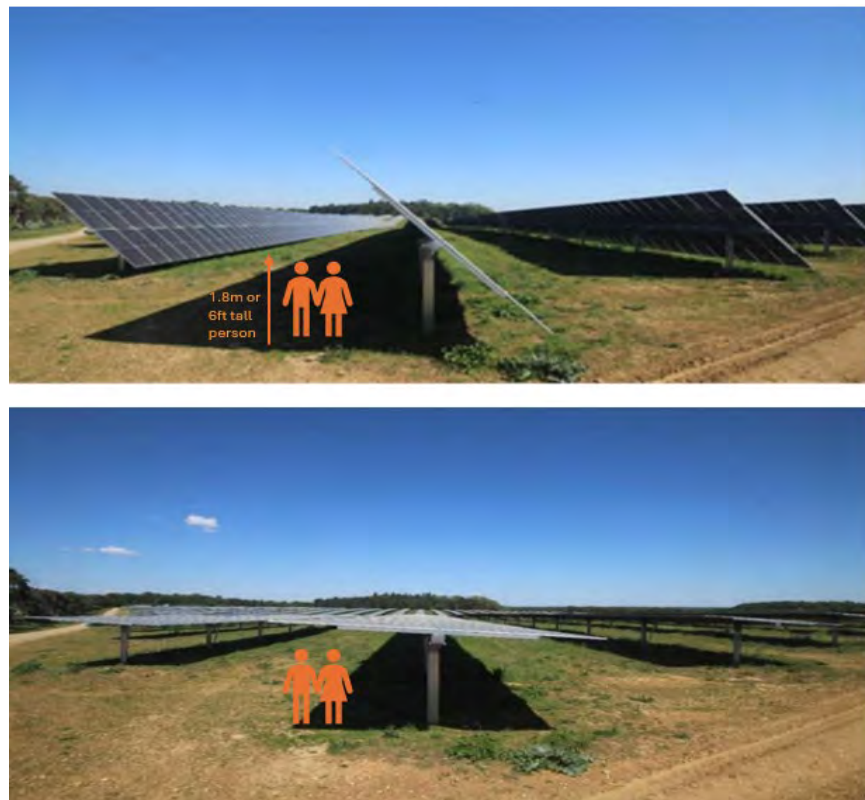


Figure 4.6 Adapted Environmental Statement Image 4.1 (Fixed panels with scale comparison) For illustrative purposes only.



Figure 4.7 Adapted Environmental Statement Image 4.2 (Tracking panels with scale comparison) For illustrative purposes only

The addition of people to the illustrations demonstrates that the proposed solar panels are substantially larger than might otherwise be appreciated from the Applicant's own graphics.

4.5 Construction Compound

Site 5 would also contain one of the principal construction compounds for the wider East Pye Solar Scheme.

The compound measures approximately 130 metres by 130 metres (around 1.7 hectares) and would accommodate construction offices, welfare facilities, storage areas, parking, traffic management infrastructure and materials associated with construction across multiple sites.

Despite the significance of this facility, the Applicant has not provided a Site 5 specific layout showing how the compound would sit within the existing landscape or how it would relate to nearby dwellings, public rights of way and heritage assets.

Instead, only a generic illustration has been supplied and the indication of location on the Works Plan.

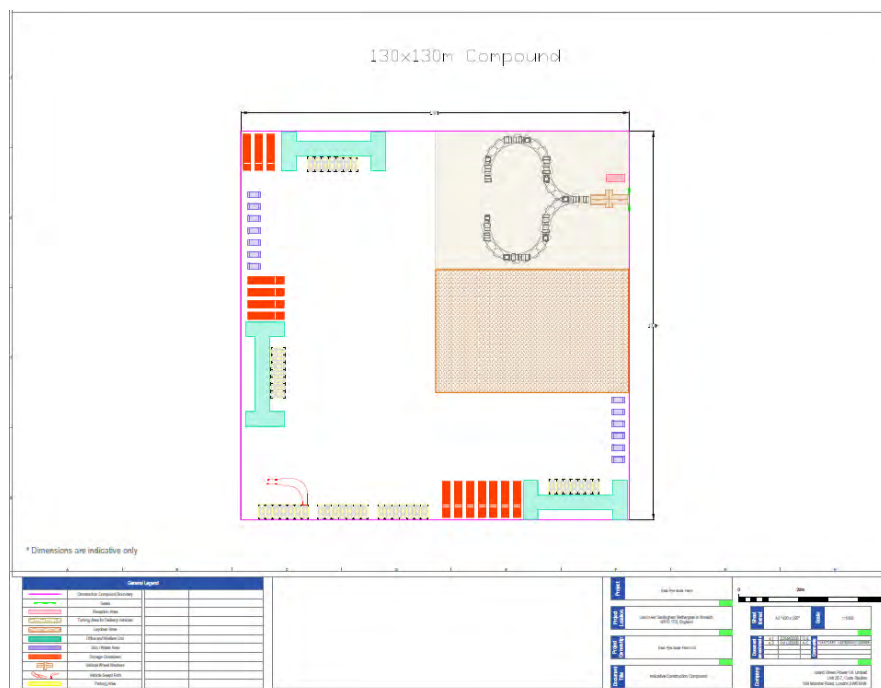


Figure 4.8 Applicant supplied details of Construction Compound from Environmental Statement Vol3 Appendix 4.1 - diagram states dimensions are indicative only

Conclusion

The Applicant's own Scheme Description confirms that Site 5 is proposed to become far more than a solar photovoltaic development. It would serve as one of the principal operational hubs of the East Pye Solar Scheme, accommodating substantial electricity transmission infrastructure, construction facilities and associated security measures within a historically sensitive rural landscape immediately adjoining Fritton Conservation Area.

The most significant features of the proposal are:

- **The introduction of a major industrial complex**, comprising a 400kV Project Substation, solar arrays, a construction compound, maintenance facilities, access roads, electrical infrastructure and security installations across approximately 90.5 hectares.
- **The scale of the 400kV Project Substation**, occupying approximately 3.5 hectares with structures up to 13 metres high, making it one of the most visually dominant elements of the entire Scheme.
- **An operational lifespan of 60 years**, resulting in the long term industrialisation of land that currently forms part of a historic agricultural landscape.
- **Extensive security infrastructure**, including palisade fencing, CCTV, lighting and gated compounds, introducing urban and industrial features into an area currently characterised by openness and dark skies.

- **Significant uncertainty over the final form of the development**, with key elements, including the substation design, solar panel configuration and construction compound layout, remaining indicative rather than fixed, limiting the ability to properly assess likely environmental effects.
- **The absence of detailed Site 5 specific visual information**, requiring the Examining Authority and local communities to assess the impacts of nationally significant infrastructure without accurate representations of its final appearance.

Taken together, the Scheme Description demonstrates that Site 5 would undergo a fundamental and enduring transformation from open agricultural countryside into a major electricity transmission and energy generation complex. The scale, permanence and uncertainty surrounding the proposed infrastructure reinforce the need for particularly careful scrutiny of the Applicant's environmental assessments and the conclusions drawn from them.

Chapter 5: Reasonable Alternatives and Design Evolution

Environmental Statement Chapter 5 (*Reasonable Alternatives and Design Evolution*) should demonstrate that the Applicant has systematically considered reasonable alternatives throughout the evolution of the Scheme and that the final design represents the least environmentally harmful solution capable of meeting the project's objectives. The Environmental Impact Assessment Regulations require reasonable alternatives to be described and the reasons for selecting the preferred option to be explained, taking account of environmental effects.

National Policy Statement for Electricity Networks Infrastructure (EN-5, 2025), particularly Sections 2.2 (Good Design) and 2.4 (Environmental Considerations), requires applicants to demonstrate good design through careful site selection, consideration of reasonable alternatives and the minimisation of environmental, landscape and community impacts. EN-5 also recognises the continued application of the Horlock Rules, which remain established good practice for the siting of electricity substations. These principles require substations to minimise impacts on landscape character, residential amenity, heritage assets and the wider environment by making best use of landform, existing vegetation and natural screening whilst avoiding unnecessary harm wherever reasonably practicable.

Whilst the Environmental Statement Vol 1 Chapter 5 describes the process followed to identify the Scheme area and refine the layout, it does not provide sufficient evidence that Site 5 represents the most appropriate location for the proposed development or that reasonable alternatives have been adequately examined.

5.1 Design Evolution Demonstrates Intensification Rather than Impact Reduction

The evolution of Site 5 demonstrates that the Applicant's design process has principally resulted in an **intensification of development** rather than a genuine reduction in environmental impacts or reconsideration of whether Site 5 remains an appropriate location.

During the **Phase 1 Non-Statutory Consultation (October 2024)**, Site 5 was presented primarily as land for solar arrays. The consultation material identified the principal Project Substation in the Great Moulton area and did not indicate that Site 5 would become a major electrical infrastructure hub.

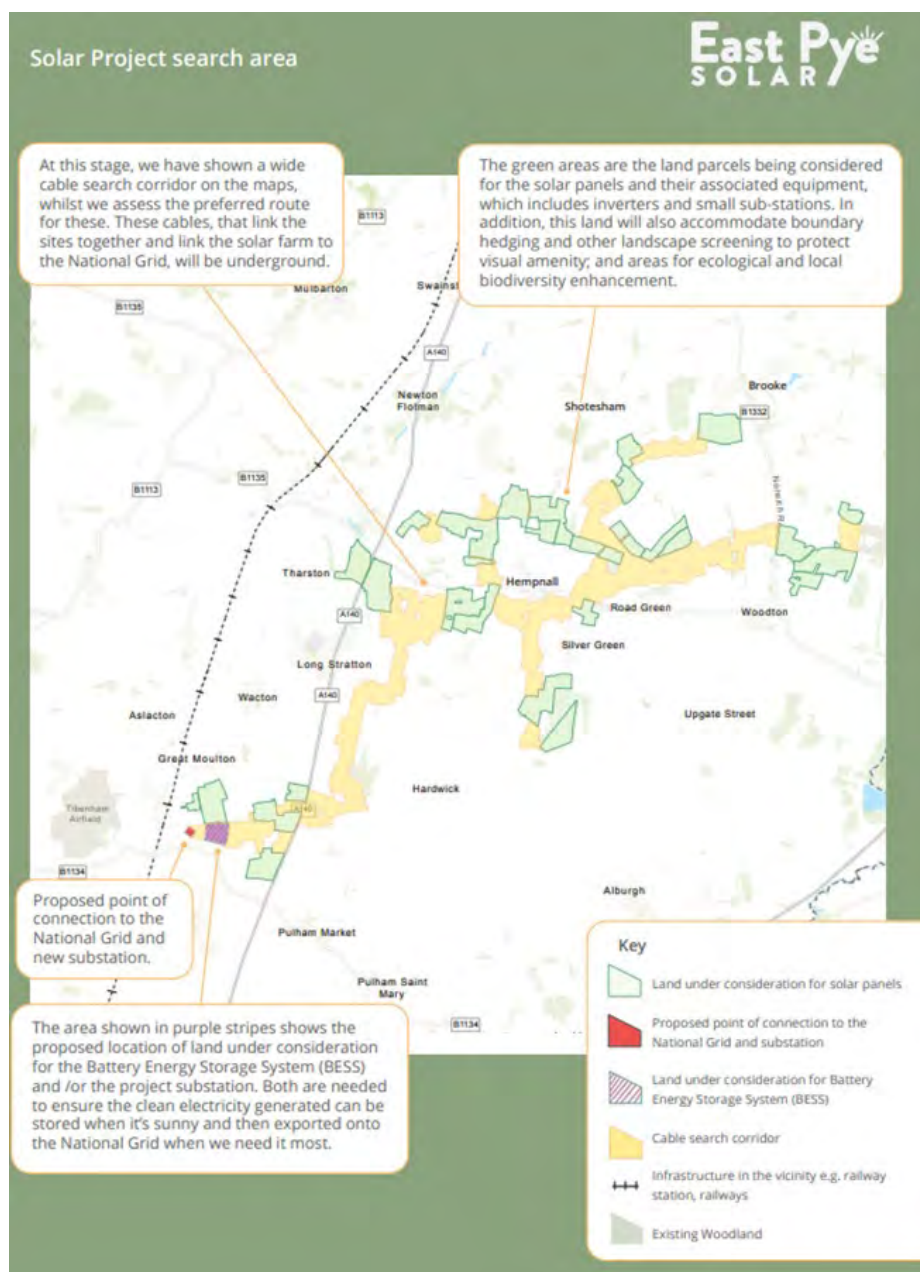


Figure 5.1: East Pye Solar Phase 1 Consultation Plan (October 2024) showing Site 5 as predominantly solar arrays with the Project Substation proposed near Great Moulton.

Following consultation, local residents raised concerns regarding landscape, heritage, ecology, transport, residential amenity and the cumulative effects of the development. Rather than fundamentally reconsidering the suitability of Site 5, the subsequent evolution of the Scheme resulted in a substantial increase in development.

By the Phase 2 Statutory Consultation (June 2025) the proposals had changed significantly. Site 5 had become the location for:

- a 400kV Project Substation;
- associated electrical infrastructure;
- offices and welfare buildings;
- a construction compound;
- permanent access roads;
- access point into Site 5 off B1527, opposite children's nursery
- continued extensive solar arrays; and
- associated construction traffic and operational infrastructure.

Although two areas of solar arrays adjacent to residential properties were redesignated as retained agricultural land or mitigation areas, these changes were offset by the introduction of substantially larger and more visually intrusive infrastructure. Consequently, the overall intensity of development within Site 5 increased rather than reduced.

This change was particularly significant because the introduction of the 400kV Project Substation fundamentally altered the character of Site 5 after local communities had already engaged with the consultation process. Despite representing one of the most significant changes to the Scheme, the Section 42 consultation covering letter of 18 June 2025 drew attention to the National Grid Substation but did not similarly highlight the addition of a major 400kV Project Substation within Site 5.



Figure 5.2: Comparison of Phase 1 (October 2024) on the left and Phase 2 (June 2025) consultation on the right plans illustrating the introduction of the 400kV Project Substation, construction compound and associated infrastructure within Site 5

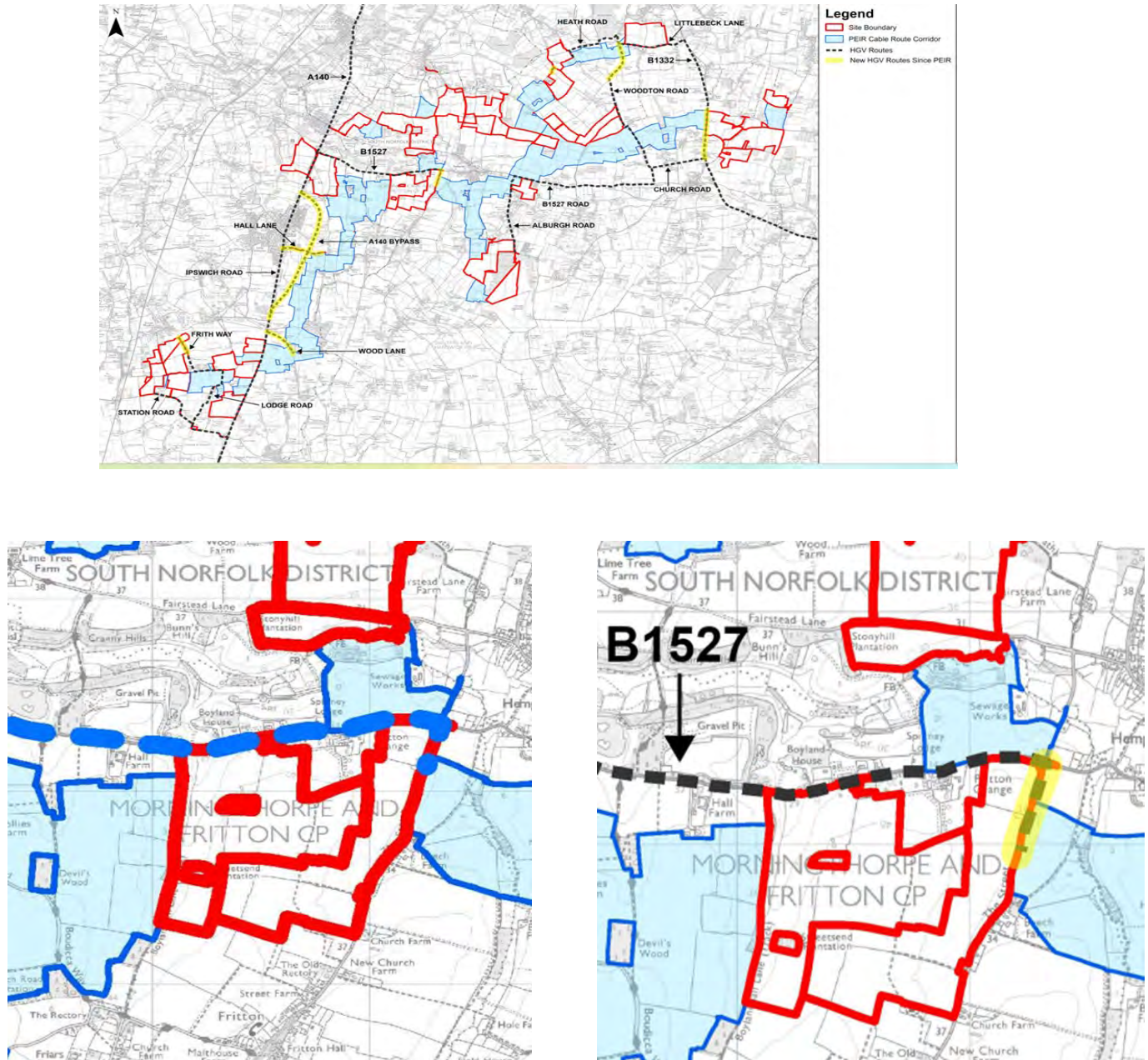
5.2 Continued Expansion Throughout the Consultation Process

The Targeted Consultation (October 2025) and the submitted DCO application demonstrate that the evolution of Site 5 continued to increase the extent of infrastructure rather than reduce impacts.

Additional verge land was incorporated into the Order Limits, HGV and Abnormal Indivisible Load (AIL) routes were extended along the B1527 and onto The Street, Fritton, and a further 3 permanent access points were introduced. By the time the application was submitted in March 2026, Site 5 included access from Boylandhall Lane, the B1527 opposite Jack in the Box Children's Nursery, the junction of the B1527, The Krons and The Street, together with additional crossings over Boylandhall Lane.



Figure 5.3 East Pye Solar Plan showing extended order limit to incorporate more verges around Site 5.



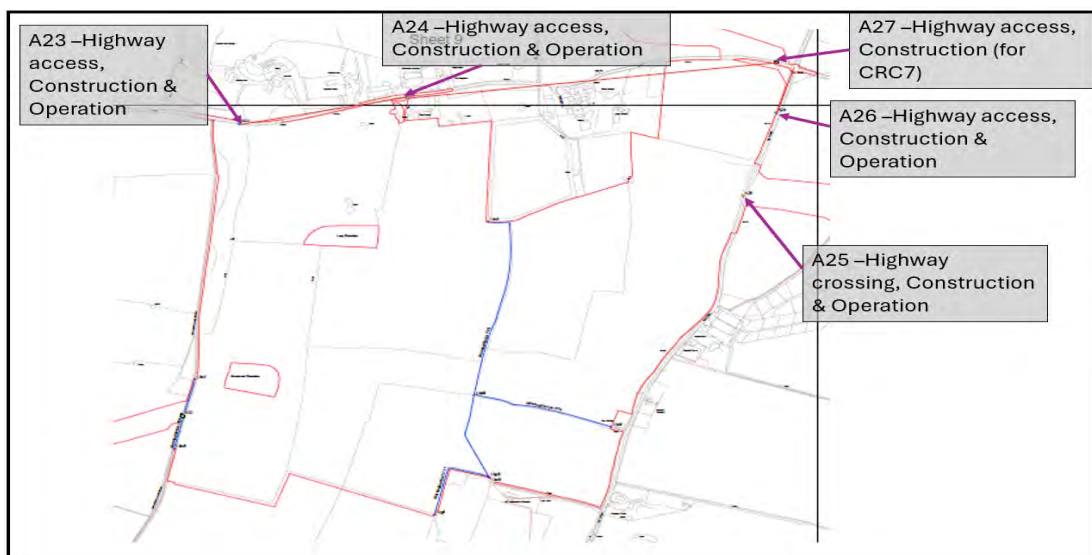


Figure 5.5 Adapted from East Pye Solar Access Rights and Way Plan to show clearly proposed access points into and around Site 5 at DCO submission



Figure 5.6 Photo of access point A24 at field gate opposite entrance to Jack in the Box Children's Nursery

The proposed 400kV Project Substation also increased in size from approximately 2 hectares, as presented during the Phase 2 consultation, to approximately 3.5 hectares within the submitted application — an increase of approximately 75%.



Figure 5.7: Comparison between the Phase 2 consultation and submitted DCO application showing the continued enlargement of the proposal for Site 5 - 400kV Project Substation and confirmation of the construction compound (second square on right hand plan).

Although further mitigation areas were introduced around Clay Cottage and alongside parts of Boylandhall Lane, the principal infrastructure remained and became more substantial. The mitigation did not alter the scale or prominence of the development.

5.3 Design Changes Did Not Address Key Local Concerns

The consultation process demonstrates that whilst detailed amendments were made, the principal concerns raised by residents were not addressed through meaningful design evolution.

Throughout successive consultations residents consistently raised concerns regarding:

- the visual prominence of the 13-metre-high 400kV Project Substation;
- the cumulative impact of the substation, solar arrays and associated buildings;
- impacts upon the setting of the Grade I listed Church of St Catherine, Fritton, nearby Grade II listed buildings and Fritton Conservation Area;
- removal of established hedgerows and mature landscape features;
- impacts upon streams, the medieval brick culvert and the River Tas catchment;
- construction traffic using roads unsuited to heavy goods vehicles;
- impacts upon Jack in the Box Children's Nursery and neighbouring businesses;
- fragmentation of ecological corridors and wildlife movement; and
- the permanent industrialisation of a predominantly rural landscape.



Figure 5.8 Photo Taken from boundary of Clay Cottage looking Westwards
towards site of proposed 400kv Substation



Figure 5.9 Photo of St Catherine's Church, looking North West across Site 5's proposed 400kV substation and Solar Panel

Despite these concerns, the design evolution resulted in the addition of further permanent infrastructure including offices, welfare buildings, construction compounds, permanent access roads, security fencing, lighting, and expanded construction routes.

The Applicant also confirmed during the July 2025 online consultation that the 400kV Project Substation could not be effectively screened because of its height. Nevertheless, the principal mitigation proposed remained replacement hedgerow planting and additional landscape planting that will take many years to establish. This appears inconsistent with the Horlock Rules, which seek to minimise impacts through the selection of an appropriate location rather than relying primarily upon mitigation after site selection.

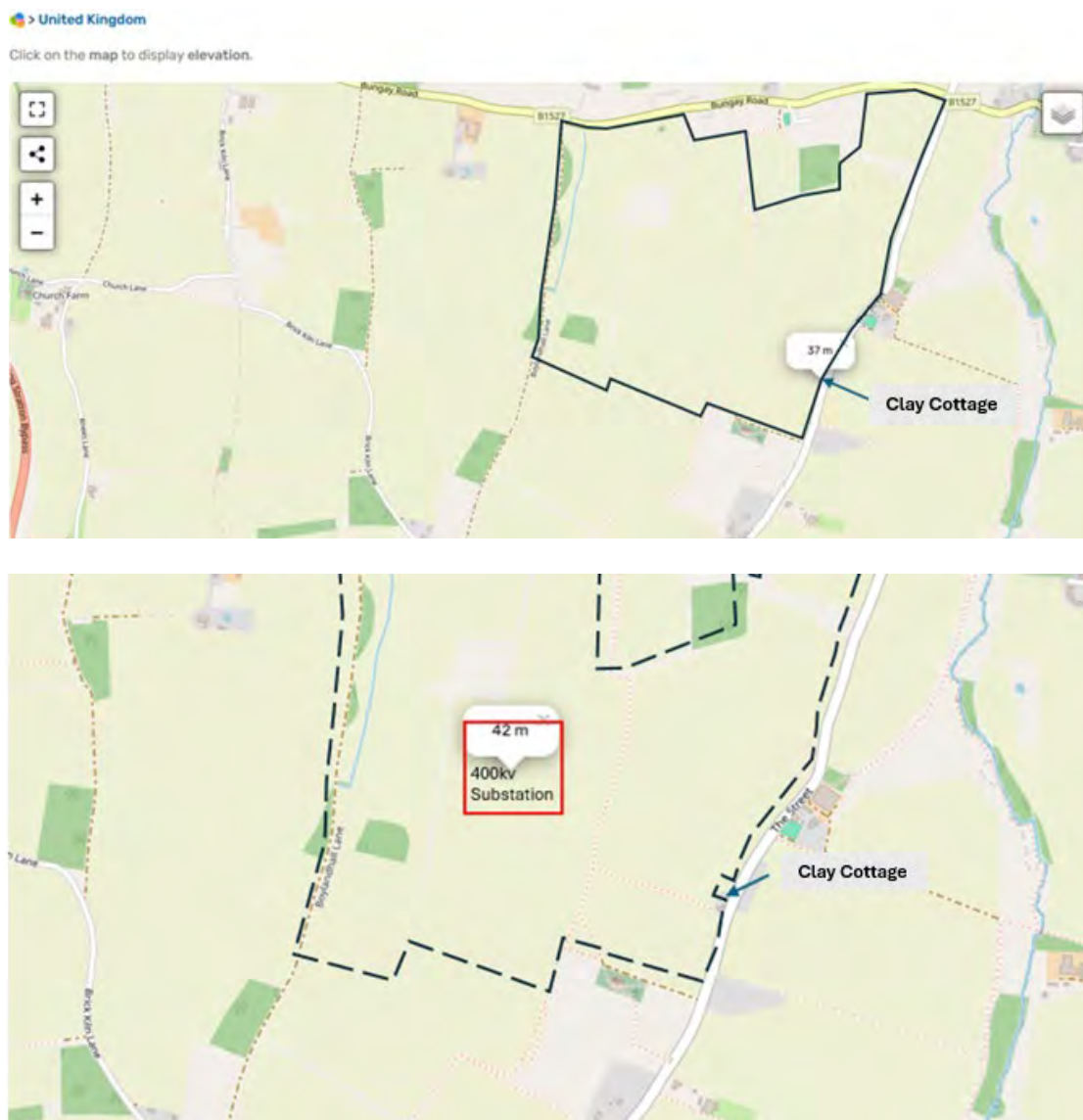


Figure 5.10 Relative land heights taken from United Kingdom Topographical Map showing proposed 400kV substation has been located at the highest point in Site 5. Boundary of Site 5 indicative.

5.4 Grid Connection Strategy Was Not Reassessed

The Site Selection Assessment explains that the original search area was centred upon Norwich Main Substation because of its proximity to the National Electricity Transmission System.

However, the original connection strategy changed when a connection at Norwich Main was no longer available. The Scheme now proposes connection via a new National Grid Substation associated with the existing Bramford–Norwich 400kV overhead transmission line.

This represented a fundamental change to one of the Applicant's principal site selection criteria. Despite this, Chapter 5 contains little evidence that the Applicant undertook a proportionate reassessment of the overall Scheme layout or reconsidered whether Site 5 remained the optimum location once the original connection strategy changed.

Instead, Site 5 became an intermediate collection point requiring substantial additional infrastructure, including the 400kV Project Substation and approximately 10 kilometres of underground cable connecting to the proposed National Grid Substation.

The Environmental Statement therefore explains how the Scheme evolved but does not demonstrate that the evolution resulted in the least environmentally harmful solution.

5.5 Commercial Considerations Are Not Planning Justification

Chapter 5 places considerable reliance upon willing landowners and the operational role of Site 5 in connecting the northern parts of the Scheme.

Whilst landowner availability is a legitimate commercial consideration, it is not, in itself, a planning justification. The fact that land is available does not demonstrate that it is the most appropriate location where significant environmental constraints exist.

Similarly, if the principal reason for retaining Site 5 is to connect other land parcels that have themselves been selected primarily because of willing landowners, this does not justify the resulting environmental harm.

Chapter 5 does not provide a transparent comparison demonstrating that alternative Scheme layouts, alternative locations for the Project Substation or reduced development scenarios were fully considered after the grid connection strategy changed.

5.6 Independent Evidence Reinforces the Need for Further Alternatives Assessment

The need for a more robust alternatives assessment is reinforced by the Relevant Representations submitted by statutory consultees.

National Grid Electricity Transmission Plc confirms that the final point of connection has not yet been confirmed and that granting consent for the proposed National Grid Substation would not oblige National Grid to utilise that infrastructure.

National Gas Transmission Plc confirms that nationally significant gas transmission infrastructure within Site 5 remains subject to unresolved protective arrangements.

Historic England identifies outstanding matters relating to designated heritage assets, cumulative effects and mitigation which require further examination.

Whilst these matters are addressed in later chapters of this Written Representation, collectively they demonstrate that important technical and environmental issues remain unresolved. This reinforces the conclusion that Chapter 5 has not demonstrated that Site 5 represents the least harmful or most appropriate location.

The Environmental Statement describes the process by which Site 5 was selected but does not demonstrate how competing environmental constraints were balanced during that process, nor why Site 5 remained the preferred option despite containing many of the very constraints the Applicant's own methodology identifies as matters to be avoided wherever reasonably practicable. This limits confidence that Site 5 represents the least environmentally harmful solution.

Conclusion

Chapter 5 of the Environmental Statement does not demonstrate that Site 5 represents the most appropriate or least environmentally harmful location for the proposed development. Rather than showing a design process driven by the avoidance of environmental impacts, the evidence indicates that the Scheme evolved through the progressive intensification of development whilst the principal concerns raised by local communities remained largely unresolved.

The most significant concerns are:

- **The design evolution resulted in substantially greater development**, with Site 5 changing from predominantly solar arrays to a major electricity transmission hub incorporating a 400kV Project Substation, construction compound, offices, permanent access roads and associated infrastructure.
- **The proposed 400kV Project Substation increased in size by approximately 75%** between the Phase 2 consultation and the submitted application, demonstrating continued expansion rather than impact reduction.
- **Successive design changes failed to address the principal concerns** relating to landscape, heritage, residential amenity, traffic, ecology and the industrialisation of the rural environment.

- **The Applicant has relied primarily on mitigation rather than avoiding harm through site selection and design**, contrary to the principles of good design and the established Horlock Rules.
- **The fundamental change to the grid connection strategy did not trigger a transparent reassessment of Site 5**, despite introducing substantial additional infrastructure and altering one of the original site selection criteria.
- **No convincing evidence has been provided that reasonable alternatives**, including alternative layouts, substation locations or reduced development scenarios, were fully evaluated before Site 5 was selected.
- **Outstanding issues raised by statutory consultees** further reinforce that key environmental and technical matters remain unresolved and that the alternatives assessment is incomplete.

Taken together, the evidence demonstrates that the Applicant has explained how the Scheme evolved but has not demonstrated that the final design represents the least harmful or most appropriate solution. Instead, the evolution of Site 5 shows a progressive increase in the scale and intensity of development, further increasing its environmental impact.

Chapter 6: Climate Change

The Environmental Statement (Volume 1, Chapter 6: Climate Change) concludes that East Pye Solar will make a significant positive contribution towards the UK's net zero objectives through the generation of renewable electricity. There is no dispute that renewable energy forms an important part of national climate policy. However, the purpose of the Environmental Impact Assessment is not simply to demonstrate that renewable energy has climate benefits in principle, but to assess whether this particular site represents an appropriate location once its environmental costs are fully considered.

In respect of Site 5, the Environmental Statement does not adequately assess the existing climate value of the landscape that would be lost, nor does it demonstrate that the claimed carbon benefits outweigh those losses. The assessment relies upon broad scheme wide assumptions and generic lifecycle modelling rather than a detailed, site specific evaluation of carbon storage, climate resilience and adaptation.

6.1 Existing Climate Management and Stewardship

Site 5 is not simply productive agricultural land; it is land that is currently being actively managed to deliver environmental and climate benefits. At the time of writing (5 July 2026), both Site 5A and Site 5B are shown on the Defra MAGIC mapping system as being subject to live Countryside Stewardship agreements, CSFREF1375492 and CSFREF829633. (*Source: Defra MAGIC Map Application, Countryside Stewardship layer, accessed 5 July 2026*).

The Environmental Statement makes no assessment of the significance of these existing stewardship agreements or the contribution they currently make towards climate resilience, biodiversity enhancement, habitat connectivity and carbon storage. Nor does it consider the consequences should those agreements be brought to an end as a direct or indirect consequence of the proposed development.

The existence of active stewardship agreements demonstrates that the land is already delivering public environmental benefits through Government funded environmental land management. Those benefits have been recognised by Defra and are already contributing towards national objectives for climate adaptation, biodiversity recovery and sustainable land management.

6.2 Loss of Existing Carbon Storage

Site 5 already functions as an important long term carbon store. The mature hedgerows, veteran and notable trees, historic field boundaries and undisturbed agricultural soils have accumulated and stored carbon over many decades, and in some cases centuries.

The proposed development requires the removal and alteration of sections of these established hedgerows to accommodate construction access, abnormal indivisible load routes, access roads, cable infrastructure and the Project Substation. Whilst the Environmental Statement proposes replacement planting, it provides no calculation of the carbon currently stored within the mature vegetation or the surrounding soils, nor does it quantify the carbon that will be released when these habitats are disturbed.

Current scientific research demonstrates that mature hedgerows are not simply carbon sinks but substantial long term carbon stores. Although newly planted hedgerows can absorb carbon relatively quickly during their early years of growth, they first have to replace the carbon already lost through the removal of mature vegetation and the disturbance of established soils. Research suggests that this process may take between 60 and 100 years, depending upon local conditions (Sci Total Environ 2023).

The proposed operational life of East Pye Solar is itself 60yr. Consequently, the replacement planting may still not have restored the carbon storage capacity that currently exists by the time the development is decommissioned.

The Environmental Statement contains no transparent comparison between carbon released during construction, carbon lost through habitat removal, carbon recovered through mitigation planting and the overall carbon balance for Site 5.

6.3 Agricultural Soils and Climate Function

Environmental Statement Vol 1 Chapter 15 confirms that Site 5 consists predominantly of Grade 2 Best and Most Versatile agricultural land. While this designation is generally considered in terms of food production, these soils also represent an important natural carbon store.

Construction of the 3.5-hectare Project Substation, access roads, construction compounds, cable routes, numerous rows of Solar arrays and associated infrastructure will inevitably disturb soil profiles, compact agricultural land and alter long established biological processes. Despite this, the Environmental Statement does not quantify the amount of soil carbon likely to be released during construction or assess the long-term consequences for soil health and carbon sequestration.

Instead, it assumes that agricultural soils will recover following decommissioning after sixty years. No evidence is presented to demonstrate that soil structure, biological activity or carbon storage can be fully restored after such prolonged industrial use.

6.4 Climate Resilience and Habitat Connectivity

Climate adaptation depends upon connected landscapes that enable wildlife to move in response to changing environmental conditions.

Site 5 currently forms part of an extensive network of hedgerows, field margins, woodland edges and watercourses which link habitats across this part of South Norfolk. These ecological corridors have developed over centuries and continue to support a wide variety of species. They are also used by larger mammals, including Red Deer, which are regularly recorded moving through Site 5 between surrounding woodland blocks.

Although the Applicant proposes areas of ecological mitigation, these are introduced alongside extensive large infrastructure, including solar arrays, substations, access roads, deer fencing, security fencing, lighting and CCTV.

The Environmental Statement provides little evidence that the landscape will continue to function as an effective ecological corridor over the 60yr operational life of the scheme. Protecting isolated habitat fragments is not equivalent to maintaining the continuous landscape connectivity upon which climate adaptation depends.

6.5 Climate Change Resilience and Water Management

Climate projections for East Anglia consistently indicate hotter, drier summers alongside more frequent periods of intense rainfall and extreme weather events. These changes place increasing pressure on agricultural soils, natural drainage systems and watercourses.

Site 5 contains a network of historic drainage features and natural watercourses which ultimately discharge into the River Tas, including the surviving sixteenth-century brick culvert associated with Boyland Hall. These watercourses have developed as part of a functioning agricultural landscape over many centuries and currently contribute to natural drainage, groundwater recharge and habitat connectivity.

The Environmental Statement fails to demonstrate that these natural systems will continue to function effectively once large areas of agricultural land are occupied by solar infrastructure, access roads, construction compounds, substations and associated engineering works. Whilst the Applicant proposes drainage mitigation, there is insufficient site specific evidence to demonstrate that the proposed measures will remain effective throughout the 60yr operational life of the development under future climate conditions.

Furthermore, the Environmental Statement Vol 1 Chapter 6 relies heavily upon conclusions presented elsewhere in the Environmental Statement without critically assessing the increasing uncertainty associated with climate change. There is no robust assessment of how more intense rainfall events, prolonged periods of saturated ground, soil compaction caused by construction activities, changes in infiltration rates or alterations to existing field drainage patterns may interact over time. Nor does the assessment adequately consider the consequences of failure of the proposed drainage measures or the cumulative effects on downstream watercourses, private water supplies and the River Tas catchment.

The Environmental Statement therefore fails to demonstrate that Site 5 will remain resilient to future climate conditions or that the proposed development will not increase climate related risks elsewhere within the catchment. This uncertainty is particularly concerning given the operational life of the Scheme extends to 60yrs, during which climate projections indicate increasingly frequent extreme weather events.

6.6 Carbon Payback

The Environmental Statement Vol 1 Chapter 6 does not include a transparent whole-life carbon assessment.

Whilst the Environmental Statement states that East Pye Solar will make a significant positive contribution to reducing greenhouse gas emissions, it does not identify the total embodied carbon associated with construction, nor the proportion attributable to Site 5. There is no site specific assessment of emissions arising from construction materials, the Project Substation, heavy goods vehicle movements, extensive earthworks or habitat removal.

Nor does the Environmental Statement identify when the development is expected to become genuinely carbon positive after these emissions have been accounted for.

This omission is increasingly important because the carbon intensity of the UK's electricity grid continues to fall. As the grid becomes progressively cleaner, each additional solar development displaces less carbon than equivalent developments constructed a decade ago. Consequently, the carbon payback period for new schemes is expected to become progressively longer.

Without transparent whole life carbon accounting it is impossible to determine whether the substantial environmental harm proposed for Site 5 is proportionate to the climate benefits claimed.

Conclusion

Whilst the proposed development would contribute to the generation of renewable electricity, Chapter 6 does not demonstrate that Site 5 represents an appropriate location when its existing climate value and environmental functions are fully considered. The assessment relies upon broad Scheme wide assumptions and fails to provide a robust, site specific evaluation of the carbon storage, climate resilience and adaptation benefits that would be lost.

The most significant concerns are:

- **The existing climate value of Site 5 has not been properly assessed**, despite the land being subject to active Countryside Stewardship agreements that already deliver recognised environmental and climate benefits.
- **No site specific assessment has been undertaken of carbon losses**, including the release of carbon from mature hedgerows, veteran trees and agricultural soils disturbed during construction.
- **The Environmental Statement does not provide a transparent whole life carbon assessment**, making it impossible to determine the true carbon balance of the development or when it would become carbon positive.
- **The climate role of Grade 2 Best and Most Versatile agricultural soils has been overlooked**, with no evidence that soil carbon stores and soil health could be fully restored following 60 years of industrial use.
- **The assessment provides insufficient evidence that habitat connectivity and ecological resilience will be maintained**, despite the introduction of extensive infrastructure into an established network of wildlife corridors.
- **Climate resilience and future flood risk have not been adequately assessed**, with insufficient consideration of how more extreme weather, soil compaction and altered drainage patterns could affect Site 5 and the wider River Tas catchment over the lifetime of the development.

Taken together, these omissions mean the Environmental Statement does not demonstrate that the claimed climate benefits outweigh the loss of the existing climate functions already provided by Site 5. Without a transparent site specific carbon assessment, a robust evaluation of existing carbon stores and evidence that the landscape will remain resilient under future climate conditions, there is insufficient justification for concluding that the proposed development would deliver an overall positive climate outcome.

(Sci Total Environ 2023 Sep 20;892:164482. doi: 10.1016/j.scitotenv.2023.164482. Epub 2023 May 29. Planting hedgerows: Biomass carbon sequestration and contribution towards net-zero targets Sofia Biffi, Pippa J Chapman, Richard P Grayson, Guy Ziv.; Hedgerows increase soil carbon storage by 40%, study finds <https://phys.org/news/2025-02-hedgerows-soil-carbon-storage.html>; <https://8point9.com/unlocking-the-carbon-drawdown-potential-of-hedgerows/>)

Chapter 7: Landscape and Visual



Figure 7.1 View across Site 5 from RB04 - Boylandhall Lane near B1527

Site 5 occupies one of the most sensitive parts of the East Pye Solar scheme in landscape terms. The area surrounding Fritton, Morningthorpe and Hempnall is characterised by open agricultural farmland, mature hedgerows, historic field boundaries, scattered woodland, quiet rural lanes and a dispersed pattern of historic settlements. This landscape has evolved over centuries and retains a strong sense of openness, tranquillity and rural character that distinguishes it from more intensively developed parts of South Norfolk.

The proposed development would fundamentally alter this landscape through the introduction of extensive solar arrays, a 400kV Project Substation, inverter stations, transformers, internal access roads, security fencing, CCTV infrastructure, security lighting and associated operational buildings. Collectively these elements represent a major piece of National Grid electricity

infrastructure extending across a substantial area of countryside for an operational period of at least 60 yrs.

The applicant's own Landscape and Visual Impact Assessment acknowledges that significant adverse landscape and visual effects would occur within Site 5. Whilst renewable energy development is recognised as an important component of national energy policy, that policy does not require significant landscape harm to be accepted where it has not been demonstrated that impacts have been avoided, minimised or adequately mitigated. The principal issue is therefore not whether landscape change would occur, but whether the scale, duration and permanence of that change has been justified and whether the environmental effects have been robustly assessed.

This chapter demonstrates that the proposed development would result in the long term industrialisation of a historically important rural landscape, causing significant adverse effects on landscape character, visual amenity, tranquillity, recreational enjoyment and the historic field patterns of South Norfolk. It further identifies shortcomings within the applicant's assessment that prevent the true extent of these impacts from being properly understood.

7.1 Existing Landscape Character

The landscape surrounding Site 5 is defined by its simplicity, openness and continuity. Large agricultural fields are enclosed by mature hedgerows and trees, creating a landscape that remains strongly influenced by its historic agricultural origins. Long distance views are available across gently undulating farmland, interrupted only by traditional farm buildings, woodland belts and occasional church towers, including the prominent setting of St Catherine's Church at Fritton.

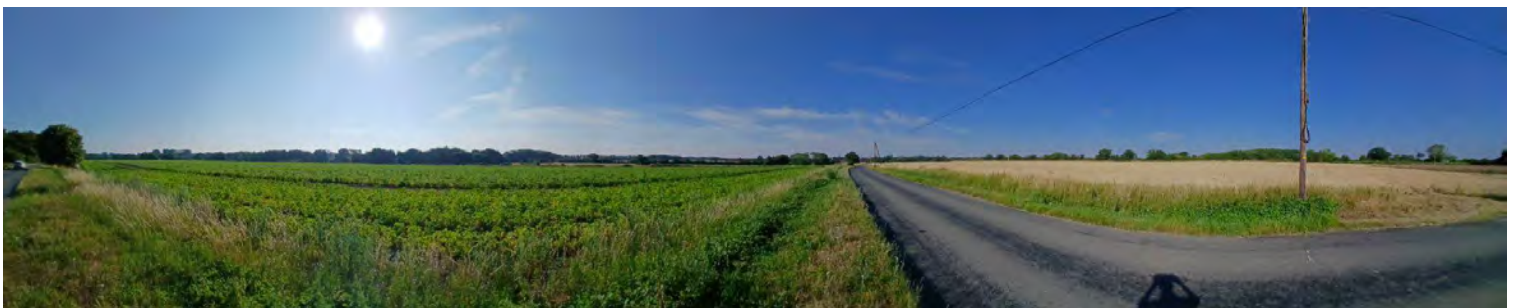


Figure 7.2 Panoramic photo taken on The Street, Fritton facing towards Fritton. Site 5 on left, CRC6 on right. Shows wide open views that those entering Fritton currently experience.

Unlike landscapes influenced by modern commercial or industrial development, this area retains a high degree of rural tranquillity. Public Rights of Way, quiet lanes and minor roads enable residents and visitors to experience uninterrupted views across farmland with relatively few intrusive vertical structures. The absence of major infrastructure is a defining characteristic of the

landscape. Telegraph height poles carrying cables are the highest industrial infrastructure to site 5, with the nearest pylon being over 4km to the West.



Figure 7.3 Photo of view exiting Hempnall along B1527 over towards Site 5 showing clear views of positions of proposed solar arrays and 400kV Substation. The photo shows the absence of any tall structures in the current setting.

Trees and hedgerows perform an important role within this landscape. Beyond their ecological function, they define the historic field pattern, reinforce the area's distinctive rural character, provide visual containment and contribute to the gradual transition between settlements and the surrounding countryside. Many hedgerows are identified as Important Hedgerows by the Applicant, whilst woodland within the north western part of Site 5 benefits from statutory protection through a Tree Preservation Order.

These features are not isolated landscape elements but form an interconnected network that contributes to biodiversity, historic landscape character and visual amenity. Their retention is fundamental to maintaining the character of the area as well as their vital ecological habitat linkage.

The existing landscape also supports an extensive network of Public Rights of Way linking Morningthorpe, Hempnall, Fritton, Shelton, Long Stratton and Tasburgh. These routes, including

sections of the nationally recognised Boudica Way, are widely used for walking, recreation and enjoyment of the countryside. Their value derives not only from continued public access but from the quality of the surrounding landscape through which they pass.

The landscape surrounding Site 5 therefore represents considerably more than agricultural land capable of accommodating solar infrastructure. It is a cohesive historic landscape whose value arises from the relationship between its field pattern, hedgerows, trees, settlements, heritage assets, open views and recreational network.

7.2 Significant Adverse Landscape Effects

The Environmental Statement accepts that Site 5 would experience significant adverse landscape effects arising from the introduction of the proposed development. The applicant identifies a moderate magnitude of landscape change resulting in a moderate adverse significant effect on landscape character. This conclusion is important because it represents the applicant's own acknowledgement that the proposal would result in significant harm to the existing landscape.

The principal source of this harm is the replacement of an open agricultural landscape with extensive engineered infrastructure. Although the solar arrays occupy much of the site, they represent only one component of the development. The proposal also includes the 400kV Project Substation, electrical compounds, transformers, inverter stations, access road, security fencing, CCTV infrastructure and associated operational equipment. Collectively these elements introduce a distinctly industrial character into a landscape presently defined by agriculture, openness and tranquillity.

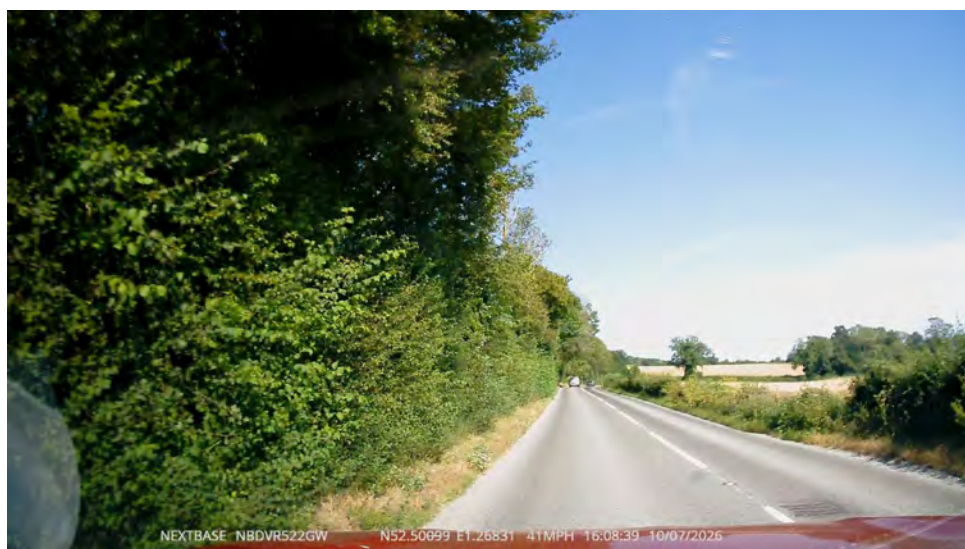


Figure 7.4 Image from Dashcam of view coming from A140 towards Hemphall on B1527 Site 5 clearly visible

The proposed 400kV Project Substation is of particular significance. Unlike the lower profile of the solar arrays (either 3.5m or 4.5m depending upon the Applicants final design), the substation introduces substantial built infrastructure that cannot reasonably be regarded as characteristic of the existing landscape. Its scale, form and operational function fundamentally alter the rural character of Site 5 and create a permanent industrial feature within the countryside.

The applicant relies extensively upon mitigation planting to reduce these effects. However, the Environmental Statement acknowledges that the proposed landscape mitigation would require many years to establish before becoming effective. Significant adverse effects would therefore persist throughout at least the first fifteen years of operation. In the Zoom consultation the Applicant held, their ecological expert admitted the substation in Site 5 could not be mitigated as no trees would grow high enough.

After the 15yr period the applicant is relying on to provide vegetational cover, the proposed mitigation cannot recreate the landscape that currently exists. The introduction of extensive native deciduous hedgerows and woodland belts would itself alter the defining characteristics of Site 5. The existing landscape is valued for its openness and long distance views across agricultural land. Replacing these views with continuous belts of screening vegetation does not restore the existing landscape character but creates an entirely different one.

The proposed mitigation is therefore compensatory rather than restorative. It seeks to reduce visibility of the development by fundamentally changing the landscape within which the development is situated. This represents a permanent alteration to the historic agricultural character of Site 5 that would persist for the operational lifetime of the scheme and beyond.



Figure 7.5 View from The Street, Fritton across proposed Solar Arrays in Site 5 with B1527 in middle ground with long views. Fritton Grange visible on left.

The duration of these effects is also material. The proposed operational period is for 60 yrs, representing more than two generations. During this period the existing rural landscape would be unavailable in its current form to residents, visitors and future generations. This brings into question whether the Applicant's claim of the temporary nature of the Development Consent Order really reflects the reality and is in fact closer to a permanent change.

The applicant's own assessment therefore demonstrates that Site 5 would experience significant adverse landscape effects arising from the industrialisation of an historically agricultural landscape. The proposed mitigation neither avoids these effects nor restores the existing landscape character. Instead, it introduces further permanent landscape change in an attempt to reduce the visibility of infrastructure that remains fundamentally incompatible with the existing rural environment.

7.3 Visual Effects on Residents and Settlements

The Environmental Statement identifies a number of residential properties and publicly accessible locations surrounding Site 5 that would experience significant adverse visual effects as a result of the proposed development. These findings are not disputed by the applicant. Rather, the applicant's own assessment concludes that the introduction of extensive solar arrays, electrical infrastructure and the proposed 400kV Project Substation would result in major or moderate adverse visual effects for several sensitive receptors.



Figure 7.6 View from the edge of curtilage of Coomb Barn over proposed Solar Arrays in Site 5

The most significant impacts occur where the development lies immediately adjacent to residential properties and Public Rights of Way. Existing views across open agricultural fields would be replaced by extensive engineered infrastructure comprising solar arrays, security fencing, inverter stations, transformers, access tracks and the proposed Project Substation. These are not features currently present within the landscape and would introduce an overtly industrial character into views presently defined by open countryside.

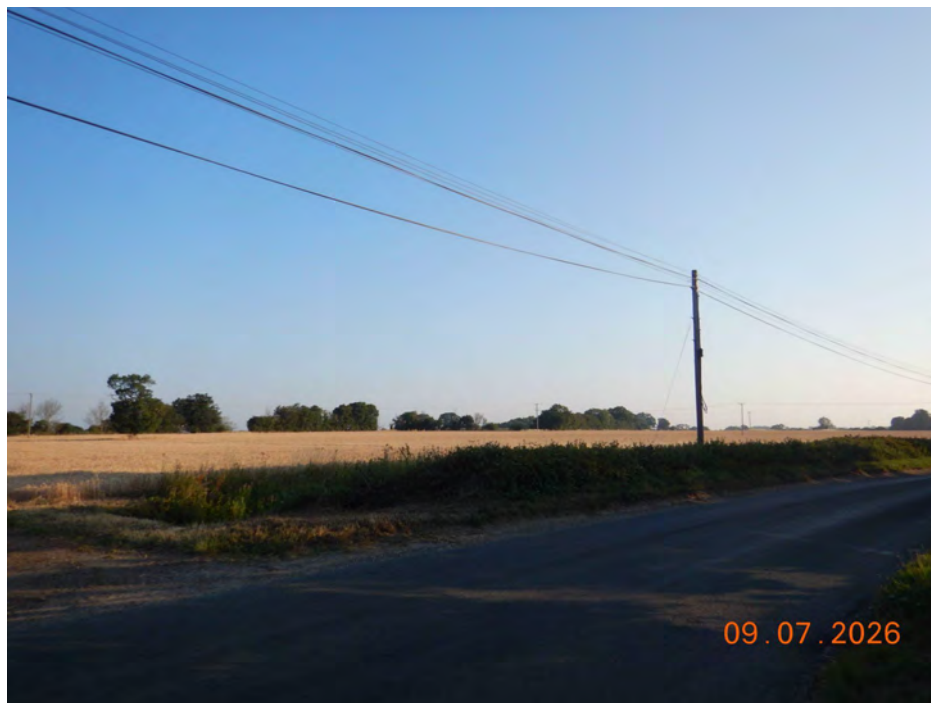


Figure 7.7 Views from edge of residential curtilage of Beech Cottage across proposed position of Solar Arrays, deer fencing, looking towards B1527 and beyond in the distance

Residents living along **The Street**, properties adjacent to the B1527 and the settlement edge of Hempnall currently experience a predominantly rural outlook characterised by open fields, mature hedgerows and long-distance views. The proposal would fundamentally alter this relationship by replacing agricultural land with nationally significant electricity infrastructure operating continuously throughout the lifetime of the development.



Figure 7.8 View from upper storey of Clay Cottage across Site 5 where proposed Solar Arrays to the back left and 400kv Substation back centre will be visible.

The applicant identifies significant visual effects for receptors including:

- Residential properties adjoining the Order Limits.
- The settlement edge of Hempnall.
- Users of Morningthorpe RB4.
- Users of Morningthorpe FP5.
- Users of Morningthorpe FP9.
- Users of Morningthorpe FP17.

These conclusions are significant because they represent the applicant's own assessment that visual effects remain significant despite the proposed mitigation.



Figure 7.9 Photo of winter view from upper storey of Boyland Hall across Site 5.

Particular concern arises from the proposed 400kV Project Substation. Unlike the solar arrays, which remain relatively low in profile, the substation introduces substantial engineered infrastructure that cannot be effectively assimilated into the surrounding agricultural landscape. Whilst proposed planting may soften some views over time, it cannot eliminate the presence of infrastructure of this scale, particularly during winter months when deciduous planting provides limited visual screening.

The visual effects experienced by nearby residents should not be considered solely in terms of visibility. Residential visual amenity is derived from the overall quality, character and composition of the surrounding landscape. The replacement of open countryside with extensive industrial infrastructure fundamentally alters that relationship for the duration of the scheme.

The Environmental Statement also appears to place considerable reliance upon future vegetation growth to reduce visual effects. However, mitigation planting requires many years to mature, during which significant adverse effects remain. Furthermore, the proposed planting does not recreate the existing landscape but replaces open agricultural views with dense belts of vegetation specifically designed to screen industrial development. This fundamentally changes the character of the landscape experienced by residents.

Accordingly, whilst the applicant acknowledges significant visual effects, the assessment understates the permanence of these changes and overstates the effectiveness of the proposed mitigation.

7.4 Public Rights of Way, Recreation and Tranquillity

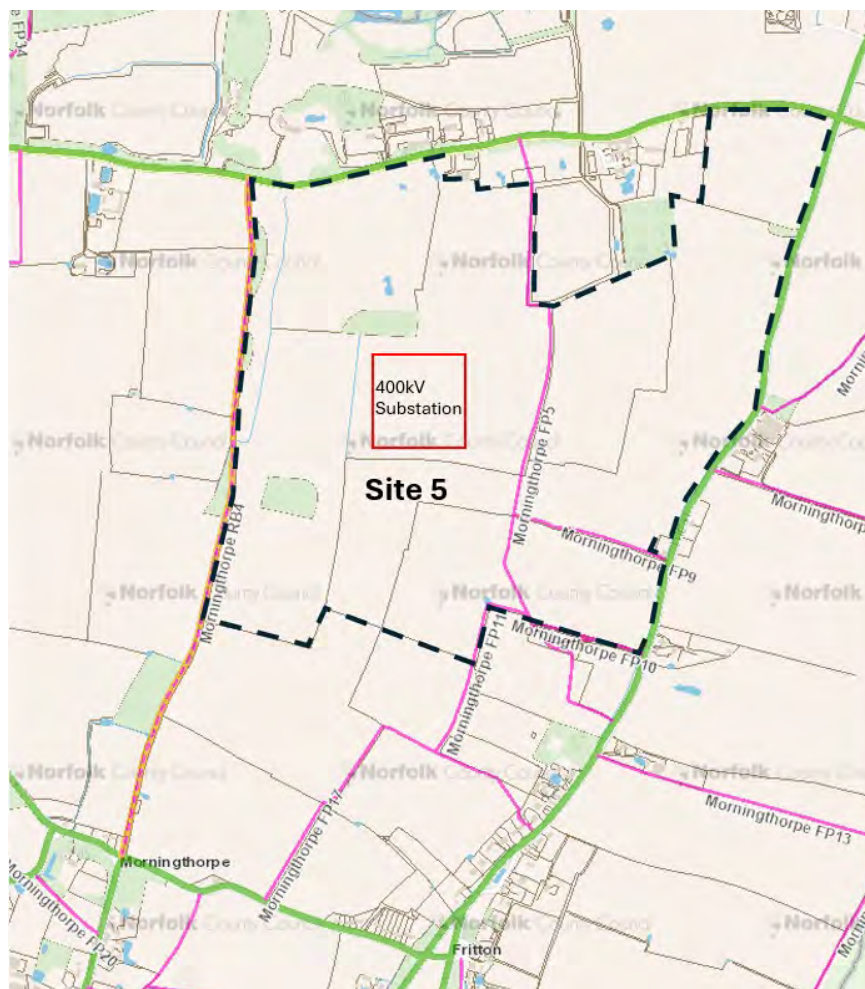


Figure 7.10 Map adapted from Norfolk County Council Highways to show position of Site 5, Proposed 400kV Substation and PRoW

See **Appendix 1** for a more detailed photographic journey along PRoW directly around and within Site 5

One of the principal shortcomings of the Landscape and Visual Impact Assessment is its treatment of the Public Rights of Way network surrounding Site 5.

The assessment considers individual viewpoints and isolated receptor locations but gives insufficient consideration to the cumulative recreational experience of users travelling through the extensive interconnected network of footpaths and bridleways surrounding the site. The planning issue is therefore not whether individual rights of way remain open, but whether the experience

of using those routes is fundamentally altered by the introduction of large-scale electricity infrastructure.

Figure 7.5.6 (Graded Digital Surface Model) demonstrates that the visual influence of Site 5 extends well beyond the immediate Order Limits and affects a substantial network of interconnected Public Rights of Way.

Figure 7.11 – Principal Public Rights of Way Affected by Site 5

Rights of Way	Relationship to Site 5	Likely Effect
Morningthorpe RB4	Runs immediately adjacent to the northern boundary of Site 5 and alongside the proposed development.	Major adverse visual effects acknowledged by the applicant. Significant change from open countryside to industrial-scale energy infrastructure.
Morningthorpe FP5	Passes directly through Site 5 between the proposed solar arrays and the proposed 400kV Project Substation.	One of the most severely affected routes. Users would experience infrastructure on both sides of the route, fundamentally altering the character and enjoyment of the footpath.
Morningthorpe FP9	Connects FP5 to The Street, Fritton.	Significant adverse effects due to close proximity to solar arrays and open views towards the development.
Morningthorpe FP10	Links FP5 with The Street and passes St Catherine's Church.	Rural setting and appreciation of the historic landscape substantially altered by nearby infrastructure.
Morningthorpe FP11	Runs south alongside the eastern boundary of Site 5.	Long sections affected by adjacent solar development and associated infrastructure.
Morningthorpe FP17	Runs adjacent to Site 5.	Significant adverse visual effects identified by the applicant.
Morningthorpe FP2 / FP33 (Boudica Way)	Forms part of the nationally recognised Boudica Way long-distance footpath.	Multiple sections affected by Site 5 alone, reducing the quality of the walking experience over an extended distance.
Morningthorpe FP3, FP6, FP16, FP18, FP19, FP20, FP21, FP24, FP29	Connect into the principal rights of way surrounding Site 5.	Sequential and cumulative visual effects as users move through the wider recreational network.
Hempnall FP2, FP3, FP5, FP6, FP11, FP12, FP13, FP17, FP18, FP20, FP22, FP27, FP31, FP32, FP35 and BR30	Interconnected routes linking Hempnall with Morningthorpe and the wider countryside.	Varying degrees of visibility identified on Figure 7.5.6 (Graded DSM). Collectively contribute to the cumulative recreational experience affected by Site 5.
Tasburgh FP2	Connects into the wider rights of way network.	Sequential visual effects as users travel between settlements.
Long Stratton FP3, FP14 and FP18	Forms part of wider recreational routes linking to Site 5.	Visual influence extends beyond the immediate Order Limits, demonstrating the wider landscape effects of the proposal.

Shelton FP12 and FP17	Part of the wider recreational network.	Illustrates the extensive geographical spread of visual effects arising from Site 5.
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Figure 7.12 Morningthorpe FP5 taken in southerly direction towards St Catherine's Church. Proposed solar arrays and deer fencing either side of the path



Figure 7.13 View from Mon FP5 towards location of proposed substation



Figure 7.14 Photo of Start of Morningthorpe FP9 from the rear garden of Clay Cottage towards site of proposed Solar Arrays and 400kV Substation (Winter)



Figure 7.15 Photo of Start of Morningthorpe FP9 from the rear garden of Clay Cottage towards the site of proposed Solar Arrays and 400kV Substation. (Summer)



Figure 7.16 Photo of View from Mon-FB5 across The Street, Fritton towards Hemphall - Showing current long unrestricted views



Figure 7.17 Site 5 with Public Rights of Way marked and 400kW Substation superimposed and red markings also superimposed indicating fields where solar panels are proposed to be installed

The significance of these effects lies not in the impact upon individual footpaths but in the cumulative experience across the network as a whole.

Residents and visitors commonly use these routes as circular walks linking neighbouring villages and connecting with the Boudica Way. Users would therefore experience successive views of extensive solar arrays, security fencing, electrical infrastructure and the proposed Project Substation over considerable distances, rather than isolated glimpses from individual viewpoints. The character of the journey would be fundamentally different from that experienced today.

The Environmental Statement does not adequately assess this sequential experience.

A walker beginning on Morningthorpe RB4, continuing along FP5 and connecting with FP9 or the Boudica Way would remain within the visual influence of the development for an extended period. Similar cumulative effects would be experienced across the wider interconnected network extending towards Hempnall, Shelton, Long Stratton and Tasburgh.



Figure 7.18 View from Boylandhall Lane across Site 5 to proposed 400kV substation location

This cumulative recreational experience is materially different from the isolated viewpoints assessed within the Environmental Statement and is not adequately reflected by considering each viewpoint independently.



Figure 7.19 Photo of View From Boylandhall Lane Across Site 5 with St Catherine's Church, Fritton in View.

The Boudica Way is particularly sensitive. As a nationally recognised long distance recreational route, its value derives from the experience of travelling through open Norfolk countryside. Site 5 alone affects multiple sections of this route before cumulative effects arising from the wider East Pye Solar Scheme are considered. Users would therefore encounter repeated sections of extensive solar infrastructure and associated electrical infrastructure throughout a single journey, substantially diminishing the qualities that make the route attractive.

The proposal would therefore diminish not only visual amenity but also the recreational value of the wider Public Rights of Way network.

7.5 Trees, Important Hedgerows and Historic Landscape Pattern

Trees and hedgerows are among one of the defining characteristics of Site 5. They perform functions that extend well beyond ecology, contributing to landscape character, historic field enclosure, visual amenity, ecological connectivity and the transition between settlements and the surrounding countryside. Collectively they form an established network of mature landscape features that has evolved over centuries and underpins the distinctive rural character of this part of South Norfolk.

The Applicant places considerable reliance upon the retention of existing hedgerows as a principal mitigation measure. However, the application documents do not provide sufficient clarity to establish precisely which hedgerows would be retained, which would be breached and the extent of any permanent losses. This uncertainty significantly undermines confidence in both the Landscape and Visual Impact Assessment and the ecological assessment.

Inconsistencies Between the Application Documents

The assessment of impacts on trees and Important Hedgerows is not presented consistently across the application documents.

In the Applicant's document 2.12 – Hedgerow and Tree Protection Order Plan it classifies the entire hedgerow along the northern boundary of Site 5 as an *Important Hedgerow*. It also identifies the woodland on the north western boundary of Site 5 that is protected by a Tree Preservation Order.

However, the Preliminary Arboricultural Impact Assessment (Environmental Statement Volume 3, Appendix 7.10) does not clearly identify this protected woodland within its assessment or provide specific recommendations relating to its protection. Given that these trees are subject to statutory protection, their omission from the principal arboricultural assessment is a significant deficiency.

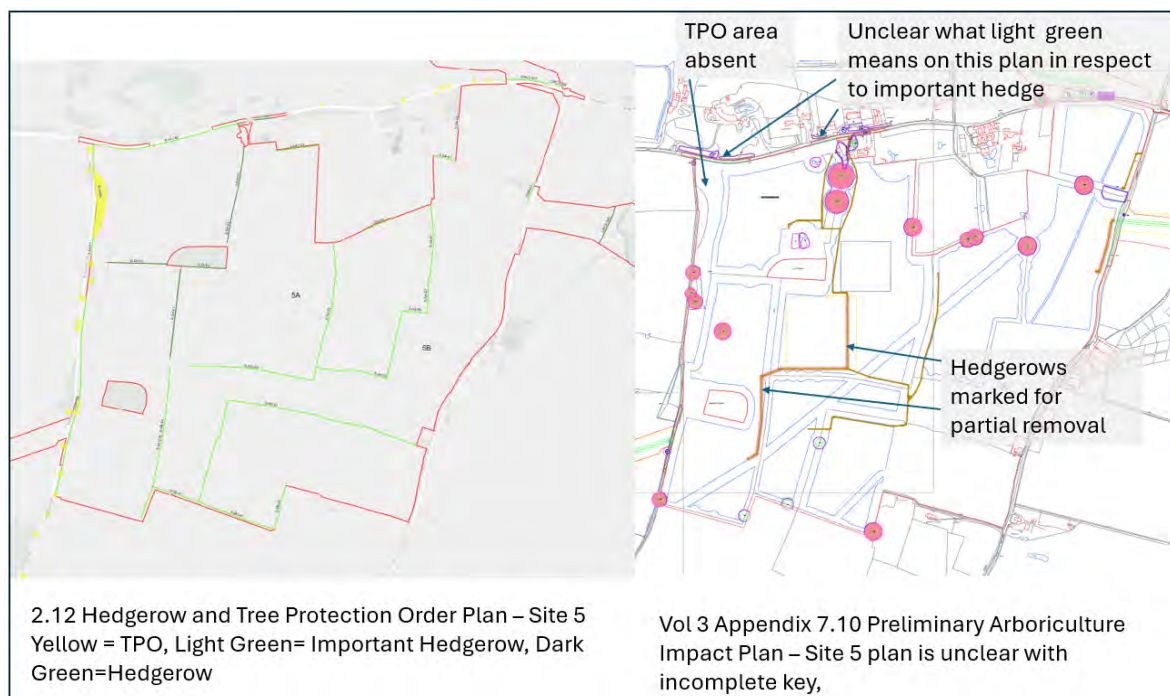


Figure 7.20 comparison between the Hedgerow and TPO plan showing Important Hedges Document 2.12 and the Preliminary Arboricultural Impact Assessment showing removal of Important Hedges and not reflecting TPO status fully.

Furthermore, Appendix 7.10 contains two key plans:

- Annex C – Tree Constraints Plan
- Annex D – Tree Impact Plan

The legends accompanying both plans are incomplete. Numerous colours, hatch patterns and symbols shown on the drawings are either absent from the accompanying keys or are insufficiently explained. Consequently, it is not possible to determine with confidence whether highlighted areas represent retained trees, Root Protection Areas, temporary construction activity, permanent removals, protective fencing or other categories of impact.

The absence of complete and intelligible legends prevents meaningful scrutiny of the plans and makes it impossible to verify that the arboricultural assessment accurately reflects the development proposed.

Lack of Certainty Regarding Important Hedgerow Removal

Throughout the Environmental Statement the Applicant states that no more than 10 metres of Important Hedgerow would be removed where access or infrastructure crossings are required.

However, the submitted drawings do not identify the precise locations of those removals or explain how the stated figure has been derived.

The Tree Impact Plan (Annex D) appears to indicate substantially greater lengths of the Important Hedgerow on the northern boundary of Site 5 may be affected. The highlighted sections appear to extend for approximately 29.8m at the western end and 12.9m at the eastern end of the same hedgerow (as measured from the Applicant's plan). If these highlighted areas represent permanent removal or breaching of the hedgerow, approximately 43m of hedgerow measuring around 75 metres in length could be affected, representing approximately 55% of that individual Important Hedgerow.

However, because the plan legend is incomplete and the highlighted features are not explained, it is impossible to determine whether these areas represent permanent removal, temporary construction activity, protective fencing or another category of impact. This apparent inconsistency cannot be reconciled with the repeated assertion elsewhere in the Environmental Statement that no more than 10 metres of Important Hedgerow would be removed.

A similar issue arises in relation to the Important Hedgerow located within the centre of Site 5. Annex D appears to indicate that a substantial section of this hedgerow would be affected, yet the plans provide no explanation of the nature or extent of the proposed works. It is therefore impossible to determine whether the highlighted area represents the full extent of permanent removal or another category of impact.

The application therefore fails to provide sufficient certainty regarding the extent of proposed hedgerow loss.

Draft Development Consent Order

This uncertainty extends beyond the Environmental Statement to the Draft Development Consent Order.

The Draft DCO seeks powers over specified lengths of hedgerow but does not identify the precise sections that would be removed or breached.

Consequently, neither the Draft DCO nor the supporting environmental information enables the Examining Authority to determine:

- which individual Important Hedgerows would be affected;
- where breaches would occur;
- whether multiple breaches are proposed within the same hedgerow;
- the cumulative length removed from each individual hedgerow;
- whether the environmental assessments have considered the correct worst case scenario.

This distinction is important.

The environmental effects of removing two separate 10-metre sections from different hedgerows are materially different from removing multiple sections from the same Important Hedgerow. Fragmentation of an individual hedgerow has greater implications for ecological connectivity, landscape character and the integrity of the historic field pattern than an equivalent overall length distributed across several locations.

The application documents do not provide sufficient information to enable these effects to be properly assessed.

Historic Landscape Character

The hedgerow network within Site 5 is a defining element of the historic agricultural landscape.

These mature boundaries have evolved over centuries and continue to define the pattern of fields surrounding Fritton, Morningthorpe and Hempnall. Their importance extends beyond biodiversity, providing visual structure, enclosure, orientation and continuity within the landscape.

Repeated breaches to facilitate access roads, cable routes and electrical infrastructure would progressively erode this historic field pattern. Even where individual losses appear limited in isolation, their cumulative effect across the site would permanently weaken the coherence of the existing landscape.

The Environmental Statement gives insufficient consideration to this cumulative erosion of historic landscape character.

Trees and Hedgerows as Landscape Mitigation

The Applicant places considerable reliance upon existing hedgerows and proposed native planting to mitigate landscape and visual effects. Whilst landscape mitigation is an important component of development, it should complement good site selection and design rather than compensate for avoidable impacts. In Site 5, however, the Applicant's approach relies heavily upon existing and proposed vegetation to reduce the visibility of extensive solar arrays, the proposed 400kV Project Substation and associated electricity infrastructure. **Rather than the development being designed**

to fit within the existing landscape, the landscape itself is being altered to accommodate the development.

This approach presents a number of fundamental difficulties.

Firstly, mitigation cannot be properly evaluated whilst uncertainty remains regarding the extent of existing hedgerow removal and the inconsistencies identified elsewhere in the application documents.

Secondly, the proposed planting would not restore the existing landscape. Site 5 is characterised by open agricultural views framed by mature hedgerows. The proposed mitigation would introduce extensive belts of native deciduous planting intended to screen the development. Whilst this may reduce visibility from some locations once established, it would fundamentally alter the character of the landscape by replacing openness with a considerably more enclosed landscape structure. This represents a permanent landscape change in its own right.

Furthermore, the proposed mitigation relies predominantly upon deciduous planting. During autumn, winter and early spring, when foliage has been lost and before it fully returns, the screening effect would be substantially reduced, exposing greater views of the solar arrays, substation and associated infrastructure. Consequently, visual effects are likely to be considerably more noticeable for a significant proportion of each year, particularly from nearby residential properties, local roads and Public Rights of Way.

The effectiveness of the proposed planting is also dependent upon successful establishment and long term management. Growth rates, density and ultimate screening are influenced by soil conditions, weather, drought, pests, disease and maintenance over many decades. There can be no certainty that all planting will establish successfully or achieve the height, density and coverage assumed within the Applicant's assessment. Where planting fails, is damaged or grows more slowly than anticipated, the landscape and visual effects would remain greater for longer than predicted.

The Applicant also relies heavily upon existing hedgerows and mature trees as part of the mitigation strategy. Whilst their retention is welcomed, these features already form part of the existing landscape baseline and contribute to the character, biodiversity and historic field pattern of Site 5 irrespective of the proposed development. They are existing environmental assets, not mitigation created by the scheme. Instead, the proposal depends upon their continued presence to reduce the visibility of infrastructure that would otherwise have greater landscape and visual effects.

This dependency is particularly significant given the proposed 60yr operational life of the scheme. Existing trees and hedgerows will inevitably change over that period through natural ageing, storm damage, drought, disease, ash dieback and necessary management. Should these features decline, require replacement or be lost, the effectiveness of the Applicant's mitigation would diminish

accordingly. The long term success of the mitigation strategy therefore depends upon factors that cannot be guaranteed throughout the operational life of the development.

Finally, newly planted hedgerows and woodland cannot replicate the ecological, landscape or historic value of mature Important Hedgerows for many decades. Even once established, replacement planting cannot recreate the historic landscape pattern that would be altered through permanent hedgerow breaches.

7.6 Residential Receptors and Visual Assessment Methodology

The Applicant's assessment of residential visual effects around Site 5 does not appear to provide a complete or fully representative assessment of the impacts likely to be experienced by nearby residents.

The identification and assessment of residential receptors is fundamental to understanding the likely effects of the proposed development. It is therefore important that all relevant residential properties are identified and assessed consistently. However, the plans accompanying the Landscape and Visual Impact Assessment raise concerns that this has not been achieved. For example, Boyland Hall is not identified on the residential receptor plan despite its proximity to Site 5 and Preston's Barn is also missed completely from the assessment. These omissions raise questions as to whether all potentially affected properties have been appropriately considered.

The methodology also appears to measure distances from residential buildings rather than from the extent of the residential curtilage. In a rural environment this distinction is important. Residential amenity is not experienced solely from within the dwelling itself. Gardens, patios and other outdoor spaces form an integral part of residential use and are specifically recognised within the Applicant's own assessment methodology as locations from which visual amenity should be considered.

By measuring distances only to the dwelling footprint, the assessment risks understating the proximity of development to residential receptors and, consequently, the magnitude of visual effects experienced by residents using their gardens and other external spaces.

The Environmental Statement (Volume 1, Chapter 7) states that residential visual assessments have been undertaken using an eye height of approximately 1.5 metres above ground level, describing this as representing the typical eye level of occupants within their homes and domestic curtilage.

Whilst this may represent a standing person at ground level, it does not reflect the full range of views available from residential properties. Many rural dwellings obtain significant visual amenity from first-floor windows and elevated living spaces that provide wider views across the surrounding landscape.

This is particularly relevant around Site 5. One property identified within approximately 100 metres of the proposed development contains an extended picture window specifically orientated towards the existing open countryside. While others have been converted from their historical uses to take full advantage of the open rural countryside views. The current assessment does not appear to consider how these elevated views would experience the introduction of extensive solar arrays, associated electricity infrastructure and the proposed 400kV Project Substation.

The residential assessment therefore appears to rely predominantly upon desk based analysis and standardised assumptions rather than reflecting the lived experience of those occupying these properties throughout the year. As a consequence, there is a risk that the significance of visual effects experienced by residents has been understated.



Figure 7.21 Coomb Barn adjacent to The Street, Fritton. Windows face directly over Site 5 - see Figure 7.6 for ground level (approx 1.6m) views from the same property



Figure 7.22 Photo showing Beech Farm with upper storey windows facing directly over Site 5 which starts where the telegraph pole is.



7.23 Photo showing 1 Beech Cottage and 2 Beech Cottage showing clear line of sight over Site 5 from upper storey windows. See Figure 7.7 for ground level (1.5m) views directly over Site 5



Figure 7.24 View from Upper Storey at Clay Cottage over Site 5 annotated to show position of proposed 400kV Substation and Solar Panels



Figure 7.25 Photo of view from upper storey at Boyland Hall over Site 5 annotated to show position of proposed Solar Arrays (either 3.5m high fixed, or 4.5m high tracker)

7.7 Limitations of the Zone of Theoretical Visibility Assessment

The Zone of Theoretical Visibility (ZTV) plans contained within Environmental Statement Volume 2, Figure 7.5.6, provide a useful indication of the potential extent of visibility. However, several aspects of their presentation limit their usefulness in understanding the likely visual effects arising from Site 5.

The Applicant has prepared the Digital Surface Model (DSM), Digital Terrain Model (DTM) and Graded DSM using an observer height of approximately 1.5–1.6 metres above ground level. Whilst this is consistent with the residential assessment methodology, it does not reflect views available from upper storeys of nearby dwellings or from other elevated viewing locations.

The ZTVs have also been artificially clipped, with the Graded DSM limited to 3 kilometres and the combined DSM/DTM limited to 5 kilometres from the site.

As a consequence, the plans do not illustrate the full theoretical extent of visibility beyond these arbitrary boundaries. The absence of mapped visibility outside the clipped area should not be interpreted as indicating that no visibility exists. Rather, the Applicant has simply chosen not to display it.

This presentation risks understating the geographical extent over which the proposed infrastructure may influence the surrounding landscape.

The issue becomes more significant when considered alongside the wider East Pye Solar Scheme. Site 5 does not exist in isolation but forms part of a much larger development extending across a substantial area of South Norfolk.

The clipped ZTVs therefore provide only a partial understanding of the visual influence of the overall scheme and do not adequately demonstrate how visibility extends across the wider landscape when the cumulative effects of the different sites are considered together.

7.8 Representative Viewpoints and the Lived Experience

Whilst representative viewpoints are an accepted component of Landscape and Visual Impact Assessment, they inevitably provide only a series of individual snapshots taken from selected locations.

The experience of residents and visitors is fundamentally different.

People living within the affected area experience the landscape continuously rather than from isolated viewpoints. Residents travel between neighbouring villages, use local roads on a daily basis,

walk the interconnected Public Rights of Way network and experience changing views throughout the seasons and at different times of day.

Similarly, visitors and tourists travelling through South Norfolk experience the landscape as a connected whole rather than as a sequence of predetermined assessment locations.

This distinction is particularly important for the East Pye Solar Scheme because of its geographical extent. The development extends for more than 16 kilometres from its north-eastern to south-western extremities. Residents living within this area would not experience the effects of a single site in isolation but would encounter different elements of the scheme repeatedly as they travel through the local road network and surrounding countryside.

The cumulative visual experience of extensive solar arrays, substations and associated electricity infrastructure across multiple sites is therefore likely to be substantially greater than is suggested by consideration of individual viewpoints or clipped ZTV plans alone.

The Landscape and Visual Impact Assessment does not adequately reflect this lived experience. By focusing primarily on selected viewpoints and standardised visibility modelling, the assessment understates the cumulative effect of repeatedly encountering large-scale energy infrastructure across a wide rural landscape

Conclusion

The Applicant's own Landscape and Visual Impact Assessment acknowledges that the proposed development would result in significant adverse landscape and visual effects within Site 5. However, this chapter has identified a number of shortcomings that indicate those effects have been understated and that the assessment does not provide a sufficiently robust understanding of the likely impacts.

In particular, the assessment:

- **relies heavily on existing hedgerows and proposed planting to reduce the visibility of the development**, despite this permanently altering the character of the existing landscape rather than demonstrating that the development has been designed to fit within it;
- **understates the effects on nearby residents**, with omissions from the residential receptor assessment, separation distances measured to dwelling footprints rather than

residential curtilage, and no meaningful consideration of views from upper storeys or the way residents experience their homes and gardens;

- **fails to fully assess the cumulative recreational experience** of users of the Public Rights of Way network;
- **relies on visibility modelling that is constrained by clipped ZTVs**, potentially understating the wider visual influence of Site 5 and the cumulative effects of the wider East Pye Solar Scheme;
- **contains uncertainty regarding the extent of impacts on Important Hedgerows and protected trees**, undermining confidence in both the landscape and ecological assessments.

Taken together, these matters demonstrate that the Applicant has not shown that the likely significant effects on landscape character, visual amenity, tranquillity and the wider rural environment have been fully assessed or adequately mitigated. Consequently, the conclusions of the Landscape and Visual Impact Assessment should be afforded limited weight.

Chapter 8: Ecology and Biodiversity

The Norfolk Biodiversity Plan identifies Site 5 as part of the Woodland Core Area. It is part of the Woodland Network in the UK Green Infrastructure Strategy. The intention of the Woodland Network is to allow species to migrate freely across the open landscape from one area of woodland to another, in order to ensure genetic diversity.

Site 5b has been identified as a Woodland Improvement Area and a Network Expansion Zone 2 in the National Habitat Network. This means that to meet our strategic goals, we should be increasing woodland in this area rather than covering the landscape with industrial infrastructure.

Site 5 is currently in the Countryside Stewardship Middle Tier and is a Farm Wildlife package area. It is also a Climate Change Vulnerability Buffer area. It is being actively removed from these environmental schemes in order to cover it with solar infrastructure. This is not an effective use of public money. These fields have been specifically funded to encourage wildlife to breed on them, to protect endangered species and to protect against climate change. Removing them from this purpose and destroying these preserved and newly enhanced habitats in order to build a permanent 400KV substation and utility scale solar infrastructure on them would not be in the interests of our national security.

8.1 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.

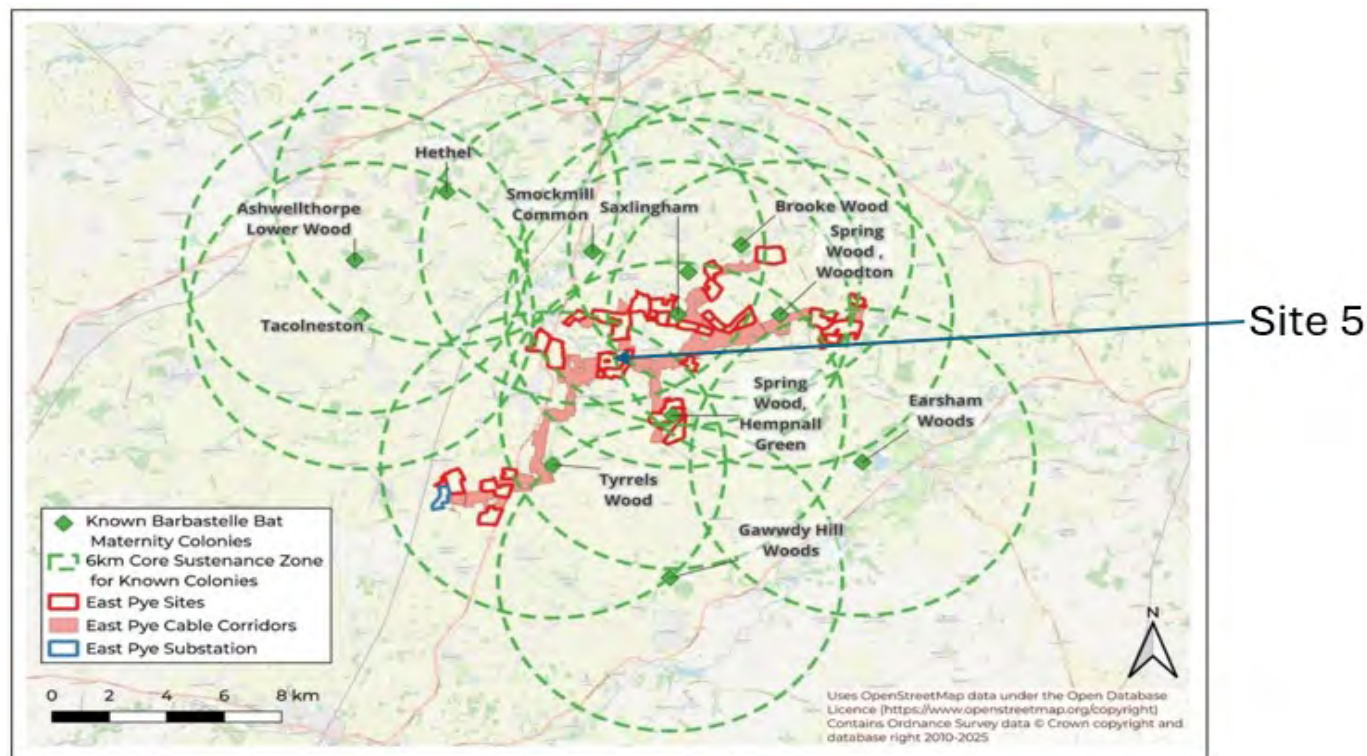


Figure 8.1 From Norfolk Barbastella Bat Study Group report - Barbastelle Maternity Colonies in the East Pye Solar Scheme Area at December 2025

Site 5 of the East Pye Solar proposal lies within one of the strongest regional landscapes for Barbastelle bats (*Barbastella barbastellus*), and recognised in the Bat survey completed by East Pye Solar as part of the Environmental Statement as “Nationally significant”. The Barbastelle bat is a UK Priority Species, Annex II species, and one of the rarest and most disturbance-sensitive bats in Europe. Norfolk has been identified as one of the core areas suitable for the implementation of the species recovery programme for this rare species.

As can be seen from the recent study conducted by the experts - Norfolk Barbastella Bat Study Group; Site 5 is at the centre of seven overlapping Core Sustenance Zones for maternity colonies of barbastelle bats (Norfolk Barbastella Bat Study Group report - Barbastelle Maternity Colonies in the East Pye Solar Scheme Area at December 2025). This is further supported by the findings of the Bat Survey conducted on behalf of East Pye Solar (Environmental Statement Vol 3 Appendix 8.3) which found high numbers of Barbastella Bats traversing Site 5, peaking in the month of July for the section referred to by EPS as 5a, and September for the section referred to as 5b.

This area of South Norfolk is recognised for:

- Extensive hedgerow networks
- Ancient woodland blocks within dispersal range
- Dark, low-disturbance rural landscapes
- High invertebrate abundance in arable margins and ditches

Site 5a was part of the parkland that was Boyland Hall estate and still contains features of this which support the Barbastelle along with other species of bat. The whole of Site 5 is part of the Rural Dark Skies area, has ancient and important hedges along with Veteran and Ancient trees (as also recognised in EPS document - Hedgerow and Tree Preservation Order Plan 2.12) identified areas that are part of the England Woodland Grant Scheme (MAGIC map), is part of the Countryside Stewardship Scheme and Climate Change Vulnerability Buffer Area. All these initiatives lead to the encouragement and incentivisation for the maintenance and further creation of favourable habits. Long established watercourses to both the West and East boundaries of the site as well as ponds provide the ongoing support for the abundance of wildlife that this Site supports.

Barbastelles typically forage up to 6 km from roosts and rely on continuous, unlit hedgerow corridors. The landscape of Site 5 provides exactly these conditions and as can be seen from the above map showing the Core Sustenance Zones of the identified maternal colonies, Site 5 sits within at least 7 of these.

Barbastelles are a highly sensitive receptor and are:

- Light-averse
- Highly sensitive to noise and disturbance
- Dependent on linear features for navigation
- Low-flying foragers (often <2 m above ground)
- Dependent on large, connected landscapes

Even small changes in lighting, hedgerow structure, or disturbance can cause roost abandonment, loss of foraging habitat, or severed commuting routes. Clearly the construction of Site 5 will result in hedgerow corridors being broken, will reduce low level flight lines, and will sever the commuting routes as well as removing the entire Site as a foraging ground

It is well documented that fragmentation is one of the primary drivers of Barbastelle decline.

Barbastelles are among the most light-averse bat species in the UK. In section 4.3.30 of the Environmental Statement Volume 1 Chapter 4 The Scheme – It clearly states the intention to remove the Dark Sky status that is protective to Barbastelle bats when it states that “The lighting of the Project Substations, National Grid Substation and BESS would be in accordance with health and safety requirements, particularly around any emergency exits where there would be lighting, similar to street lighting that operates from dusk.” The intention of the project is to clearly introduce light to Site 5 from the hours of Dusk.

It goes on further to state that “Motion sensing lighting will be implemented in the National Grid Substation, Project Substations and BESS and other critical electrical infrastructure to be used only for maintenance and security purposes”. Again, this is introducing light into an environment that has never had it, removing the Dark status that supports the Barbastelle.

During the construction and decommissioning phases of Site 5 the Environmental Statement states “Temporary on-Site lighting will be required during construction and decommissioning to enable safe working in hours of darkness, within the agreed working hours. This lighting will be suitably designed as far as reasonably practicable to not cause nuisance and would accord with good practice measures to minimise light spill and glare.” There is no recognition as to the negative impact this will have at Site 5 and on the bat population that will be clearly impacted.

It will disrupt their nocturnal behaviour, block their movements along the recognised Important Hedgerows either due to their removal (as part of the access works to Site 5 and along the B1527) or through disruption caused by vastly increased human activity near them during construction. Their foraging areas in Site 5 will be lost.

The permanent loss of foraging habitat as a result of the construction of Site 5, along with hydrological and Invertebrate impacts and the cumulative impacts of other nearby solar site proposals and other ongoing construction projects will result in the collapse of the local population of Barbastelle Bats.

Barbastelles are protected under:

- Habitats Regulations 2017 (EPS)
- Wildlife and Countryside Act 1981
- NERC Act 2006 (Section 41 Priority Species)
- Natural England Bat Mitigation Guidelines (2023–2025)

Any development causing:

- Disturbance
- Fragmentation
- Loss of foraging habitat
- Lighting impacts
- Barrier effects

requires a protected species licence and must demonstrate avoidance, not just mitigation. Avoidance is not achievable as a result of the construction, operation and decommissioning of Site 5 of the East Pye Solar proposal and the fact that it has been shown by EPS' Bat survey that the entire Order Limit spans this Nationally Significant population of bats.

These impacts cannot be mitigated due to the scale, layout, fencing and lighting requirements of the proposal.

Other Bats

The bat survey completed on behalf of East Pye Solar (document 6.3.8.6) records that Site 5 (5a and 5b) have significant numbers of bats that inhabit it. These include not only the rare Barbastelle discussed above but also:

- Serotine - **Status: Red List Vulnerable, Protected under Annex IV, EU Habitats Directive** Will be affected by the proposed changes to habitat structure, foraging opportunities and landscape connectivity
- Nathusius' Pipistrelle- **Status: Rare, Red List Near Threatened, Protected under Annex IV, EU Habitats Directive** , - - Winter Migratory - Recordings at Site 5 in September only would be explained by the fact they are a Winter Migratory Species. The Bat Conservation Trust states that *"At present, threats to the species would appear to be reduction in insect prey due to degradation of water quality, loss of foraging habitat such as woodland, treelines and hedgerows plus loss of roosting habitat."* Removal of the established hedgerows and disturbing the treelines will impact heavily on this species.
- Common Pipistrelle - feeding habitats include woodland, hedgerows and farmland, all of which will be disturbed or removed with the proposal to Site 5
- Brown Long-eared bat - habit of flying low to the ground which will not be possible with proposed infrastructure to Site 5
- Daubenton's Bat - Site 5 contains a watercourse and is in relatively close proximity to the River Tas. It also contains a tunnel system in the form of the Medieval brick culvert system that has not been surveyed to ascertain if it is a possible roosting site which would explain the presence of this species in Site 5.
- Natterer's bat - According to the Bat Conservation Trust, emergence of the Natterer bat reaches its peak 1hr after Sunset. The Nighttime Bat survey conducted on behalf of East Pye Solar only stayed at each starting point 30mins after sunset, therefore the risk is the number of recorded emergence for this species is significantly under represented across not only Site 5 but the whole Order Limit.
- Noctule - Commuter corridor hedgerows and treelines are of great significance for this species and therefore the proposed removal of the established hedgerows which are classified as "Important" as well as the introduction of 4.5m high solar structure will significantly impact this species.
- Soprano Pipistrelle - Will be affected by the habitat changes proposed by the industrialisation of Site 5.

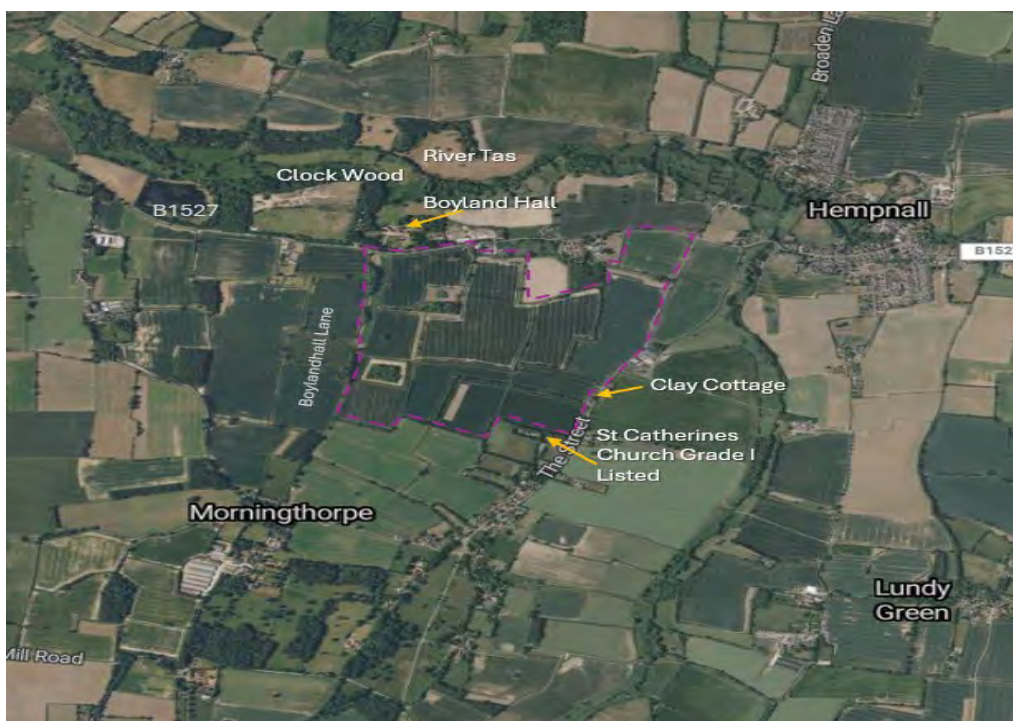


Figure 8.2 Map of Site 5 in relation to surrounding trees and woodland used by multiple species of bat

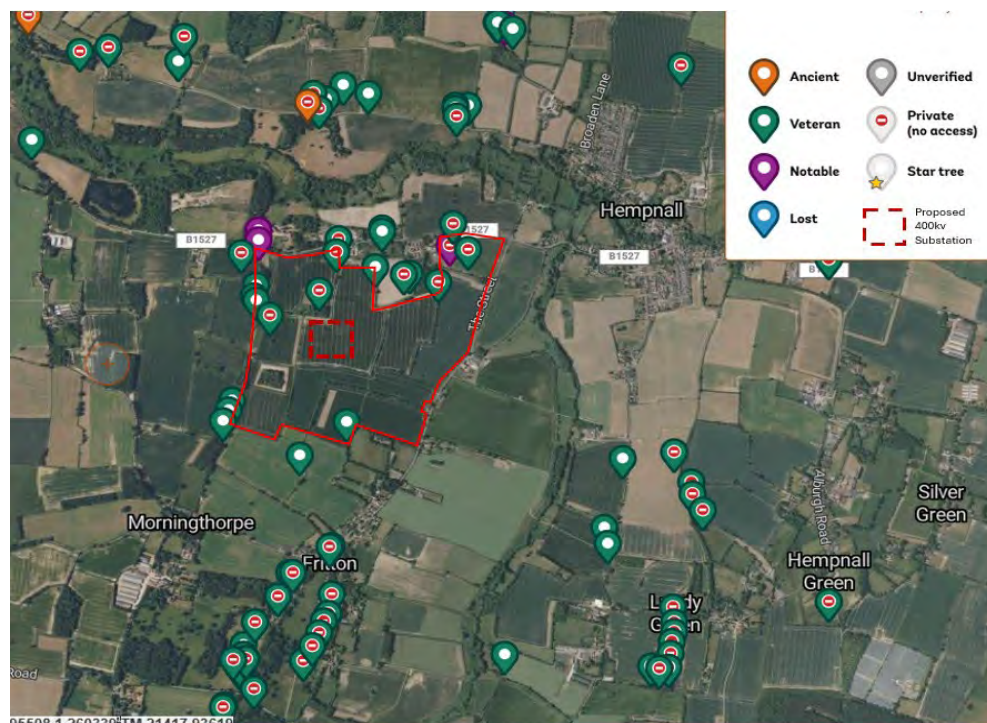


Figure 8.3 Map Showing Woodland Trust Tree Classification around Site 5 as of February 2026 (For Illustration Purposes only. Base map used from Woodland Trust Ancient Tree Inventory.)

The evidence from the Norfolk Barbastella Bat Study Group, East Pye Solar's Bat Survey, and site records shows that Site 5 lies at the core of multiple overlapping Core Sustenance Zones for barbastelle maternity colonies and supports a nationally significant, disturbance-sensitive barbastelle population; the scheme would permanently fragment and degrade continuous, unlit hedgerow corridors, sever commuting routes, remove key foraging habitat and introduce sustained lighting, noise and human disturbance during construction, operation and decommissioning, effects that are intrinsic to the proposal and cannot be reduced to avoid adverse impacts on barbastelle favourable conservation status.

In addition, Site 5 supports significant populations or regular records of other legally protected and conservation-priority bats — including serotine, Nathusius' pipistrelle, common and soprano pipistrelles, brown long-eared, Daubenton's and Natterer's bats and noctules — all of which rely on the site's woodland, hedgerow networks, watercourses, veteran trees and dark, low-disturbance landscape for roosting, commuting and foraging; the proposed removal or alteration of hedgerows, treelines, low-level flightlines, and potential roost features (including an unassessed medieval culvert) plus temporary and permanent lighting and increased human activity would materially harm these species' habitat and connectivity and is likely to cause local population declines.

Taken together, the scale, layout, fencing and lighting requirements of the development mean avoidance cannot be demonstrated for barbastelle or for the suite of other protected bats; the proposal therefore fails to meet the Habitats Regulations 2017, relevant Natural England guidance and local biodiversity policy, and should be refused.

8.2 Skylarks

Skylarks are classified in the UK as Red under the Birds of Conservation Concern 5: the Red List for Birds (2021) due to the severe national decline in numbers over recent years, with a 63% drop in numbers between 1967 and 2016 (British Trust for Ornithology). Regular sightings of Skylarks within the proposed Site 5, have been documented over recent years.

Skylarks diet consists mainly of invertebrates such as worms but will also eat seeds and grain. Foraging on farmland or grassland makes up the main feeding method for the Skylarks, but they will sometimes catch insects in the air.

Skylarks are ground nesting birds. They need open fields with long sight lines to detect predators. They form their nests in the depressions in the ground within short vegetation. It has been recognised in the Solar industry that areas that are preferred by Skylarks for nesting and breeding are also ones that are now being identified by companies as being most suitable for solar developments due to the very nature that they are flat, wide areas that afford clear views. The

Solar Industry has also stated that they “recognise the presence of solar arrays is therefore not conducive to nesting by skylarks” due to the fact that Skylarks avoid tall structures such as the 4.5m Solar Arrays and the 13m tall 400kV Substation proposed for Site 5.

Currently Site 5 does not contain tall structures, it has areas of historical woodland and ancient hedgerows. It is part of the Countryside Stewardship Scheme (tier 2), Climate Change Vulnerability Buffer area, identified as part of the Woodland Priority Habitat Network. It has been managed in a way to maintain wide field margins ensuring that these habitats are preserved and available to ground nesting birds. Whilst Solar Energy UK refers to unpublished data conducted in a limited number of Solar Sites (Just states more than 30) that has shown the presence of Skylarks in just over half of these, meaning it could be as low as only 15 sites. They state that some individual birds were displaying foraging behaviour, no recorded nesting sites for Skylarks have been recorded to date.

Below: Figure 8.4 View along Wildlife “managed” field margins at the North of Sub-site 5a, (ancient hedge of far left of photograph) as of May 2026



The evidence being used to justify the removal of habitats that are conducive to ground nesting birds is not robust. It has been conducted across smaller sites with shorter infrastructure (not the 4.5m tall tracking panels) and the sample number is not statistically significant. With numbers still declining, ground nesting birds need to have their current habitats protected and expanded, not removed and replaced with the expectation that they will go to areas the developers have now set aside for them.

The construction and operation of the 400kV Substation, welfare buildings, offices, switching gear, Inverters, 4.5m tall solar arrays as well as the construction compound with associated hard surfaced access roads proposed for Site 5 will remove this potential nesting and foraging habitat for this protected species which is still declining in numbers. The proposal is likely to cause a net loss of Skylark breeding habitat, contrary to NPPF Section 15, the Environment Act 2021

biodiversity duties and best-practice guidance for farmland bird conservation.

From the Environmental Statement Vol 1 Chapter 8 Ecology and Biodiversity - the Breeding Bird Surveys recorded 81 skylark breeding territories across the survey area, with 70 of those within areas proposed for permanent development.

The construction phase would remove open arable habitat and bring noise, movement and machinery that can cause nest abandonment and reduce breeding success; disturbing or destroying active nests risks contravening the Wildlife and Countryside Act 1981. Operation of the scheme—4.5 m tracking panels, a 13 m 400 kV substation, buildings, access roads and compounds—reduces visibility and can increase predation risk, and skylarks typically avoid nesting within panel arrays, so the development is likely to cause a net loss of breeding habitat and could undermine any biodiversity net gain obligations under the Environment Act 2021. Decommissioning may cause temporary disturbance but much infrastructure could remain, limiting full habitat restoration and long-term biodiversity outcomes required by consent conditions or BNG commitments.

The scheme proposes mitigation such as skylark plots, rotational arable management and new grassland (East Pye Solar document - Outline Landscape and Ecology Management Plan 7.1, Environmental Statement Volume 1 Chapter 8 Ecology and Biodiversity). Any mitigation must be demonstrably effective, legally secured through planning obligations or conditions, and consistent with the statutory biodiversity duty in the Environment Act 2021 and the National Planning and Policy Framework Chapter 16. However, the evidence for mitigation is weak: cited industry data are unpublished or from small samples, and may not be applicable to the taller arrays and larger infrastructure proposed for Site 5. Research indicates skylarks rarely nest within panel arrays, so mitigation that does not guarantee large, open, panel-free nesting areas may not compensate for habitat loss. Where harm cannot be avoided, NPPF Section 15 requires clear justification, consideration of alternatives and appropriate compensation or offsetting. The ES's findings of negligible construction/decommissioning impact and a moderate operational benefit depend entirely on mitigation working in practice—a risky assumption given skylark declines and their priority status.

Key statutory and policy context includes the Wildlife and Countryside Act 1981 (protection of wild birds, eggs and nests), the Environment Act 2021 (public bodies' biodiversity duty and biodiversity net gain requirements where applicable), NPPF Section 15 (requirement to conserve and enhance biodiversity and avoid net loss of priority habitats/species), UK biodiversity frameworks identifying skylark as a priority species, the Hedgerows Regulations 1997 (where relevant), and SSSI protections under the Countryside and Rights of Way Act 2000. Local planning policies and biodiversity strategies will also apply and typically require avoidance, mitigation, compensation and monitoring to meet national duties and any BNG commitments.

Site 5 supports open habitat used by a Red-listed, declining species. The proposed development, with 4.5m tall panels, a 400kV substation and associated infrastructure—would remove and fragment that habitat. Given statutory protections for these birds, the National Planning and Policy Framework's biodiversity tests and the Environment Act 2021's biodiversity duty and Biodiversity

Net Gain expectations, the proposed mitigations are uncertain and are not sufficient which will cause a net loss skylark breeding habitat and fail to meet policy and legislative requirements. East Pye Solar have based their conclusion that the population of Skylarks in the Order limit is unlikely to be considered Nationally important on survey data from 2007 which is 19 years old. This is not statistically sound and risks the understating of the importance of the skylark population in this area especially as Site 5 is within the wider area scheme designed to encourage and support them.

The proposed mitigations are not sufficient when balanced with the Red List status and declining populations of skylarks.

- The permanent loss of open arable habitat at Site 5, a key breeding area, cannot be fully offset by skylark plots or grassland creation, given the species' specific nesting requirements and the limited evidence for successful mitigation within solar arrays.
- The Environmental Statements's reliance on speculative mitigation and monitoring does not meet the precautionary principle or the policy imperative to halt and reverse declines in priority species.

8.3 Turtle Doves

The UK population of Turtle Doves has declined by 98% since 1994 (BTO/JNCC/RSPB Breeding Bird Survey) and they are included in the Red List - Birds of Conservation Concern 5, 2021 and are currently a priority species.

According to the IUCN, their numbers are declining and it considers them as Vulnerable. The Wildlife Trust states that they are the fastest declining bird in the UK and are on the brink of extinction with the British Trust of Ornithology(BTO) stating that the Turtle Dove is being lost from its former strongholds including East Anglia. The RSPB states that Turtle Dove populations are now concentrated in southern and eastern England. The overall population of Turtle Doves has declined by 99% between 1967 and 2023 in the UK. An RSPB-led national survey of Turtle Doves estimated 2,100 breeding territories present in 2021. This decline has been attributed to the loss of quality and the quantity of their breeding habitats - dense hedges and scrub, seed-rich plants and accessible water, all of which should be within 300m of each other. Browne *et al.* (2004) showed that breeding density fell in proportion to loss of the hedgerow and woodland edge and Dunn & Morris (2012) showed that foraging impacted on the survival of the young birds.

The BTO identifies specific management actions to help in the conservation effort of the Turtle Doves, "might include the provision of uncropped margin or plots or set-aside, planting buffer strips around arable fields, sowing wild bird seed mixes, restoring or creating semi-natural grassland and managing hedgerows to provide nesting opportunities". Site 5 is part of the Countryside Stewardship (middle tier) Scheme (Farm Wildlife package areas), and Woodland

Core Area, as such it has been actively managed to maintain the ancient hedgerows, have buffer strips left around the crops and encouraging areas of semi-natural grasslands around the banks of the stream in the West as well as the woodland copses known as Long Plantation and Streetland Plantation.

As Turtle Doves have been noted in close proximity (2km) to Site 5, The East Pye Solar proposal of constructing and operating a 400kV Substation, welfare buildings, offices, switching gear, Inverters, 4.5m tall solar arrays as well as the construction compound with associated hard surfaced access roads proposed for Site 5 will remove this potential nesting and foraging habitat for this Vulnerable and protected species. The proposal is likely to cause a net loss of Turtle Dove breeding habitat, contrary to NPPF Section 15, the Environment Act 2021 biodiversity duties and best-practice guidance for farmland bird conservation.

They are also classified as vulnerable globally (on the IUCN Red List) and have declined severely across western Europe due to the continued loss of habitat.

8.4 Lapwing

Site 5 is part of the Countryside Stewardship (middle tier) Scheme aimed at supporting the recovery of the Lapwing (*Vabellus vanellus*), a Red List species that has seen significant population decline.

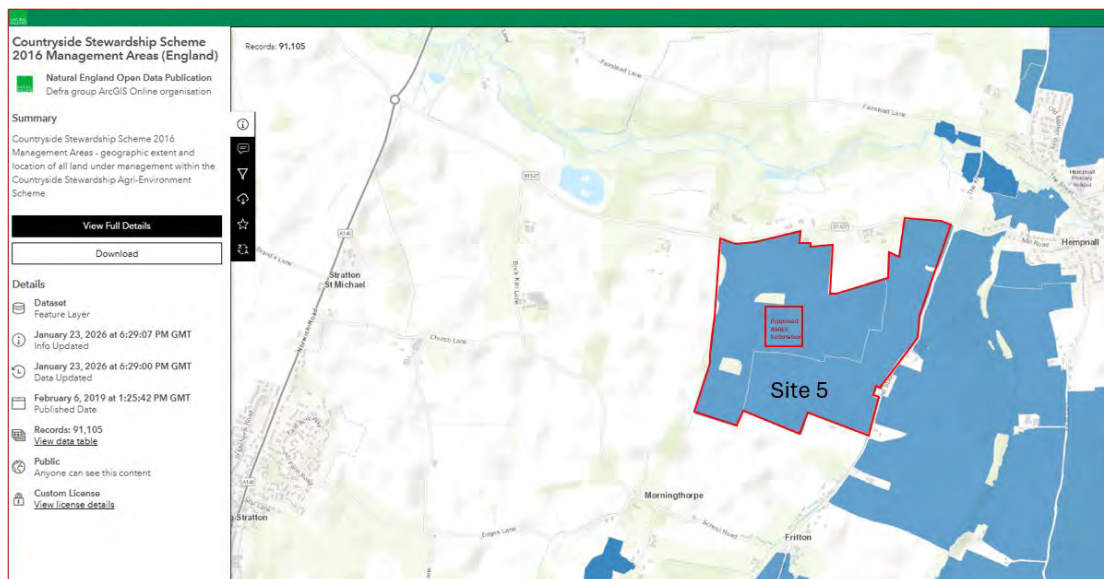


Figure 8.5 Map taken from naturalengland-defra.opendata.arcgis.com. Adapted to show location of Site 5 and 400kV substation in relation to Countryside Stewardship (middle tier) Scheme in blue and proximity to river Tas Wetland -Darker blue

The Proposed Development would result in the loss and disturbance of habitat used by the Northern Lapwing (*Vanellus vanellus*, also known as a Peewit or Green Plover), a UK Red-listed farmland bird species of high conservation concern. Lapwings are ground-nesting birds that rely

on open farmland and wet grassland habitats which are highly vulnerable to disturbance from construction activity, noise, lighting and increased human presence during the breeding season (typically March to July). Site 5 which is currently open farmland and has several watercourses running through and along it, is also in close proximity to the River Tas and the wet grasslands that it provides.

In the Environmental Statement document ES: Chapter 8 – Ecology and Biodiversity APP/6.1.8 the description and visual representation of the watercourse (that has appeared on Historic Maps) has been downplayed. The image below is taken from the submitted document

Photograph 5

Ditch without hedgerow at Sub-Site 5A.



Figure 8.6 Environmental Statement Vol 3 Appendix 8.1Annex B p 52

The following photographs are of the same stream taken in February 2026 and show that it is a far more significant watercourse than the Environmental Statement implies supporting the Lapwing habitat.



Figure 8.7 Stream in Site 5 looking from B1527 end towards Morningthorpe. Right of picture - Boylandhall Lane. Left of picture - proposed construction of compound and 4.5m Solar Panels.



Figure 8.8 Showing Size of the Stream in the West of Site 5 as it flows under the B1527 (16th Century Brick culvert) and the North Boundary

Site 5 is included in the Countryside Stewardship Scheme (Middle Tier) which is aimed to support farmland biodiversity including the recovery of this species. With reported sightings of Lapwings in close proximity to Site 5, their presence on the proposed development site cannot be discounted.

The PEIR does not demonstrate that adequate breeding bird surveys have been undertaken over an appropriate timescale to establish a reliable baseline of lapwing territories within and adjacent to Site 5. Furthermore, the mitigation measures proposed by the Applicant are insufficiently detailed and fail to demonstrate that functional breeding habitat can be successfully retained or

recreated. The loss or disturbance of land that is already delivering recognised biodiversity benefits undermines the purpose of the stewardship scheme and risks damaging established breeding habitat.

As a result, the proposed development of Site 5 with a 400kV substation, Solar Arrays and Construction Compound risks causing disturbance to nesting birds and potential nest failure, contrary to the protections afforded under the Wildlife and Countryside Act 1981 and to national policy objectives for the conservation and recovery of priority farmland bird species.

8.5 Great Crested Newts

Site 5 lies within a landscape highly suitable for Great Crested Newts (GCN), a European Protected Species under the Conservation of Habitats and Species Regulations 2017.

Natural England's standing advice identifies several key GCN features present at Site 5, including ponds, ditches and seasonal waterbodies; hedgerows and treelines; rough grassland, field margins and arable land with damp depressions; and connectivity between ponds and surrounding terrestrial habitat.

To put Site 5 in context, a **Red Zone for GCN centred on Fritton is located approximately 220 m south of Sub-Site 5B, indicating a regionally important GCN population.**

There are also numerous ponds and ditches which occur within the 250–500m zone for consideration (Natural England) of Site 5, with streams running along the site's East and West boundaries that feed the River Tas/Hempnall Beck as well as a ditch at the base of the hedgerow (classified as Important in the submitted document - 2.12 Hedgerow and Tree Protection Order Plan) on the Northern boundary. These ancient hedgerow corridors and high-quality terrestrial habitat across the site provide foraging, shelter and hibernation opportunities. Taken together, this baseline represents an area that is of **High Sensitivity** and **Vulnerability** to moderate disturbance.

The proposed construction works pose a **Severe disturbance** due to— trenching, cable routes, access tracks, soil stripping, pile driving, soil compaction, removal of hedgerow (classified as Important) for access along with a 3.5 ha 400kV substation, Offices, Welfare buildings, Construction compound and the 4.5m Solar arrays with associated inverters and motors, which will result in the removal and degradation of foraging habitat, hibernation sites such as the hedgerow bases, tree roots, and dispersal corridors they form, increasing the fragmentation of the established favourable habitat and the mortality risk to the GCN. In addition the specific risks include crushing by machinery, entrapment in trenches, desiccation in open excavations and disturbance of hibernacula. Construction activities will also cause siltation and pollution (fuel, concrete washout, chemicals), alter groundwater flows and reduce pond hydroperiods, conditions that can lead to

breeding failure. During operation, extensive PV arrays and associated infrastructure will change shading and microclimate, altering ground temperature, moisture and vegetation structure and thereby reducing terrestrial habitat suitability for GCN.

GCN and their habitats are protected under the Conservation of Habitats and Species Regulations 2017, the Wildlife and Countryside Act 1981, and Section 41 of the NERC Act 2006 as a priority species. Natural England's Standing Advice and Great Crested Newt Survey & Mitigation Guidelines (2025) also apply. Any development causing killing or injury, habitat loss, fragmentation or disturbance requires a protected species licence and must demonstrate avoidance of impacts, not merely mitigation. The level of protection afforded Site 5 due to its close proximity to the Red Area signifying an area of Regional Importance is further elevated.

Assessment of the proposal finds that its scale, layout and permanent 60-year structures — including a 400 kV substation, 4.5 m tracking panels, buildings, inverters and access roads — together with a construction compound serving the wider project during the 2–3 year build, mean genuine avoidance is not achievable. The proposal would destroy and fragment high-value GCN habitat, increase construction mortality risk, alter the hydrology of breeding ponds, create long-term movement barriers and contribute to cumulative decline, including impacts on the nearby Red Zone population. Given the scale, fencing and proximity to the regionally important Red Zone, these impacts cannot be adequately mitigated and the proposal fails to comply with Natural England's standing advice, the Habitats Regulations and local biodiversity policies.

Numerous suitable waterbodies lie within 500 m of Site 5, and Natural England advises surveys where a pond or ditch (even seasonal) is within that distance. As of March 2026, pond owners within 150m of Site 5 have not been approached by the applicant to survey for GCN, and confirmed sightings on the site's northern and eastern boundaries indicate presence. No survey data from the applicant has been provided, so there is no baseline to inform design or mitigation. The following maps show the locations of suitable waterbodies within 500 m of the Site 5 boundary.

North Section of Site 5 Bodies of Water Map

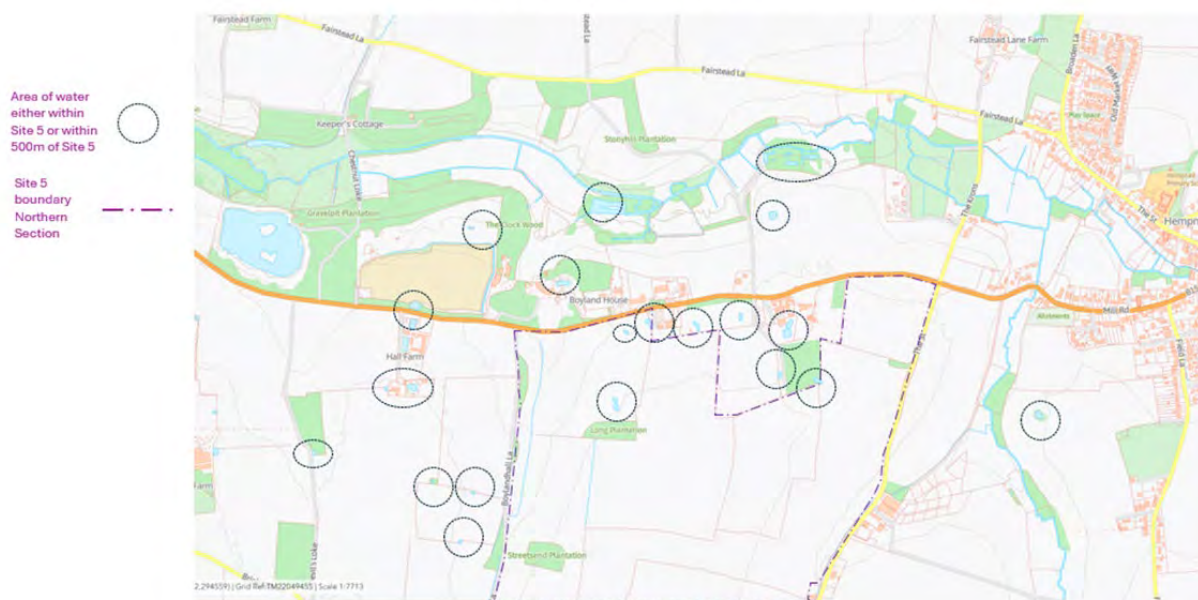


Figure 8.9 For illustration purposes only. Base map used from [magic.Defra.gov.uk](https://magic.defra.gov.uk) Powered by Landmark Solutions (c) Crown Copyright and database rights 2024. Ordnance Survey AC0000805307

South Section of Site 5 Bodies of Water Map

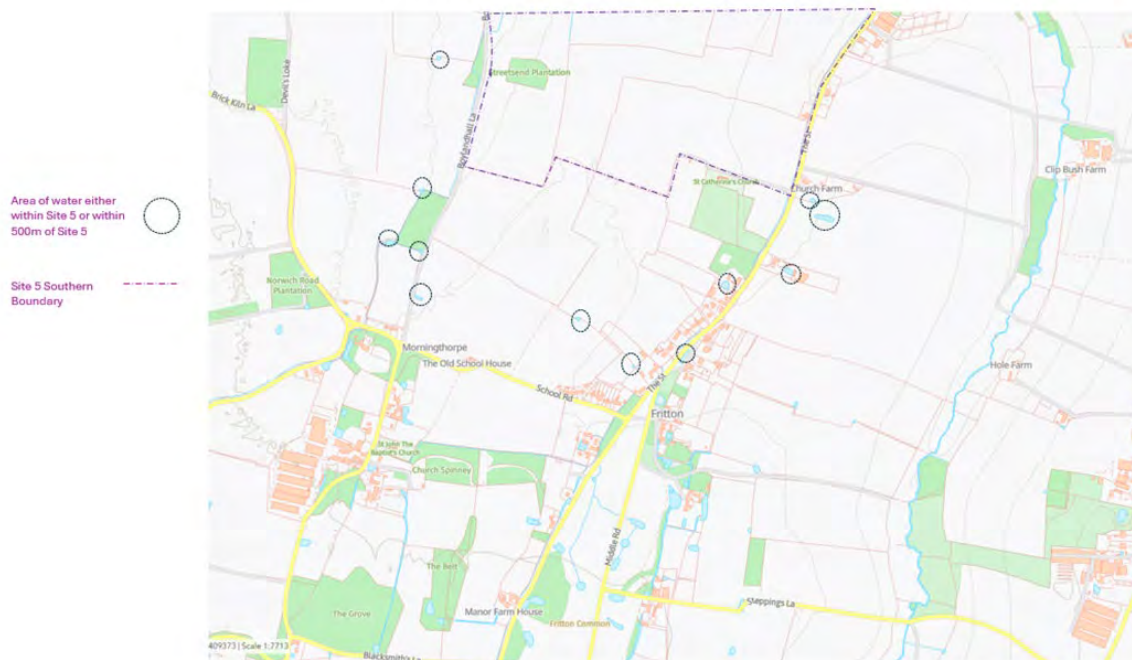


Figure 8.10 For illustration purposes only. Base map used from [magic.Defra.gov.uk](https://magic.defra.gov.uk) Powered by Landmark Solutions (c) Crown Copyright and database rights 2024. Ordnance Survey AC0000805307.

8.6 Badgers

Badgers depend on a varied landscape, using woodland, hedgerows, scrub, and grassland for building setts, foraging, and moving between areas. They usually place their setts in well-drained soils with good cover and close to feeding grounds, and they are particularly vulnerable to disturbance during the breeding and cub-rearing season in spring and early summer. Main breeding setts are essential for raising cubs and sustaining local populations, and disruption at these sites can result in abandonment or even cub mortality. Badgers forage mainly at night, feeding on earthworms, insects, small mammals, and plant material, with grassland and woodland edges providing especially valuable feeding opportunities.

Site 5 with its long established woodlands, hedgerows and field margins that have been managed as part of the Countryside Stewardship scheme provide the ideal habitat for badgers to breed and forage.

The site supports several partially active setts and as many as six clans, although the relatively low number of field signs and recent records suggests that local badger populations may already be under pressure. Construction activities pose risks including injury, mortality, disturbance, habitat fragmentation, and habitat degradation, and a 30-metre buffer is unlikely to prevent indirect impacts such as noise, vibration, and light pollution during sensitive breeding periods. Security fencing, even when designed with gaps, may still impede movement and restrict access to key foraging areas if it is not correctly installed or maintained. While the assessment acknowledges temporary loss of foraging habitat, it compares this to routine agricultural disturbance, potentially underestimating cumulative effects; badgers rely on consistent access to foraging grounds, and fragmentation can reduce breeding success. Artificial lighting, even at low levels, can disrupt nocturnal behaviour and increase stress. The assessment also places significant reliance on embedded mitigation but does not consider how impacts will be managed if new setts are found or if badgers alter their behaviour in response to disturbance. Site 5, which contains woodland not only at the margins but also two separate areas within the proposed development boundary, along with the arable nature and natural watercourses provides the ideal habitat for badgers.

According to the Environmental Statement – Volume 1 Chapter 8, setts within Sub-Site 5a have been recorded (Main and annex setts) during the site survey. This is in addition to the historical records mentioned that are based on road kills, it is clear that there is a level of Badger activity in Site 5.

In the Environmental Statement (vol1, Chp 8), the survey conducted on behalf of East Pye Solar comments on the relatively low number of field signs and recent records which shows that the population of badgers in this area is already under pressure.

Whilst the Environmental Statement does include a survey for the presence of Badgers, the proposed development of this rural area is occurring in a landscape where badgers are protected by

law, but the Environmental Statement down plays the badgers local importance by stating it is being “included for legislative compliance only”.

The document’s claim of a “moderate beneficial” operational effect for badgers is speculative, relying on the assumption that habitat enhancements will succeed and that badgers will readily adapt to altered site conditions, despite evidence that they are sensitive to landscape change and may not do so (Cresswell et al., 1990, Ref 8-69). The “moderate Beneficial” status they give the scheme at the operational phase does not take into consideration the damage the construction phase will have on the setts that have been identified in Site 5. If the badgers have been adversely affected during the 2-3 year construction time estimated by the developer on Site 5 due to the substation, it is unlikely there will be badgers left to “moderately benefit “ from the operational phase.

Although routine maintenance is proposed to avoid nocturnal periods, any deviation from this could still cause disturbance, and the presence of security lighting and ongoing human activity may continue to disrupt natural behaviour.

The assessment also acknowledges that decommissioning will recreate many of the same risks posed during construction, yet it assumes that most infrastructure will remain in place, potentially leaving long-term physical barriers or hazards for badgers. While updated surveys prior to decommissioning are proposed, there is no assurance that future mitigation will be adequate for altered population dynamics or newly established setts.

Mitigation for small/medium Mammals Suggested for Security Fencing

In the Environmental Statement, East Pye Solar have stated that the 2.5m tall deer proof security fencing will be mitigated for the small/medium sized mammals through the use of wildlife corridors and gates in the fence.

There is no robust empirical evidence demonstrating that wildlife gates installed in perimeter fencing around solar farms are regularly used by the small- and medium-sized mammals they are intended to support. Despite their increasing use as a mitigation measure, no UK studies have monitored or verified their effectiveness, and ecological literature repeatedly identifies a significant evidence gap regarding mammal movement through solar-farm infrastructure (The Wildlife Trusts, *A Review of the Evidence on Solar Farms and Nature*, 2025).

Independent reviews of solar-farm biodiversity note that fencing can act as a substantial barrier to wildlife, and that mitigation features such as gates or gaps are often installed without any post-construction monitoring to confirm functionality (CIEEM, *Biodiversity & Infrastructure: A Handbook for Practitioners*, 2018). In the absence of such evidence, it cannot be assumed that wildlife gates maintain ecological connectivity or prevent fragmentation of mammal territories.

Broader research on wildlife passages shows that crossing structures only function effectively when they are species-appropriate, correctly located, and maintained, and when they align with established movement routes. Without these conditions—and without monitoring—there is a high risk that wildlife gates will fail to provide meaningful permeability, resulting in restricted access to foraging grounds, disrupted commuting routes, and increased energy expenditure for mammals attempting to navigate around fencing (van der Ree, R., Smith, D.J. & Grilo, C. (eds.), *Handbook of Road Ecology*, Wiley-Blackwell, 2015).

Camera-trap studies from the United States demonstrate that mammals *may* use openings in fencing, but these observations relate to incidental gaps, not purpose-built wildlife gates, and therefore cannot be relied upon as evidence of effective mitigation. For example, The Nature Conservancy's *North Carolina Wildlife and Solar Study* (2020–2022) recorded foxes, raccoons, and bobcats moving through unintentional openings, but did not evaluate formal wildlife-gate designs. As such, the applicant's reliance on wildlife gates as a means of maintaining connectivity is unsupported by empirical data and should not be considered adequate to offset the known barrier effects of solar-farm fencing.

Given the lack of evidence, the proposal risks causing **habitat fragmentation, reduced foraging access, and long-term impacts on local mammal populations**, particularly species with established territories such as badgers (*Meles meles*) and foxes (*Vulpes vulpes*). Until the effectiveness of wildlife gates is demonstrated through independent monitoring, they should not be treated as a reliable mitigation measure within the planning process.

CIEEM (2018). *Biodiversity & Infrastructure: A Handbook for Practitioners*. Chartered Institute of Ecology and Environmental Management.

The Nature Conservancy (2022). *North Carolina Wildlife and Solar Study: Final Report*. The Nature Conservancy, North Carolina Chapter.

The Wildlife Trusts (2025). *A Review of the Evidence on Solar Farms and Nature*. The Wildlife Trusts, UK.

van der Ree, R., Smith, D.J. & Grilo, C. (eds.) (2015). *Handbook of Road Ecology*. Wiley-Blackwell

8.7 River Tas – Protected Chalk Stream

The River Tas is recognised by both the Environment Agency and the Norfolk Rivers Trust as a chalk stream and is identified within the Environmental Statement (Volume 1, Chapter 8: Ecology and Biodiversity) as a watercourse of high ecological importance. Chalk streams are globally rare habitats, with approximately 85% of the world's examples occurring in England. They are recognised as Priority Habitats and support highly specialised aquatic communities that depend upon stable groundwater-fed flows, exceptional water quality and low sediment inputs. Their ecological integrity is therefore highly sensitive to changes in water quality, sediment loading and disturbance within the wider catchment.

Hydrological Connectivity to Site 5

Although Site 5 does not directly adjoin the main channel of the River Tas, it is hydrologically connected to the chalk stream through several watercourses and field drainage systems that drain into the River Tas catchment.

These include:

- a watercourse running through the western part of Site 5, flowing from Morningthorpe through the historic Boyland estate before discharging into the River Tas;
- a second watercourse running through the centre of Site 5;
- a further watercourse running along the eastern boundary of Site 5, flowing from Fritton before joining Hempnall Beck and ultimately the River Tas; and
- an extensive network of agricultural field drains and modified drainage channels that discharge into these tributaries.

These watercourses provide direct ecological connectivity between the proposed development and the River Tas. Consequently, any deterioration in water quality, increased suspended sediment, nutrient enrichment or accidental pollution arising from construction, operation or decommissioning activities at Site 5 has the potential to affect downstream chalk stream habitats and the protected and priority species they support.

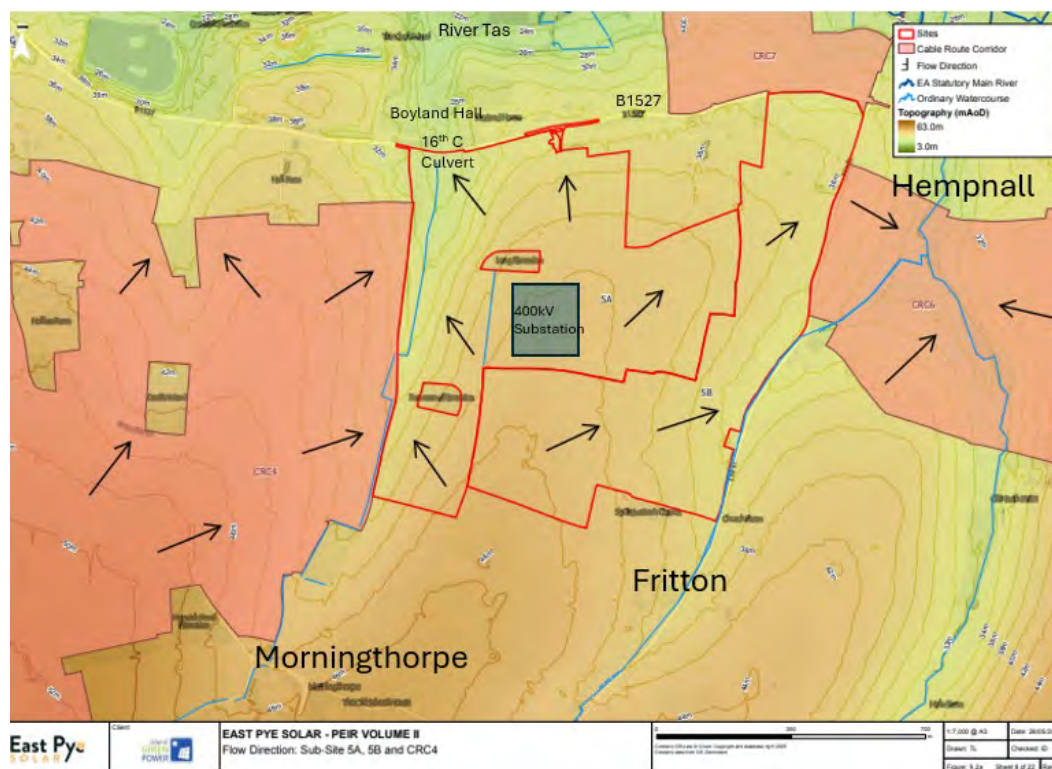


Figure 8.11: Hydrological connections between Site 5 and the River Tas Adapted from East Pye Solar PIER Vol II.

The Ecological Desk Study and Extended Habitat Survey identifies the River Tas and its tributaries as supporting important aquatic habitats together with species including brown trout, bullhead, European eel and diverse aquatic invertebrate assemblages. Records of White-clawed Crayfish also exist within the wider River Tas catchment. These species are dependent upon the high water quality and stable environmental conditions characteristic of chalk streams and are particularly vulnerable to increased sedimentation and pollution.

Figure 8.11 illustrates the hydrological connectivity between Site 5 and the River Tas, demonstrating that the development site contains a more extensive network of watercourses and drainage pathways than is represented within the Environmental Statement. These connections are ecologically significant because they provide direct pathways through which sediment, nutrients and contaminants could be transported to the River Tas during construction, operation and decommissioning.

Given the international importance of chalk streams and the recognised sensitivity of the River Tas, the ecological assessment should demonstrate that all hydrological connections between Site 5 and the chalk stream have been identified, assessed and appropriately mitigated. As set out below, the Environmental Statement does not provide sufficient evidence that this has been achieved.

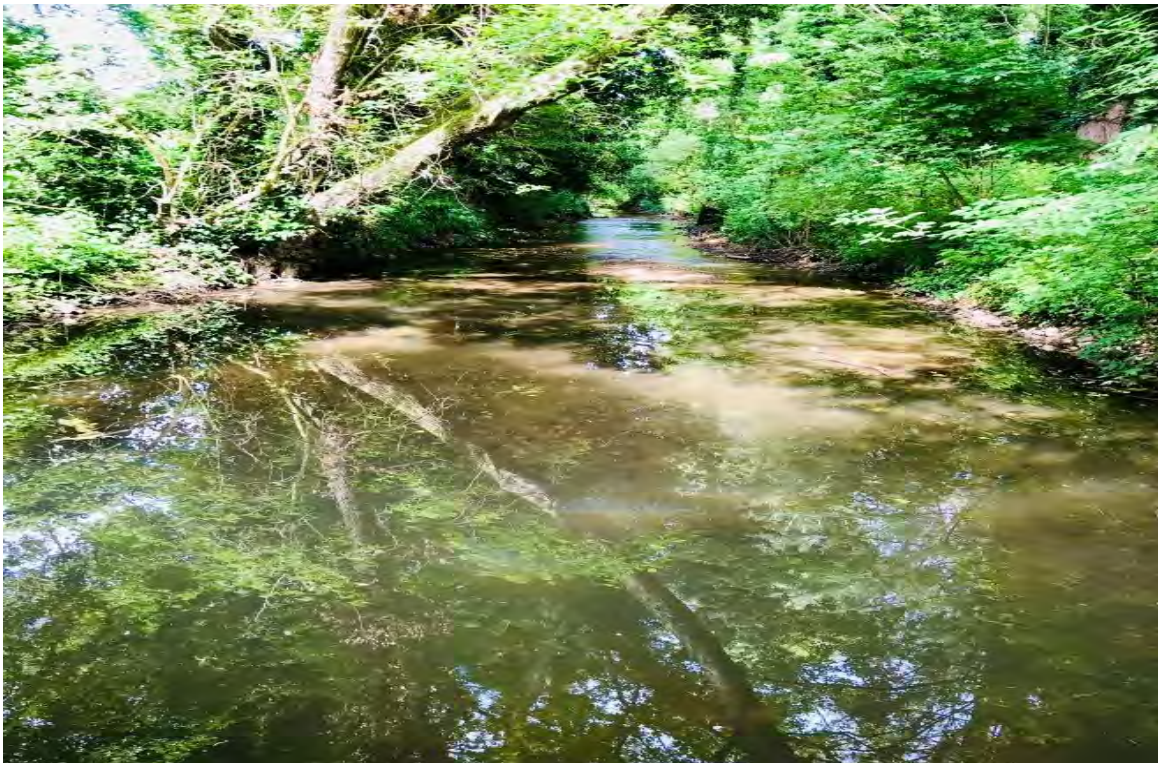


Figure 8.12: River Tas at Hempnall Beck near Site 5.

Potential Effects of the Proposed Development

The proposals for Site 5 include the construction of a 400 kV substation occupying approximately 3.5 hectares, associated buildings and welfare facilities, solar arrays, pile driven or concrete foundations, access roads, cable routes and the principal construction compound for the wider development.

These works would introduce substantial areas of hardstanding and require extensive excavation, cable trenching, foundations and permanent drainage infrastructure across land draining directly towards the River Tas catchment.

The scale of these works has the potential to:

- alter natural surface water drainage pathways;
- reduce infiltration and groundwater recharge to the underlying chalk aquifer;
- increase the volume and velocity of surface water runoff;
- mobilise sediment during construction;
- increase the risk of accidental pollution from fuels, oils and construction materials; and
- affect the quality of water entering the River Tas via connected tributaries.

Given the direct hydrological connectivity between Site 5 and the River Tas, even relatively minor pollution incidents could have disproportionate consequences for this highly sensitive chalk stream ecosystem.

Cumulative Effects

The Environmental Statement does not adequately assess the cumulative ecological effects of the proposed development on the River Tas chalk stream and its tributaries.

Although individual impacts associated with Site 5 are generally assessed separately, the proposed development forms part of a much larger scheme comprising multiple solar sites, substations, cable routes and associated infrastructure distributed across the River Tas catchment. Many of these sites are hydrologically connected through tributaries, field drains and modified agricultural watercourses that ultimately discharge into the River Tas.

The Environmental Statement considers cumulative effects at a strategic level but does not provide a sufficiently detailed assessment of how multiple construction activities across the catchment may interact to affect the ecological integrity of the chalk stream system. Construction of the proposed 400 kV substation, construction compound, cable corridors, solar arrays and associated infrastructure at Site 5 will involve extensive ground disturbance. When considered alongside works at other hydrologically connected sites, there is potential for cumulative increases

in suspended sediment, nutrient mobilisation, accidental pollution and habitat disturbance affecting the River Tas and its tributaries.

The ecological consequences of these combined effects are likely to be greater than those arising from individual elements of the Scheme in isolation. Chalk streams are particularly sensitive to even relatively small changes in water quality and sediment inputs, and incremental deterioration across several connected tributaries has the potential to adversely affect aquatic habitats and species throughout the wider catchment.

The Environmental Statement therefore does not demonstrate that cumulative ecological effects on the River Tas chalk stream have been fully assessed or that the combined impacts of multiple hydrologically connected development areas can be adequately mitigated.

Policy Conflict

The River Tas is recognised as a chalk stream of national ecological importance and is acknowledged within the Environmental Statement as a highly sensitive ecological receptor. Chalk streams are Priority Habitats under the UK Biodiversity Action Plan and are habitats of principal importance for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities Act 2006. Public authorities are required under Section 40 of that Act to have regard to the purpose of conserving and enhancing biodiversity when exercising their functions.

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 require that development proposals do not result in deterioration of the ecological status or ecological potential of water bodies. National Policy Statements EN-1 and EN-3 similarly require applicants to demonstrate that significant adverse effects on biodiversity and the water environment have been avoided, appropriately mitigated or compensated, whilst the Environment Act 2021 places greater emphasis on securing measurable environmental improvement and biodiversity enhancement. Section 15 of the National Planning Policy Framework requires planning decisions to contribute to and enhance the natural environment by protecting and enhancing valued landscapes, sites of biodiversity value and priority habitats.

In relation to Site 5, the Environmental Statement has not demonstrated through a sufficiently robust ecological assessment that:

- all hydrological connections between Site 5 and the River Tas have been identified and assessed;
- the ecological consequences of sediment mobilisation, nutrient enrichment and accidental pollution have been fully evaluated;
- cumulative effects arising from multiple hydrologically connected development areas have been adequately assessed;
- the proposed mitigation measures are specifically designed to protect the River Tas chalk stream ecosystem; or

- the proposed monitoring strategy would detect and enable effective management of unforeseen impacts on downstream ecological receptors.

Given the international rarity of chalk streams, the recognised ecological importance of the River Tas, and the direct hydrological connectivity between Site 5 and the wider catchment, the Environmental Statement does not provide sufficient evidence to demonstrate that the proposal would avoid deterioration of the chalk stream ecosystem or adequately protect its associated habitats and species.

Accordingly, the assessment fails to demonstrate compliance with National Policy Statements EN-1 and EN-3, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, the Natural Environment and Rural Communities Act 2006, the Environment Act 2021 and Section 15 of the National Planning Policy Framework.

8.8 White Clawed Crayfish

White-clawed Crayfish (*Austropotamobius pallipes*) is the United Kingdom's only native crayfish species and is recognised as one of Britain's most threatened freshwater invertebrates. Norfolk remains one of the country's principal strongholds for the species, with the Norfolk Rivers Trust confirming that breeding populations occur within the River Tas and its tributaries. The River Tas catchment is therefore of significant importance for the conservation of this protected species.

The Ecological Desk Study identifies aquatic habitats associated with the River Tas catchment, including Hempnall Beck and connected tributaries. However, the Environmental Statement does not demonstrate that sufficient survey work has been undertaken to establish whether White-clawed Crayfish are present within watercourses hydrologically connected to Site 5 or whether suitable habitat exists within the wider catchment.

This omission is of particular concern because Site 5 contains several watercourses and field drainage systems that discharge towards the River Tas, including:

- the western watercourse flowing from Morningthorpe through Boyland towards the River Tas;
- the central watercourse crossing Site 5;
- the eastern watercourse flowing from Fritton to Hempnall Beck; and
- the wider network of agricultural drainage channels connected to these tributaries.

These watercourses provide potential pathways through which construction-related sediment, pollutants or other contaminants could reach downstream habitats supporting White-clawed Crayfish.

The proposed development at Site 5 includes a major construction compound, a 400 kV substation, extensive cable trenching, access roads, hardstanding, foundations and associated infrastructure. These activities have the potential to increase suspended sediment, alter drainage pathways and increase the risk of accidental pollution entering hydrologically connected watercourses. White clawed Crayfish are particularly sensitive to deterioration in water quality, increased sediment deposition and habitat disturbance, making them especially vulnerable to these forms of impact.

The Environmental Statement concludes that ecological effects can be adequately controlled through embedded mitigation measures, the Outline Construction Environmental Management Plan and standard pollution prevention measures. However, it does not provide a species-specific assessment of the potential effects on White clawed Crayfish, nor does it demonstrate that the complete drainage network associated with Site 5 has been considered when assessing downstream ecological risks.

Norfolk Wildlife Trust has raised the same concern in its Relevant Representation dated 10 June 2026, noting that records supplied by the Norfolk Rivers Trust identify White clawed Crayfish within approximately 2 km of the Scheme on the River Tas. Norfolk Wildlife Trust recommends that further surveys are undertaken by the Applicant to determine whether the species is present and that appropriate biosecurity, pollution prevention and sediment control measures are implemented to safeguard downstream habitats.

In the absence of targeted surveys, species specific assessment and robust evidence demonstrating that construction, operation and decommissioning activities would not adversely affect downstream crayfish habitat, the Environmental Statement has not demonstrated that likely effects on White-clawed Crayfish have been adequately assessed.

Given the recognised importance of the River Tas catchment for this endangered native species, together with the direct hydrological connectivity between Site 5 and the chalk stream system, a precautionary approach should be adopted. The Examining Authority should require further surveys, a species-specific impact assessment and enforceable mitigation, monitoring and biosecurity measures before it can be concluded that the proposed development would avoid adverse effects on White-clawed Crayfish and their habitat.

8.9 Hedgerows and Significant Trees

Site 5 encompasses an area that used to be parkland to the historic Boyland Hall and as such has many significant deciduous trees and species-rich native hedgerows which are identified as

a Priority Habitat. Priority habitats are of principal importance to England and through the protection of these Site 5 supports Biodiversity

(<https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england>).

Boylandhall Lane, now a restricted access unmetalled track is lined with trees which includes specimens with Tree Protection Orders. This would have been the main route for the family and staff from the succession of Boyland Halls (from mid 16th Century through to the mid 20th Century) to connect with the village of Morningthorpe and St John the Baptist's Church . From historic maps it can be seen that large sections of Site 5 and the surrounding area were woodland until after the 1950's when the old Boyland Hall went into decline, was demolished and land sold off. With much of the remaining woodland being on privately owned ground, the opportunity to accurately classify the remaining specimens is limited and therefore the number of trees that would qualify for Tree Preservation Orders and Veteran or Ancient Status will be understated in current records.

Site 5 is part of Woodland priority Habitat Network (England) with not only the areas of woodland inside Site 5 included but also the ancient hedgerow along the Northern boundary with the B1527 which is under threat of being removed to gain access to the site.



Magic

Countryside Stewardship Targeting & Scoring Layers

Biodiversity

Habitats

Woodland Priority Habitat Network (England)

■ High Spatial Priority

■ Lower Spatial Priority

Figure 8.13 Taken from MAGIC map showing Site 5 and the Woodland Priority Habitat Network (England) www.magi.defra.gov.uk

As can be seen from the Environmental Statement Hedgerow and Tree Protection Order plan below, Site 5 not only encompasses Important Hedgerows in its boundary but also significant long runs of Important Hedgerows throughout the proposed site that interconnect and form the long established wildlife corridors.

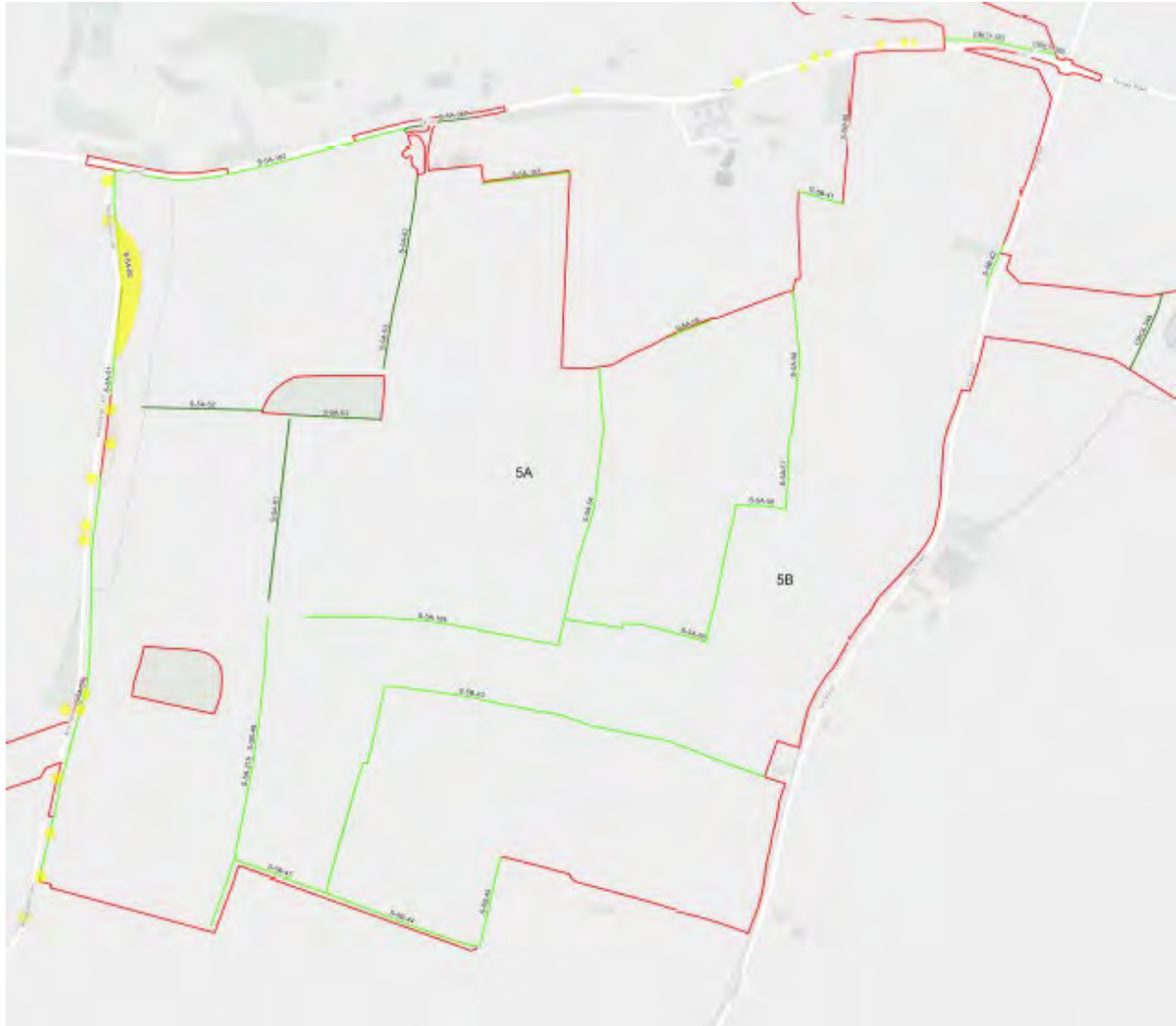


Figure 8.14 Light Green signifies Important Hedgerows, dark green - hedgerows and yellow - tree preservation orders.

As can be seen from the historical OS maps from 1880's the area on the North West boundary that has Tree Preservation Orders in place, was once part of a much larger deciduous woodland. With wildlife continuing to be under pressure from a reduction not only in the amount of habitat available to them, but the connectivity of that habitat. It is more important than ever to at least maintain the established trees and hedgerows ensuring that they are not either removed or fenced off which would lead to destruction of these established rich and biodiverse areas.



Figure 8.15 Adapted from 1921 OS Map to show approximate boundary of Site 5 and historically wooded areas

As previously stated, Site 5 is edged with and contains ancient and historic hedgerows as well as trees recognised by The Woodland Trust as Veteran and Notable. It has been recognised that newly planted hedges will take between 60 to 100 years to sequester the same amount of Carbon as the native ancient hedgerows they are replacing. Whilst each specimen can grow to a height comparable with the removed hedge within the quoted 15 years, the density and variety of the current hedge will never be fully restored. There is no recognition within the Environmental Statement as to what the wildlife will do whilst it waits for the replacement hedges to provide the habitats that they have lost. Even disturbing them for a season will impact negatively upon them and with the replanting not commencing until the project is completed and the access has been widened they will be further displaced. With hedgerow removal occurring across the entire project site the cumulative impact to the wildlife is understated and will negatively impact many species.

The proposed development conflicts with the requirements of the National Policy Statement for Renewable Energy Infrastructure (EN-3) and the overarching National Policy Statement for Energy (EN-1). EN-1 (paragraphs 5.4.3–5.4.5) requires applicants to avoid significant harm to biodiversity and to demonstrate that impacts have been avoided, mitigated, or compensated in line with the mitigation hierarchy. EN-3 specifically recognises that solar developments can have significant impacts on land use, landscape character, and biodiversity, particularly where they affect established vegetation and field boundaries.

In addition, the National Planning Policy Framework (NPPF) requires that development minimise impacts on biodiversity and provide measurable net gains (paragraphs 180–182). It also states that development resulting in the loss or deterioration of irreplaceable habitats, including veteran trees and ancient hedgerows, should be refused unless there are wholly exceptional reasons (paragraph 180(c)).

The Environmental Statement acknowledges the presence of important hedgerows and TPO trees but fails to adequately assess their function as interconnected wildlife corridors. This is contrary to EN-1 (paragraph 5.4.6), which emphasises the importance of maintaining ecological networks, and to the NPPF requirement to promote the conservation, restoration, and enhancement of priority habitats.

Critically, the Environmental Statement fails to address the **cumulative impact** of hedgerow removal across the East Pye Solar project. The widespread loss and fragmentation of habitat corridors will result in significant adverse effects on biodiversity, including priority and protected species, contrary to the protections afforded by the Wildlife and Countryside Act 1981 and the biodiversity duty under the NERC Act.

Furthermore, the temporal gap between habitat removal and re-establishment is not addressed. Replanting will only occur after construction and access works are completed, leaving a prolonged period during which species reliant on these habitats will be displaced with no viable alternative. This is inconsistent with the mitigation hierarchy required under EN-1 and represents a significant adverse residual effect.

8.10 Rare Flora

Site 5 of the proposed East Pye Solar Project lies in close proximity to Fritton Common SSSI and within a wider landscape (Morningthorpe and Fritton) known to support a high concentration of rare and locally scarce plant species associated with damp acidic grassland, ancient trees, pond systems, and long-established arable and verge habitats. The SSSI is particularly sensitive to hydrological change, nutrient enrichment, dust deposition, and microclimatic alteration, and supports notable assemblages including epiphytic lichens and wet meadow flora.

The Norfolk Rare Plant Register further identifies species of conservation concern in the surrounding arable landscape, including corn marigold (*Glebionis segetum*), listed on the England Red List, alongside a wider assemblage of threatened species (estimated at no fewer than 88 within the affected area), including sulphur clover (*Trifolium ochroleucon*) and dyer's greenweed (*Genista tinctoria*), both of which are highly vulnerable to verge disturbance, road widening, and construction traffic. These habitats—often confined to extremely narrow, historically continuous verge and field-edge systems—represent irreplaceable ecological and cultural assets formed over centuries of low-intensity land use and cannot be recreated through mitigation or biodiversity net gain measures.

Despite this, the Environmental Statement fails to include systematic botanical survey data across Site 5 and its zone of influence, including road verges, field edges, and boundary features likely

to be directly or indirectly affected. This omission constitutes a failure to comply with Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, which requires a full assessment of likely significant effects on biodiversity, with particular regard to species and habitats. The absence of detailed botanical surveys by appropriately qualified specialists (e.g. FISC Level 5 or above), alongside the lack of seasonal survey coverage and hydrological modelling, means that the Environmental Statement cannot be said to provide sufficient information for lawful decision-making. This is contrary to established case law, including *R (Blewett) v Derbyshire County Council* and *R (Morge) v Hampshire County Council*, which confirm that decision-makers must be adequately informed of environmental impacts, and *R (Hart District Council) v Secretary of State*, which highlights the risks of relying on incomplete or inadequate ecological survey data.

Furthermore, the proposed construction and operation of Site 5—including large-scale soil disturbance, altered surface water runoff, shading, and intensified construction traffic—poses a credible and unassessed risk to the hydrological and ecological functioning of Fritton Common SSSI and the wider botanical network. This conflicts with protections afforded under the Wildlife and Countryside Act 1981 and Natural England's statutory duties in relation to SSSIs, as well as policy requirements within the National Policy Statement for Energy (EN-1) and National Planning Policy Framework (Section 15), both of which require avoidance of harm to designated sites and priority habitats and the application of the mitigation hierarchy.

The failure to properly identify, assess, and avoid impacts on rare plant assemblages and their supporting habitats also undermines any claim of compliance with the biodiversity net gain provisions of the Environment Act 2021.

In the absence of robust baseline data, scheme design that demonstrably avoids sensitive botanical areas, and full public consultation on revised proposals, the application is fundamentally unsound and does not meet the legal and policy tests required for the granting of development consent

8.11 Inadequate Mitigation for Common Species

Site 5 as discussed previously formed part of the historic Boyland Hall estate and still contains two isolated copses, native-rich hedges, veteran trees, and streams. The proposal will introduce deer proof fencing, artificial lighting, solar arrays that are constantly repositioning, a 400kV substation which will introduce significant amounts of noise along with switching gear and inverters that will be surrounded by deer-fencing. In addition to this is a large construction compound with access roads for the significant number of HGVs needed to not only construct the proposed infrastructure on Site 5 but also for surrounding Sites will be included on this currently open space. Abnormal Indivisible Loads will also be accessing Site 5. This vast area of deer-fenced land will significantly impact the ability of creatures, particularly the local herds of roe and red deer, to freely cross the landscape from woodland to woodland, forcing them onto the surrounding roads - the busy B1527 which will be subject to significant project HGV and AIL movement.

The cumulative impact of the entire East Pye Solar project across 15 sq km of open farmland will significantly negatively impact the migration of common species of wildlife.

The mitigation strategies for common species at Site 5 of the proposed East Pye Solar development are inadequate to offset the disruption and destruction of the habitats for the common species that are present at Site 5.

Priority species such as brown hare, hedgehog, and harvest mouse are protected under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, which requires public authorities to have regard to their conservation ([NERC Act 2006, Section 41]. However, the Environmental Statement and Outline Protected Species Mitigation Strategy (6.3.8.10) offer only generic and unenforceable measures—such as habitat retention, fencing with gaps, and informal safety meetings—without clear, site-specific, or robust provisions tailored to these species. This lack of detail and enforceability risks non-compliance with the NERC Act. Furthermore, the claimed buffer zones and habitat retention lack detailed enforcement and monitoring mechanisms, increasing the likelihood of habitat loss or degradation in breach of the Wildlife and Countryside Act 1981, which prohibits intentional or reckless damage to protected habitats and species (Wildlife and Countryside Act 1981, Section 9).

Of particular concern for the Inspector's consideration is the complete lack of mitigation for large common species such as red deer, which are known to use Site 5 regularly as a migratory route (see photos in Section 7 and Section 12.2 of this document). The Environmental Statement and associated mitigation documents do not address the potential for perimeter fencing and site layout to impede the movement of these large mammals, nor do they propose any specific measures—such as deer gates or dedicated crossing points—to maintain landscape connectivity for these species. In fact they are specifying the use of Deer Proof fencing which result in the direct exclusion of native species from their historic habitat which has up until the 1950s been parkland and even now retains many features of this as discussed previously. This omission risks fragmenting habitats and restricting the natural movement of red deer and other large fauna, contrary to the principles of the NERC Act 2006 and best practice in ecological impact mitigation.

As raised within Section 8.6 of this document, the proposed wildlife gates in the deer proof fencing to allow for movement of small/medium species through Site 5 have no robust evidence that they fulfil their purpose and therefore basing any mitigation measures on this is wholly unacceptable.

The management of invasive non-native species (INNS), including giant hogweed which has been found to be present at Site 5, is also insufficiently addressed, with no comprehensive, site-specific plan provided, risking breaches of the Wildlife and Countryside Act 1981 (Schedule 9) and the Invasive Alien Species (Enforcement and Permitting) Order 2019 [WCA 1981, Schedule 9].

Pollution prevention measures are generic and do not address the specific risks at Site 5, potentially resulting in breaches of the Environment Act 2021 [Environment Act 2021]. The reliance on informal safety meetings and infrequent visits from the Ecological Clerk of Works, rather than continuous onsite ecological supervision, further undermines the enforceability of mitigation and increases the risk of undetected legal breaches.

In summary, the current mitigation approach for common species at Site 5 does not provide the necessary detail, enforceability, or site-specific measures to ensure compliance with the NERC Act 2006, Wildlife and Countryside Act 1981, Environment Act 2021, or INNS regulations. The

absence of mitigation for large species such as red deer further exacerbates these legal compliance risks.

Conclusion

The Ecology and Biodiversity chapter of the Environmental Statement significantly underestimates the ecological value and sensitivity of Site 5 and fails to demonstrate that the proposed development can be delivered without significant adverse effects on protected species, priority habitats and ecological connectivity.

In particular, the Environmental Statement:

- **underestimates the importance of Site 5** within the wider woodland, hedgerow and habitat network of South Norfolk;
- **fails to adequately assess impacts** on the nationally significant barbastelle bat population and other protected bat species;
- **does not provide sufficient evidence** that impacts on priority farmland birds, including skylark, turtle dove and lapwing, can be avoided or adequately mitigated;
- **provides insufficient survey evidence** and species-specific assessment for protected species including Great Crested Newts, White-clawed Crayfish and badgers;
- **underestimates the ecological importance** of the River Tas chalk stream by failing to fully assess hydrological connectivity and downstream ecological effects;
- **fails to adequately assess** cumulative ecological effects across the wider landscape; and
- **relies heavily on generic** mitigation and future management plans rather than demonstrating, through robust baseline evidence, that significant ecological harm has been avoided.

Taken together, these deficiencies undermine confidence in the conclusions of the Environmental Statement and mean that the Applicant has not demonstrated compliance with the mitigation hierarchy or shown that significant adverse effects on biodiversity can be avoided.

Accordingly, the Ecology and Biodiversity assessment does not provide sufficient evidence to demonstrate compliance with National Policy Statements EN-1 and EN-3, the Conservation of Habitats and Species Regulations 2017, the Wildlife and Countryside Act 1981, the Natural Environment and Rural Communities Act 2006, the Environment Act 2021 or Section 15 of the National Planning Policy Framework.

Chapter 9: Water Environment

9.1 Rivers, Streams, Ditches, Culverts

On the boundary to the east of Site 5, a stream runs parallel with the road known as The Street, Fritton before crossing under the road to join a larger tributary system at Hempnall Beck. Similarly in the west of Site 5, another stream flows down and joins the Hempnall Beck. This then flows into the River Tas.

The rivers and streams around Morningthorpe and Fritton form part of the sensitive upper Tas catchment, characterised by chalk-influenced baseflow, narrow watercourses and nationally recognised Water Quality High Priority and Keeping Rivers Cool designations.

Site 5 of the East Pye Solar proposal sits upslope of these watercourses and is likely to increase surface water runoff, sediment mobilisation, pollution risk and hydrological alteration.

These changes threaten to degrade water quality, destabilise flow regimes and undermine climate-adaptation objectives for the Tas.

East Pye Solar has not mapped the connectivity into the River Tas accurately. It has repeatedly downgraded the streams in both the East and West of Site 5. It can be seen from the historical maps that the stream to the West has had its flow route modified to accommodate the change of use from parkland to agriculture.

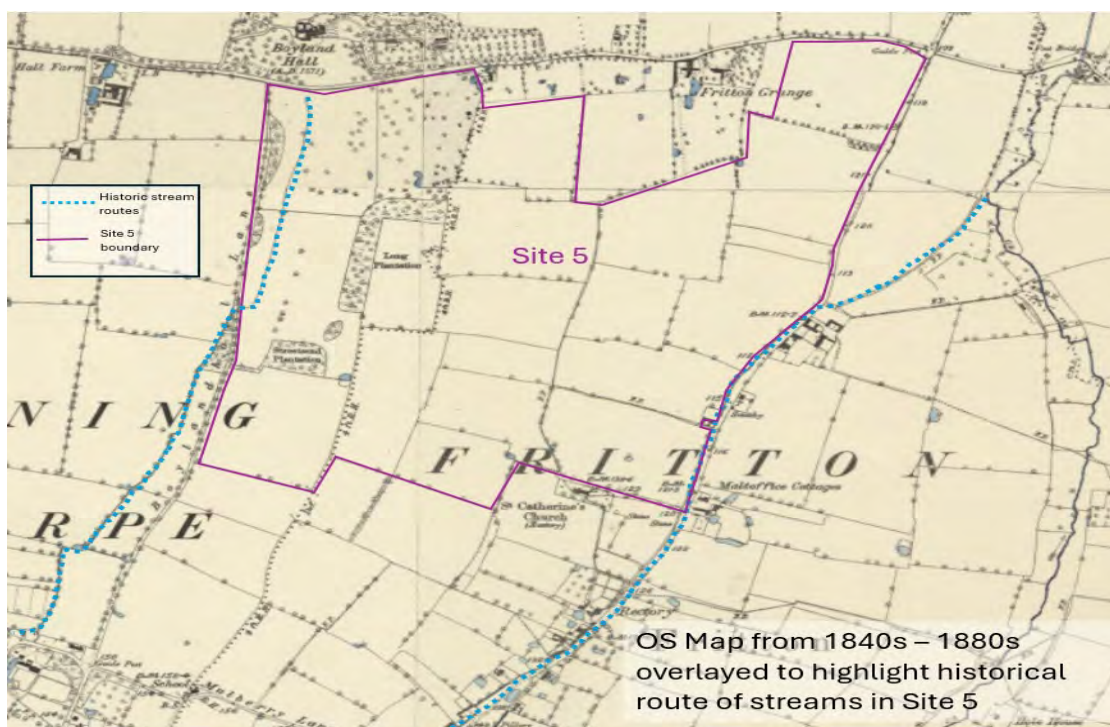


Figure 9.1 Historic OS map marked up to show Site 5 and watercourses overlaid

From the Environmental Statement Volume 2 Fig 16.1 (Superficial Geology), it can be seen clearly that the formations labeled as “Head Deposits” in the West section of Sub-Site 5a correspond directly with the 1880’s map showing the stream that flows in the Medieval brick Culvert on the North Boundary before passing under Boyland Hall and flowing into the River Tas. The excerpt below from the above document clearly shows the route the historical watercourse took from the far southern side of Site 5, through it and all the way to the River Tas.



Figure 9.2 Section of the Environmental Statements Vol 2 Fig 16.1 Surface Geology - Head Deposits shown in tan

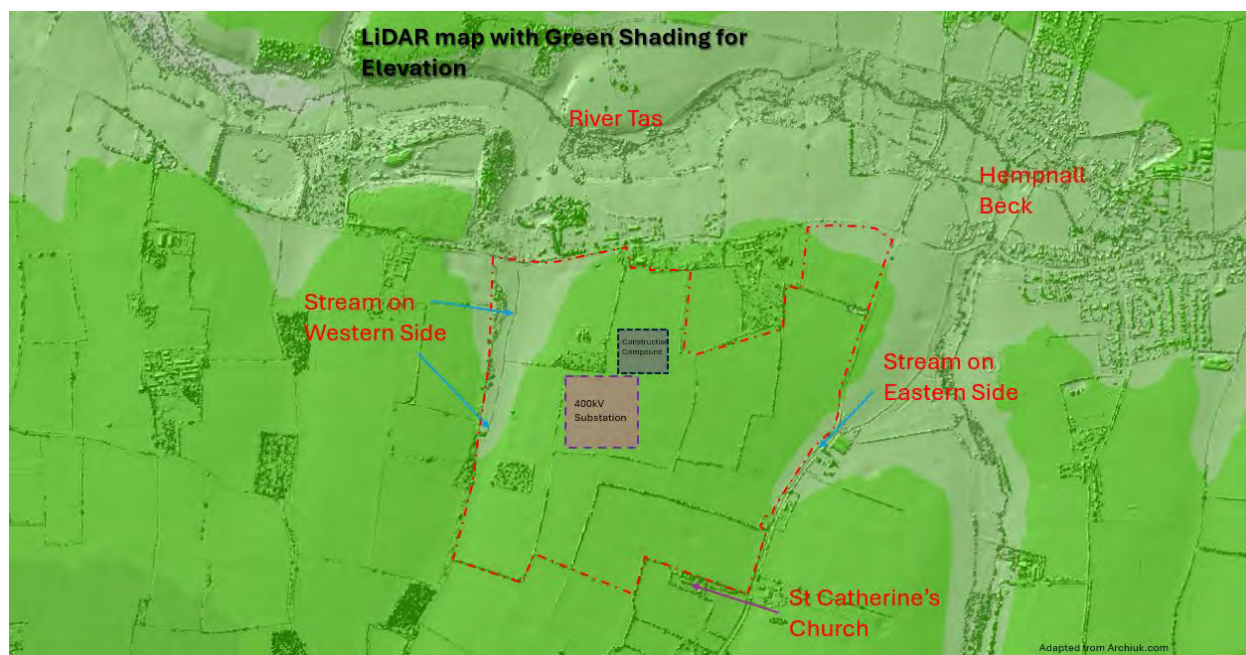


Figure 9.3 Map Marked up to show location of Site 5, streams Construction Compound and 400kV substation
Adapted from LiDAR map Screenshot from the ARCHI MAPS UK website at <https://www.archiuk.com>; LiDAR tiles © Environment Agency copyright and/or database right 2022. All rights reserved.

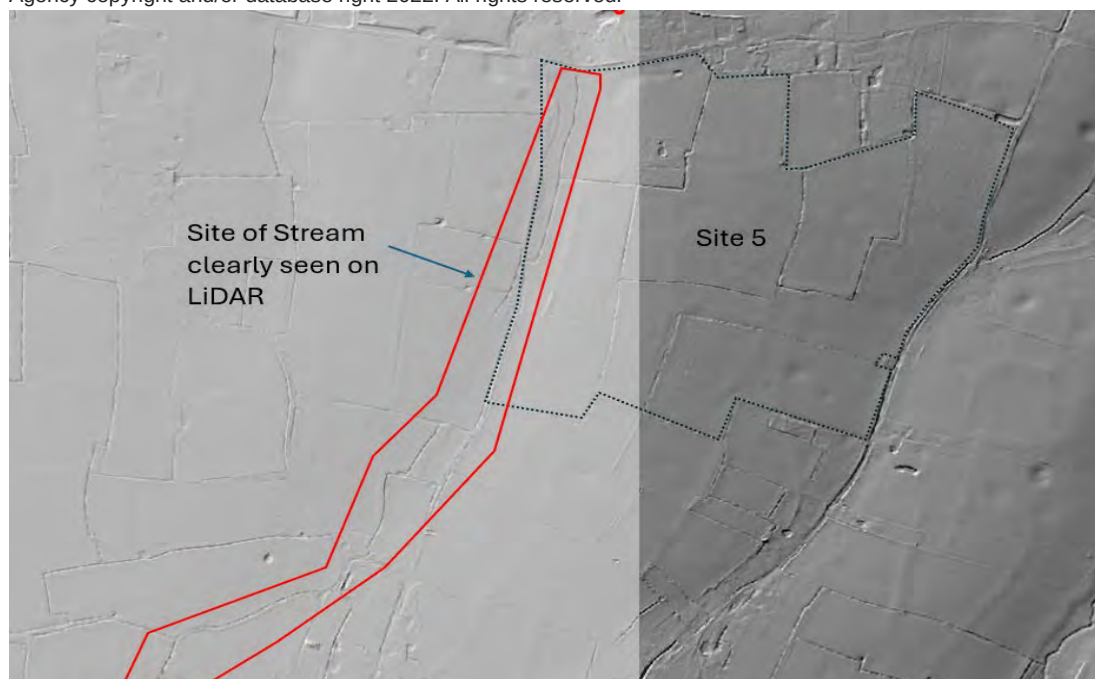


Figure 9.4 Map marked up to show route of Western stream structures. Adapted from LiDAR map Screenshot from the ARCHI MAPS UK website at <https://www.archiuk.com>; LiDAR tiles © Environment Agency copyright and/or database right 2022. All rights reserved.

Figure 9.5 Comparing location of Site 5 on road map, satellite image and LiDAR of the same area to highlight the underlying land structures. Adapted from LiDAR map Screenshot from the ARCHI MAPS UK website at <https://www.archiuk.com>; LiDAR tiles ©

Environment Agency copyright and/or database right 2022. All rights reserved. Showing Marked up to show location of Site 5, streams

Construction Compound and 400kV substation



LiDAR, historic maps, and borehole data together provide a robust basis for distinguishing natural streams from artificial ditches. LiDAR highlights subtle channel morphology such as sinuosity and valley form indicative of natural versus engineered origins (Tarolli, 2014; Environment Agency, 2017). Historic maps establish timing and evidence of modification (Hooke, 2000), while boreholes reveal subsurface stratigraphy, differentiating natural fluvial sediments from disturbed or excavated ground (Howard et al., 2008). Integrated, these together enable confident interpretation through combined surface, historical, and subsurface evidence. Add to this the Surface Geology survey conducted on behalf of East Pye Solar and it can be clearly seen that the Water Environment for Site 5, its surroundings and the **impact that any development will have has been severely understated. Any Mitigation measures proposed are based on incomplete information**

In the absence of detailed hydrological modelling, ditch capacity assessment, and water-quality impact analysis, the proposal fails to demonstrate compliance with EN-1, EN-3, the Water Framework Directive, and NPPF Section 15.

As a result, a full river and stream impact assessment should be included within the EIA.

Culverts

Environmental Statement Volume 3 Appendix 9.2 (Water Framework Directive Assessment) states:

"The construction of culverts (in a worst-case scenario) in channels to provide access over watercourses could impact the quantity and dynamics of flow. However, as the access tracks are only crossing field drains that have minimal dynamics the impact to flow should also be minimal."

This conclusion is fundamentally flawed because it is based upon an incorrect characterisation of the watercourses within Site 5.

As demonstrated in Chapter 8 of this Representation, Site 5 is crossed by a network of connected watercourses comprising:

- the western stream flowing from Morningthorpe through Boyland before entering the River Tas;
- a second watercourse crossing the centre of Site 5;
- the eastern watercourse flowing south from Fritton before joining Hempnall Beck; and
- numerous interconnected field drains which discharge into these streams.

These are not simply isolated agricultural field drains with "minimal dynamics". They form part of the wider River Tas catchment and provide direct hydrological and ecological connectivity with the River Tas chalk stream.

Consequently, the assumption within the Water Framework Directive Assessment that access crossings will only affect minor field drains materially understates the potential impacts of the proposed works.

This is particularly relevant to Site 5 where the proposals indicate that watercourse crossings are likely to be required to facilitate:

- construction of the principal Site 5 access for delivery of the 69.9 m, 317 tonne Abnormal Indivisible Load (AIL);
- construction access associated with Cable Route Corridor CRC4;
- internal construction access tracks;
- cable route crossings;
- drainage infrastructure associated with the proposed 400 kV substation and construction compound; and
- possible strengthening or modification of existing crossings, including the historic culvert beneath Boyland Hall Lane.

The Applicant has not provided a comprehensive inventory of proposed culverts or watercourse crossings, nor assessed whether existing crossings require widening, strengthening or replacement. No site-specific hydraulic assessment has been undertaken for these structures despite their potential to alter flow characteristics and affect downstream watercourses.

This omission is significant because culverts are recognised as capable of:

- altering natural flow regimes;
- increasing local flow velocities;
- increasing erosion and sediment mobilisation;
- interrupting natural geomorphological processes;
- creating barriers to aquatic species movement; and
- reducing ecological connectivity between upstream and downstream habitats.

These effects are particularly important where watercourses are hydrologically connected to the River Tas chalk stream and support protected aquatic species, including White-clawed Crayfish.

The Applicant's conclusions are also inconsistent with the position of the Environment Agency.

In its Relevant Representation, the Environment Agency expressly objects to the proposed reliance upon culverts, stating that new culverts are unacceptable and should be replaced with clear-span bridges in accordance with the Environment Agency's anti-culverting policy. The Environment Agency further states that where culverting cannot be avoided, applicants must demonstrate that no reasonable alternative exists, and any culvert should normally be temporary

for the construction period only, consistent with paragraphs 3.10.78 and 3.10.79 of National Policy Statement EN-3.

The Environment Agency also identifies deficiencies in the Environmental Statement regarding the location and design of proposed watercourse crossings, requiring further information before their impacts can be properly assessed.

Given that the Environmental Statement incorrectly classifies the western stream as a field drain or ditch, its conclusion that impacts from culverting would be minimal cannot be relied upon. The baseline hydrological assessment is incomplete, the scale of required watercourse crossings has not been disclosed, and the ecological and hydraulic effects of those crossings have not been robustly assessed.

Accordingly, the Environmental Statement has not demonstrated that the proposed access works and cable crossings at Site 5 comply with the requirements of the Water Framework Directive, National Policy Statements EN-1 and EN-3, or the Environment Agency's published policy on culverting watercourses.

Ditches

The watercourse network surrounding Morningthorpe and Fritton comprises a dense and interconnected system of winterbournes, watercourses, agricultural drainage channels and field ditches. Many of these watercourses have been modified over time through historic agricultural drainage and field enclosure. Despite these alterations, they continue to provide hydrological connectivity within the River Tas catchment and should not be regarded simply as artificial field drains. Together, they form the principal drainage network surrounding Site 5.

Collectively these watercourses perform several important functions by:

- conveying surface water from the surrounding plateau and valley-side catchments;
- maintaining the natural drainage regime of the upper River Tas catchment;
- sustaining tributaries that ultimately discharge to the River Tas chalk stream;
- supporting aquatic and riparian habitats through seasonal and permanent flows; and
- providing hydrological connectivity between the upper catchment and downstream chalk stream habitats.

Because Site 5 extends across several interconnected drainage catchments, alterations to any part of this network has the potential to affect downstream watercourses and the River Tas.

Eastern Watercourse Network

The eastern side of Site 5 contains a combination of winterbournes, naturally occurring watercourses and modified drainage channels that:

- generally follow historic field boundaries running north-south and east-west;
- collect runoff from the higher ground around Hempnall Road and the plateau edge;
- discharge to Hempnall Beck before entering the River Tas catchment; and
- include both seasonally flowing winterbournes and permanent watercourses, rather than functioning solely as agricultural field drains.

These watercourses are particularly sensitive to increased sediment loading, altered flow velocities and pollution during construction.

Western Watercourse Network

The western side of Site 5 is characterised by a network of winterbournes, naturally occurring watercourses and historic drainage channels which:

- include the Morningthorpe Stream flowing through Boyland before joining the River Tas;
- comprise both shallow and deeply incised channels, many of which have subsequently been modified through agricultural drainage;
- convey seasonal groundwater discharge together with surface water runoff; and
- provide important hydrological connectivity between the upper catchment and the River Tas.

Although some sections have been modified for agricultural purposes, they continue to function as tributary watercourses within the River Tas catchment and should not be regarded simply as agricultural ditches.

Because Site 5 occupies multiple drainage basins:

- runoff generated across the solar arrays will enter different tributary systems depending upon location;
- construction activities have the potential to mobilise sediment into both the Morningthorpe and Hempnall Beck catchments;
- proposed access roads, cable corridors and watercourse crossings have the potential to interrupt existing hydrological connectivity; and

- accidental pollution incidents, including fuels, concrete washout or herbicides, could be rapidly conveyed through these interconnected watercourses to downstream ecological receptors.

The River Tas is recognised by the Environment Agency and Norfolk Rivers Trust as a chalk stream and is identified within the Environmental Statement as a watercourse of high ecological importance. Although the main river lies beyond the Order Limits, Site 5 is hydrologically connected to the River Tas through this extensive network of winterbournes and tributaries. Consequently, any deterioration in water quality or interruption of natural flow processes has the potential to adversely affect downstream chalk stream habitats and protected species.

In Appendix 9.2 of the Water Framework Directive Assessment, the Applicant repeatedly refers to the western watercourse as a "ditch" or "field drain". This characterisation is inconsistent with the observed characteristics of the watercourse and its function as part of the River Tas catchment. The Water Framework Directive Assessment acknowledges that watercourse crossings may alter flow dynamics and affect sediment transport, water quality and fish passage. However, these conclusions are based upon the assumption that crossings are limited to "field drains with minimal dynamics". This assumption is not consistent with the hydrological character of Site 5. The watercourse network comprises a combination of winterbournes, naturally occurring watercourses and modified agricultural drainage channels that together provide hydrological connectivity within the River Tas catchment. . By characterising these features collectively as 'field drains with minimal dynamics', the Environmental Statement understates both their hydrological function and their ecological significance , thereby undermining the conclusions of the Water Framework Directive Assessment. .

This concern is reinforced by the Environment Agency's Relevant Representation, which states that the Environmental Statement provides insufficient information regarding the location and design of proposed watercourse crossings. The Environment Agency further advises that new culverts should be avoided in accordance with its anti-culverting policy, that clear-span bridges should be used wherever practicable, and that where culverts are unavoidable they should be justified by demonstrating that no reasonable alternative exists and that any culverts should normally be temporary during the construction period. The Relevant Representation also concludes that the Environmental Statement provides insufficient information regarding the location and design of proposed watercourse crossings. This directly contradicts the Applicant's conclusion that impacts would be minimal and demonstrates that the Environmental Statement has not provided sufficient evidence to support its assessment of watercourse crossings.

Risks to Private Water Supplies

Sensitive water receptors, including private drinking water supplies, are located within 120m of Site 5's boundary with one from a spring being fed by the watercourse in the West of the proposed development. The site is underlain by aquifers. Construction and operation could mobilise contaminants to surface water and groundwater, posing risks to private water supplies.

East Pye Solar have recognised the risk to these highly sensitive receptors in the Environmental Statement Vol 3 Chapter 9.1 Flood Risk Assessment and Outline Drainage Strategy stating:

“Sensitive water receptors (private drinking water supplies and ecological designated sites (Special Areas of Conservation (SAC) and Sites of Specific Scientific Interest (SSSI)) are located within the Study Area (as defined in the ES: Chapter 9 Water Environment [EN0110014/APP/6.1.9]) and have the potential to be impacted by the Scheme through the mobilisation of contaminants to surface water and groundwater receptors. Therefore, a mitigation strategy has been developed to address such risks during all phases of the Scheme.”

The mitigation strategy relies on pollution prevention and drainage controls, but lacks robust site-specific monitoring and contingency plans.

Drainage mitigation measures for Site 5 lack sufficient detail, robust monitoring, and enforceable commitments to prevent adverse impacts. The risks to the River Tas and private water supplies are **highly significant** due to hydrological connectivity and aquifer sensitivity.

The East Pye Solar proposal poses significant risks to the site's extensive ditch network, which functions as the primary hydrological and ecological infrastructure for the surrounding landscape. Increased runoff from panel arrays, soil disturbance and construction activities are likely to elevate sediment loads, alter flow regimes, and degrade water quality within these ditches.

The anticipated need for multiple culverts and track crossings further threatens to fragment habitats, increase flood risk and impede species movement, including White Clawed Crayfish.

No detailed ditch inventory, hydrological modelling, or ecological assessment has been provided to demonstrate that these impacts can be avoided or mitigated. In the absence of robust baseline data and a comprehensive drainage strategy, the proposal fails to meet the requirements of EN-1, EN-3, the Water Framework Directive, and NPPF Section 15.

The Environmental Statement for Site 5 within the East Pye Solar Project fundamentally misrepresents a natural watercourse as a “field drainage ditch,” resulting in a serious and material flaw in the assessment of hydrology, water quality, and ecological connectivity. This is not a minor semantic issue; it leads directly to the exclusion of a key pathway within the wider catchment of the River Tas (chalk stream), and a consequent failure to assess downstream impacts. The watercourse forms part of an interconnected system influencing surface water flows, groundwater recharge, and receptors including private water supplies directly opposite, many of which are highly vulnerable to contamination, sediment loading, and changes in flow regime. By misclassifying this feature, the applicant has failed to identify and assess credible risks arising from construction and operation, including polluted runoff, mobilisation of sediments, and

disruption to local hydrogeology. **This represents a clear and substantive omission in the Environmental Statement.**

This failure places the application in direct breach of Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, which requires a complete and accurate assessment of likely significant effects on water, population, and human health. The omission is compounded by the failure to consider regulatory implications under the Water Resources Act 1991, including potential impacts on both licensed and unlicensed abstractions supplying local properties.

Furthermore, the proposal is in clear conflict with the National Policy Statement for Energy (EN-1) and the National Planning Policy Framework, both of which require rigorous assessment and protection of the water environment, including the prevention of pollution and safeguarding of water resources. The complete absence of detailed hydrological modelling, groundwater assessment, and evaluation of impacts on the River Tas catchment and private water supplies is indefensible. It leaves the Secretary of State without the information necessary to lawfully determine the application.

The concerns raised above are reinforced by Anglian Water Services in its Relevant Representation dated 9 June 2026. Whilst AWS's statutory role relates to public water infrastructure rather than private supplies, it similarly concludes that important aspects of the Project's interaction with the water environment remain unresolved. AWS identifies outstanding uncertainty regarding underground infrastructure interfaces, trenchless crossings, groundwater protection, Source Protection Zones and water supply arrangements, and records that opportunities for technical assurance and clash detection have not been taken up by the Applicant. These independent concerns further undermine confidence that the Environmental Statement provides a sufficiently robust assessment of groundwater-dependent receptors within and adjacent to the Order Limits, including private water supplies.

References

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 Environment Agency (2017). *Understanding the performance of LiDAR for mapping geomorphological features*.
 Hooke, J.M. (2000). *Geomorphological impacts of river channel changes on floodplain environments*. *Earth Surface Processes and Landforms*, 25(6), 593–609.
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9.2 Flooding

Large-scale solar developments like East Pye (2,692 acres) can significantly alter local and downstream flood dynamics. The combination of panelised surfaces, soil disturbance, culverts, access tracks and altered drainage patterns creates multiple pathways for increased flood risk.

Site 5 of the East Pye proposal sits across multiple streams in the Western and Eastern sides, draining from Morningthorpe and Fritton towards the Tas valley, as well as containing drainage ditches, making flooding a serious and real concern. With soil types identified by the Geoarchaeological survey (Environmental Statement Vol 3 Appendix 10.3) as being “in the

northwestern half of the area consist of slightly acid loamy and clayey soils with impeded drainage whilst across the southeastern half they are described as slowly permeable seasonally wet slightly acid but base rich loamy and clayey soils (Soilscapes, 2025).” adding to the waterlogging risk of Site 5.

Solar panels shed water rapidly, concentrating rainfall into narrow drip lines. This leads to:

- Higher peak runoff rates
- Faster delivery of water into ditches
- Reduced infiltration into soils
- Greater risk of ditch overtopping

On a site of this scale, the cumulative effect is substantial. The watercourses in Morningthorpe and Fritton are not designed for sudden, high-velocity flows. This is likely to result in increased localised flooding of fields, tracks, downstream properties, B1527 (where the Western watercourse crosses under the road), in Hempnall where the Eastern stream feeds into Hempnall Beck.

Flooding already occurs on the B1527 at the boundary point of Site 5 as well as through Hempnall. In October 2023 the levels were significant enough to close the road completely at the point the applicant is proposing to use as an access point for the Abnormal Indivisible Loads.



Figure 9.6 Photo of Flooding on B1527 towards Hempnall - Site 5 on Right of Picture taken at point where Stream crosses under the road

Figure 9.7 Photo of Flooding - same occasion B1527 Towards Hemphall taken between Site 4B and Site 5, approaching Richardson Recycling.



With the compaction of the soil due to construction hindering further the ability of the ground around the infrastructure on Site 5 to absorb the rainfalls, the risk of waterlogging is increased. This scene recently witnessed at the Mega Solar installation at Cleve Hill in Kent demonstrate these concerns.



Figure 9.8 Photo of flooding at Cleve Hill Solar Park, North Kent on 2nd March 2026

Figure 9.9 Photo of flooding at Cleve Hill Solar Park, North Kent on 2nd March 2026



Construction activities, particularly heavy plant, trenching and track installation will compact soils and reduce their ability to absorb rainfall.

This causes:

- Increased surface water accumulation
- Faster runoff into ditch systems
- Reduced groundwater recharge (critical for chalk streams)

Compaction effects can persist for decades if not properly mitigated.

Site 5 is also the proposed location for a 400kV Substation, welfare buildings and offices across 3.5ha which will introduce permanent hardstanding, and access roads increasing the runoff.

Site 5 of the East Pye proposal will require multiple culverts across the stream in the West of the boundary with CRC4 required to cross it as well. Culverts are a well-documented flood risk because they:

- Block easily with debris
- Reduce channel capacity
- Create upstream ponding

- Increase downstream flow velocity

A single blocked culvert can cause rapid flooding of adjacent land or roads. Given the density of the streams and ditches in Morningthorpe and Fritton, this is a major concern.

New and altered tracks, compounds and cable routes can:

- Interrupt natural drainage
- Divert water into new pathways
- Create artificial flow channels
- Cause unexpected pooling or flooding in low-lying areas

This is particularly relevant around Hempnall Road, Fritton Common and the Morningthorpe valley floor.

The stream and ditch systems in Morningthorpe and Fritton ultimately feed into chalk-influenced tributaries of the River Tas.

Increased runoff and sedimentation can:

- Raise flood peaks in the Tas
- Increase flood frequency in Tasburgh and Newton Flotman
- Reduce the river's ecological resilience
- Exacerbate climate-driven flow instability

Chalk streams are especially vulnerable to sudden wet-dry transitions.

Climate Change Interactions:

Climate projections for Norfolk show:

- More intense rainfall events
- Longer dry periods
- Greater runoff during storms

Solar farms amplify these effects by reducing infiltration and increasing flow flashiness.

East Pye Solar have used High Level Mapping tools to assess groundwater flooding risk and have concluded that Site 5a and 5b have a <25% risk, although they then go on to identify areas in the south of Site 5b (making it the nearest section to the SSSI Fritton Common) as having a 25 - 50% susceptibility and then further going on to identify Site 5

“The areas of higher groundwater flood risk are in proximity to the Hempnall Beck and the Broome Beck. The higher groundwater flood risk also occurs within areas where sand and gravel members/alluvium overlie the Norwich Crag Formation (sand) in the central and eastern areas of the Order Limits

(notably Sites 4, 5, 7 and 10)”

The lived experience of residents has shown that Site 5 and the fields around it can have water sitting across several months of the winter and that even in autumn the combination of high rainfall and high water table leads to flooding.



Figure 9.10 Waterlogged field in December 2025 adjacent to Site 5A



Figure 9.11 View along The Street Fritton. Proposed access point A25 on left, CRC6 on right

The proposal for Site 5 presents a significant risk of increased flooding within Fritton, Morningthorpe and the wider Tas catchment.

The extensive panel arrays, soil compaction, construction disturbance, and the likely installation of multiple culverts will increase surface water runoff, reduce infiltration and alter natural drainage patterns. These changes are expected to elevate peak flows, increase ditch overtopping and raise downstream flood risk, particularly during intense rainfall events that are becoming more frequent under climate change.

The hydrological modelling, is generalised, stream and ditch capacity assessment based on incorrect classification of watercourse, interactions and impacts on current tunnelled stream, and culvert impact analysis for the AIL crossing point over the watercourses is inadequate or absent. Therefore it is impossible to demonstrate that these risks can be avoided or mitigated. In the absence of a comprehensive drainage strategy and robust flood risk assessment, the proposal fails to meet the requirements of EN-1, EN-3, the Flood and Water Management Act 2010, the Water Framework Directive, and NPPF Section 14.

Keeping Rivers Cool: Priority Area

The River Tas, a chalk stream, has Keeping Rivers Cool (KRC) Priority Areas along several of its reaches, including:

- Tasburgh / Newton Flotman corridor
- Upper Tas tributaries fed by Morningthorpe and Fritton ditch systems

Because Site 5 of the East Pye Solar proposal drains north via the Morningthorpe and Fritton stream and ditch networks into the Tas system, the proposal is hydrologically connected to these Priority Areas.

This makes the KRC designation directly relevant.

KRC Priority Areas are designated because the Environment Agency has identified these river sections as:

- Highly vulnerable to climate-driven overheating
- Lacking sufficient riparian shade
- Critical for salmonids, white-clawed crayfish, and chalk stream ecology

- Priority zones for woodland creation and shading interventions

It has identified that solar farms can worsen the exact pressures the KRC scheme is designed to mitigate.

Site 5 of the East Pye Solar proposal could undermine the KRC objectives as a result of:

- Increased runoff which results in warmer water entering the Tas.
- Sediment mobilisation which causes the smothering of bankside vegetation resulting in the reduction of natural shading and increasing water temperature.
- Hydrological alteration which leads to reduced cool groundwater influence
- Pollution risk as a result of hydrocarbons, cement washout and herbicides killing riparian plants which directly opposes KRC goals.

Countryside Stewardship Water Quality: High Priority

Large parts of the landscape around Site 5 of the East Pye Solar proposal fall within *Countryside Stewardship (CS) Water Quality: High Priority* areas. These are nationally mapped zones where DEFRA and the Environment Agency have identified high risk of agricultural and land-use pollution entering watercourses and where interventions are prioritised to protect water quality.

DEFRA's Countryside Stewardship targeting maps identify High Priority areas where:

- Watercourses are at risk of pollution from sediment, nutrients, and pesticides
- Catchments drain into protected ecological sites
- Water quality improvements are a national priority
- Land management must reduce runoff, erosion, and pollution
- Funding is targeted to reduce diffuse pollution from land use

These areas are mapped specifically to guide policy, land-use decisions and environmental protection

Large parts of the catchment downstream of Site 5 are designated as Countryside Stewardship Water Quality: High Priority areas, meaning they are nationally recognised as being at elevated risk of pollution from land-use change and diffuse runoff.

Large scale solar developments such as East Pye Solar, can increase the exact pressures on the Countryside Stewardship High Priority designation area that the initiative is meant to reduce. This is due to increased sediment runoff, nutrient mobilisation, pollution pathways, hydrological alteration and the sensitivities of downstream watercourses.

With Site 5 already being included in multiple schemes aimed to increase biodiversity and protect the ecology of the site and surrounding areas, it is actively reducing the pollution entering the watercourses. The argument that removing this site from agricultural use will reduce pollution into waterways is based on the generalised assumption that all agricultural usage land is currently managed in the same unecological way. This is not the case with Site 5 and therefore the justification that the potential for pollution from the construction, operation, maintenance and

decommissioning of the 400kV Substation, Offices, welfare building, construction compound, 4.5m tracker panels, switching gear, inverters, access roads, cabling does not outweigh the current status and must therefore be considered as a high risk.

The East Pye proposal for Site 5, through extensive soil disturbance, increased surface water runoff and the necessary installation of multiple culverts and track crossings, poses a significant risk of sediment, nutrient, and pollutant mobilisation into these sensitive watercourses.

Private Foul Drainage Systems

The Environmental Statement does not consider whether changes to groundwater, soil permeability or surface water drainage resulting from the Proposed Development could affect nearby private septic tanks and package treatment plants. Many surrounding properties rely on private foul drainage systems that discharge treated effluent to drainage fields, soakaways or local watercourses, and these systems depend upon stable hydrogeological conditions to function effectively.

Without assessing the potential effects of piling, cable trenching, soil compaction and altered drainage on these systems, the Applicant has not demonstrated that there would be no adverse impacts on groundwater, water quality or receiving watercourses. This omission is also relevant to the assessment of private infrastructure and residential receptors discussed in Chapter 18.

9.3 Public Drinking Water Supplies

Site 5 of the East Pye Solar proposal occupies permeable agricultural land that contributes both surface runoff and groundwater recharge to the Morningthorpe and Fritton ditch systems and the chalk-influenced River Tas catchment, on which local private and public drinking water supplies ultimately depend.

The development of Site 5 introduces credible risks of hydrocarbon, cement, herbicide, nutrient and sediment pollution entering these watercourses and infiltrating to groundwater, as well as reducing groundwater recharge through soil compaction and increased runoff from panel arrays, tracks and compounds. These changes have the potential to degrade raw water quality, increase treatment burdens and undermine the long-term reliability of local drinking water sources.

No source, pathway and receptor assessment, groundwater recharge modelling or drinking-water-specific risk appraisal has been provided and the January 2025 Environmental Impact Assessment Scoping Report fails to even mention public drinking water supplies.

In the absence of such information, the proposal fails to demonstrate compliance with EN-1, EN-3, the Water Framework Directive and national policy on the protection of drinking water supplies and a full drinking water impact assessment must therefore be included within the EIA.

9.4 Private Drinking Water Supplies

The area surrounding Site 5 contains private water supplies serving neighbouring rural properties. These groundwater dependent receptors are particularly vulnerable to changes in groundwater quality, sediment mobilisation and pollution arising from construction activities. The protection of private water supplies is governed by the Private Water Supplies (England) Regulations 2016, which require water intended for human consumption to remain wholesome and protected from contamination.

The Environmental Statement does not identify all private water supplies located in the vicinity of Site 5, nor does it demonstrate that the potential effects of the proposed development on these receptors have been comprehensively assessed.

In particular, Boyland Hall, immediately north of Site 5, is served by a private water supply that provides the property's domestic water. Boyland House also has a private water supply. British Geological Survey GeoIndex records identify boreholes/extraction points associated with both properties, yet there is no evidence within the Environmental Statement that these receptors have been specifically considered or that the property owners have been consulted regarding the potential effects of the proposed development.

Boyland Hall's private water supply is groundwater dependent and draws from the same chalk aquifer that sustains the River Tas and its associated winterbournes. Consequently, the potential effects of the proposed development extend beyond water quality alone. Construction activities, including excavation, trenching, dewatering, soil compaction and alterations to existing drainage pathways, have the potential to modify local groundwater movement and recharge within the shallow chalk aquifer. Whilst the extent of any such effects would require detailed hydrogeological assessment, the Environmental Statement does not demonstrate that these potential impacts on groundwater levels and groundwater-dependent receptors have been adequately investigated

As illustrated in Figure 9.12, the proposed 400 kV substation is located on one of the highest points within Site 5. Surface water generated within this area has the potential to drain towards multiple watercourses connected to the River Tas catchment. Consequently, any accidental release of contaminants, increased sediment mobilisation or changes to local drainage patterns could affect both downstream watercourses and nearby groundwater-dependent receptors, including private water supplies.

England topographic map

United Kingdom > England

Click on the map to display elevation.

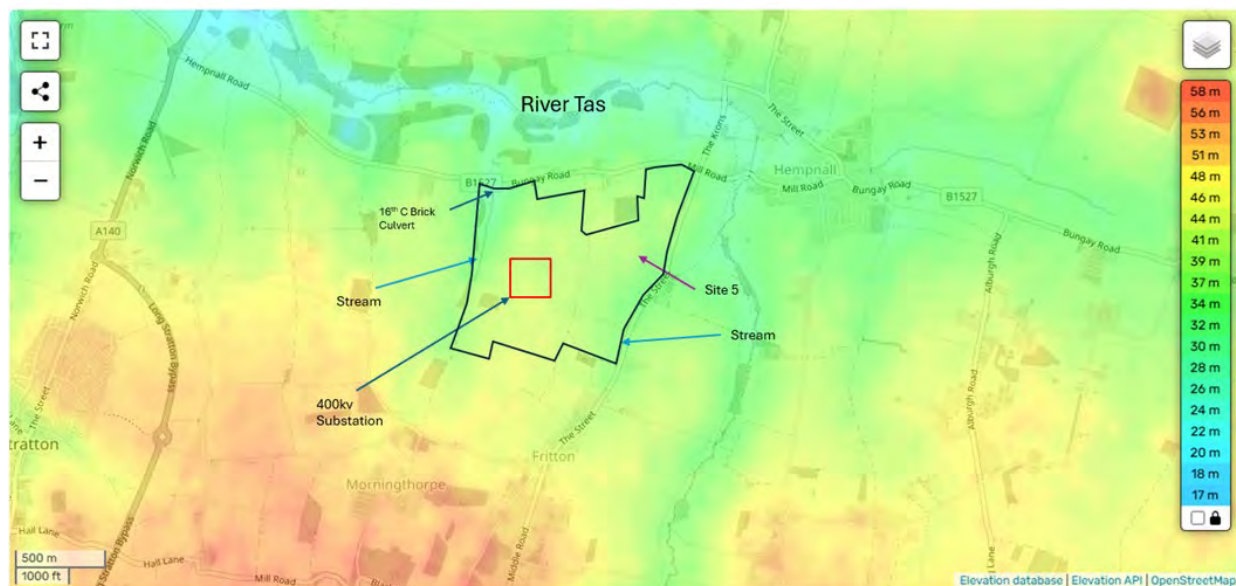


Figure 9.12 Topographical Map showing the proposed 400kV substation has been sighted at the highest point in Site 5 meaning that any run off can flow in both directions into the watercourses and onto the River Tas.

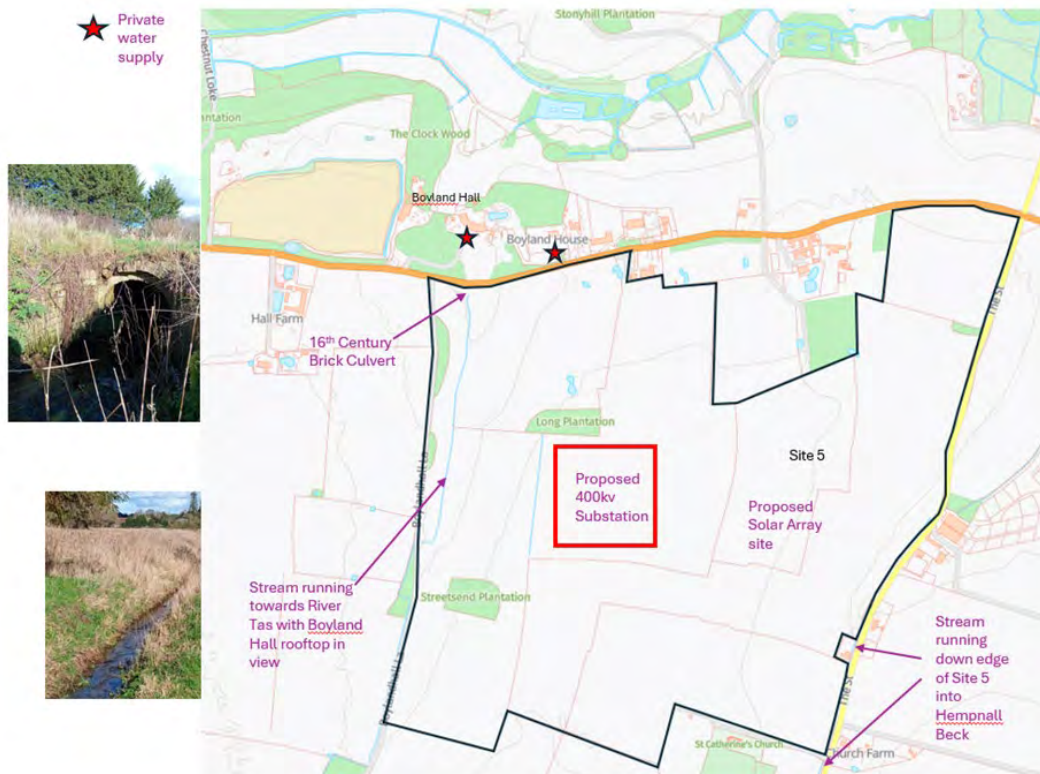


Figure 9.13 Map showing the location of nearest Private Water Supplies to Site 5, Watercourses and proposed 400kV Substation location in relation to them. For illustration purposes only. Base map used from magic.Defra.gov.uk Powered by Landmark Solutions (c) Crown Copyright and database rights 2024. Ordnance Survey AC0000805307.



Figure 9.14 Map based on Information From BSG - British Geological Survey showing location of Private water supplies in relation to Site 5

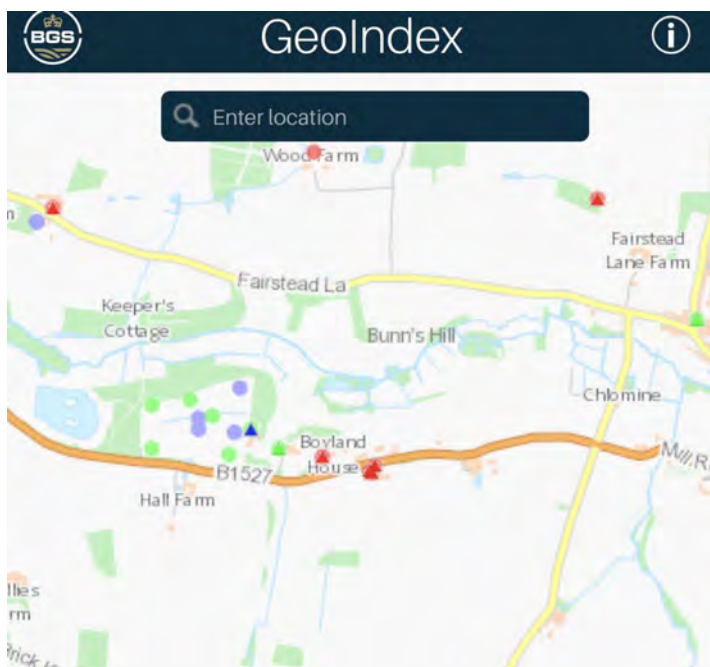


Figure 9.15 Readily available Geoindex maps of boreholes close to Site 5, clearly showing presence at Boyland House and Boyland Hall (next door)

The Environmental Statement does not demonstrate that the potential effects of the proposed development on nearby private water supplies have been adequately assessed. In particular, it does not provide sufficient evidence that consideration has been given to:

- potential changes to groundwater flow associated with excavation, trenching and construction activities;
- sediment mobilisation affecting groundwater quality;

- accidental pollution from fuels, oils, concrete washout or other contaminants;
- changes to local drainage resulting from new access tracks, hardstanding and infrastructure; or
- the cumulative effects of construction, operation and decommissioning on groundwater-dependent receptors.

This omission is particularly significant because changes in groundwater levels could affect both the quantity and quality of water available to nearby private water supplies, as well as the seasonal behaviour of connected winterbournes and tributaries within the River Tas catchment. The Environmental Statement has not demonstrated, through site-specific hydrogeological assessment, that these groundwater-dependent receptors would remain unaffected throughout the construction, operational and decommissioning phases of the Scheme.

Accordingly, the Environmental Statement has not demonstrated that the proposed development would avoid adverse effects on nearby private water supplies or that appropriate mitigation has been identified should impacts occur. Given the reliance of Boyland Hall on its private water supply and the difficulty of remediating contaminated groundwater, this represents a significant deficiency in the assessment and conflicts with the precautionary approach required by the Private Water Supplies (England) Regulations 2016, National Policy Statement EN-1, and Section 15 of the National Planning Policy Framework.

Conclusion

The Environmental Statement has not demonstrated that the effects of the proposed development on the water environment have been adequately assessed. The baseline hydrological assessment is incomplete, leading to an underestimation of the likely impacts on watercourses, groundwater, private water supplies and the wider River Tas catchment.

In particular, the Environmental Statement:

- mischaracterises key watercourses within Site 5, undermining the assessment of hydrological connectivity and downstream effects;
- fails to adequately assess the impacts of proposed watercourse crossings, culverts and associated infrastructure;
- does not provide sufficient site-specific assessment of groundwater or nearby private water supplies; and
- underestimates the cumulative effects of construction and operation on the wider water environment.

Accordingly, it has not been demonstrated that the proposed development complies with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, National Policy Statements EN-1 and EN-3, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, or the relevant water protection policies of the National Planning Policy Framework.

Chapter 10: Cultural Heritage

Fritton, Morningthorpe and the historic manor of Boyland occupy one of the most historically significant rural landscapes affected by the East Pye Solar Scheme. Unlike many rural settlements that have experienced substantial twentieth century expansion or modern development, this part of South Norfolk retains a remarkably intact relationship between its historic villages, medieval churches, ancient routeways, commons, agricultural land and surrounding countryside. Site 5 lies at the heart of this landscape and forms an integral part of the setting that has connected these historic places for centuries.

The antiquity of the area is demonstrated by the **Domesday Book of 1086**, in which all three settlements are recorded. Fritton appears as **Fredetuna**, where reference is made to "*three freemen and the moiety of another*." The eighteenth century Norfolk historian **Francis Blomefield** interpreted the name as meaning "**Free Town**", suggesting that it was "free from many things that other villages were subject to." Other interpretations include a settlement enclosed by fenced ground or one established by settlers from Frisia in northern Germany. Morningthorpe is recorded as **Torp** or **Thorp**, having been a Danish settlement during the reign of Edward the Confessor before being granted by **Thurketel** to the Abbey of St Edmund at Bury. Boyland appears in the Domesday Book as **Boieland**, forming an important manor that subsequently became associated with the Baynard family following the Norman Conquest. Collectively, these records demonstrate that the settlements and surrounding countryside have formed an interconnected rural landscape for almost one thousand years, illustrating an exceptional continuity of settlement and agricultural land use.

The historic focus of Fritton is the Grade I listed **Church of St Catherine**, whose twelfth century Norman round tower remains a defining landmark within the parish. The church retains important medieval features including a fifteenth century belfry and porch, an embattled parapet and medieval font. Of particular significance is its rare painted rood screen dating from around 1520, providing a remarkable illustration of the richly decorated interiors that existed before the Reformation, together with surviving thirteenth century wall paintings. Morningthorpe is similarly centred upon the Grade I listed **Church of St John the Baptist**, one of Norfolk's distinctive medieval round tower churches, which has served as the focal point of the parish for centuries.

The settlements historically formed part of the **Manor of Boyland cum Fritton**. The manor shaped the surrounding landscape for centuries through its agricultural land, estate boundaries, historic routeways and the later Boyland Hall estate. Although the Elizabethan Boyland Hall, rebuilt during the nineteenth century, was demolished in 1947, the surrounding landscape continues to preserve its historic legacy through surviving field patterns, mature trees, watercourses, Boylandhall Lane and archaeological remains associated with the former medieval settlement of Boyland.

Another defining feature of the parish is **Fritton Common**, historically known as **Fritton Green**, one of the relatively few surviving medieval commons in South Norfolk. These commons developed on the heavier clay uplands that were less suited to arable cultivation but were

fundamental to the medieval rural economy. They provided common grazing, sources of clay for building, and marl for improving surrounding farmland. Settlement frequently developed around their edges from the eleventh and twelfth centuries onwards, although the commons themselves are almost certainly older and probably of Anglo Saxon origin. Over subsequent centuries, common land across Norfolk was progressively lost through encroachment and enclosure, making the survival of Fritton Common particularly significant within the modern landscape.

This history is important because Site 5 does not occupy an ordinary agricultural landscape. It lies within a **living historic landscape**, where medieval settlements, churches, commons, historic lanes, field boundaries and productive farmland continue to exist in much the same relationship as they have for centuries. The significance of the designated heritage assets surrounding Site 5 therefore derives not only from the buildings themselves, but from the remarkable survival of the wider landscape in which they continue to be experienced.

10.1 Impacts to Conservation Area

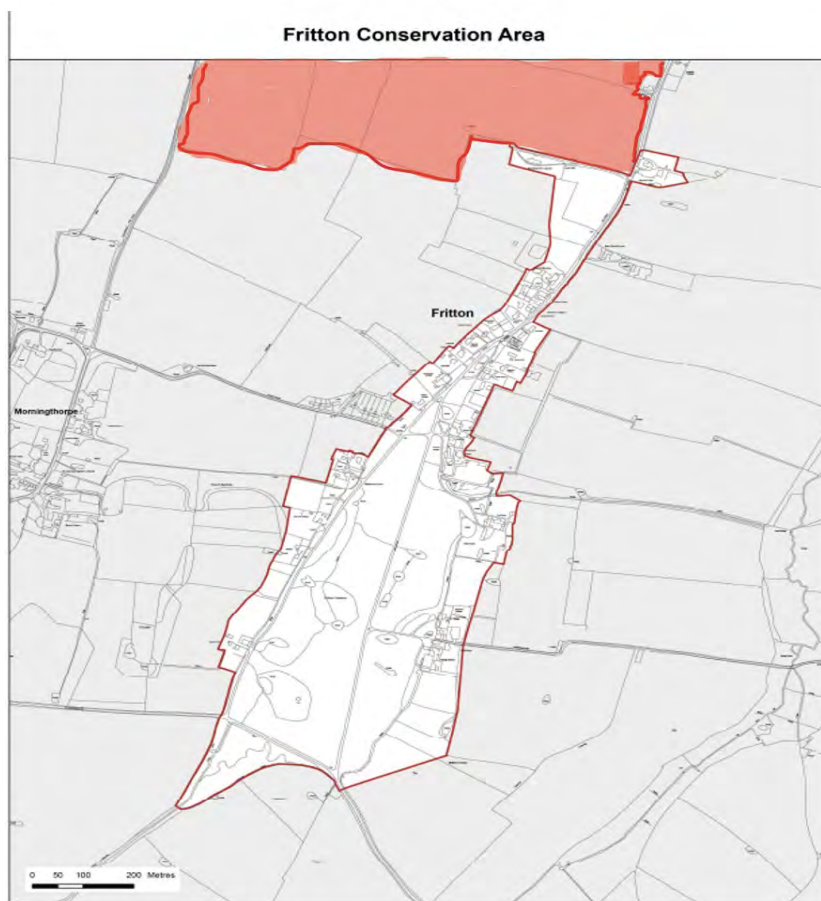


Figure 10.1 Map: Fritton Conservation Area showing Land Parcel 5 to the north (in red) directly adjoining the conservation area at Grade 1 Listed St Catherine's Church and Grade II Listed Church Farm.

Site 5 lies immediately adjacent to the northern boundary of Fritton Conservation Area. Few major infrastructure projects proposed through the Development Consent Order process would be located in such close proximity to a designated Conservation Area, particularly one whose significance derives so heavily from its surrounding agricultural landscape.

The Conservation Area was designated not simply to protect the individual historic buildings within the village, but to preserve the wider character and appearance of the historic settlement. The Conservation Area Character Appraisal identifies the importance of the relationship between the village, the surrounding farmland, mature hedgerows, historic lanes and the open countryside that frames the settlement. Site 5 forms part of that setting.

Immediately adjoining the northern boundary of the Conservation Area are the Grade I listed Church of St Catherine, the Grade II listed Church Farm House and associated historic agricultural buildings. Beyond these heritage assets, Site 5 currently provides uninterrupted agricultural land that has remained largely undeveloped for generations. This open landscape contributes directly to the rural character, tranquillity and historic legibility of the Conservation Area.

The proposed development would fundamentally alter that relationship. Rather than open agricultural land forming the northern setting of the Conservation Area, visitors and residents would experience an extensive area of energy infrastructure incorporating solar arrays, inverter stations, internal access roads, security fencing, CCTV, lighting and, most significantly, the proposed 400kV Project Substation together with its associated buildings and permanent maintenance facilities.

The significance of this change extends beyond visual appearance. The Conservation Area derives much of its character from the continued survival of a historic village that remains closely connected with the surrounding countryside. Replacing approximately 90 hectares of agricultural land immediately adjoining the Conservation Area with industrial energy infrastructure would substantially alter that historic relationship.

Section 72(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires special attention to be paid to the desirability of preserving or enhancing the character or appearance of Conservation Areas. That statutory duty requires decision makers to give considerable importance to the preservation of those characteristics that contribute to significance.

The Environmental Statement concludes that effects on Fritton Conservation Area would be limited. However, this conclusion appears to rely primarily upon the extent of direct visibility rather than undertaking a broader assessment of the contribution that Site 5 currently makes to the Conservation Area's historic setting. The assessment gives insufficient weight to the way in which the surrounding agricultural landscape contributes to the experience of arriving at, moving through and appreciating the historic settlement.

The proposal would therefore affect more than individual views. It would alter the historic relationship between village and countryside that has defined Fritton for centuries and which forms an essential component of the Conservation Area's significance.

10.2 Impacts to Setting of Conservation Area

The setting of a Conservation Area extends beyond its designated boundary. It includes those surrounding areas that contribute to the significance, character and appreciation of the historic settlement.

Approaching Fritton from the north along the B1527, the transition from open countryside into the historic village remains remarkably intact. Visitors experience expansive agricultural views before entering the Conservation Area centred upon St Catherine's Church and the historic buildings along The Street. This gradual transition between countryside and settlement forms an important part of the area's historic character.

Site 5 occupies almost the entirety of that northern foreground.

The Environmental Statement acknowledges that the significance of the Conservation Area is derived in part from its agricultural surroundings, mature landscape structure, grazing land and rural character. Having identified those characteristics as positive contributors to significance, it is difficult to reconcile that analysis with the subsequent conclusion that replacing those same agricultural surroundings with extensive energy infrastructure would result in no meaningful harm.

The issue is not simply whether individual solar arrays or substation structures would be visible from specific viewpoints. Historic England's guidance makes clear that setting embraces the surroundings in which heritage assets are experienced. It includes landscape character, historic relationships, tranquillity, movement through the landscape and the way in which designated heritage assets are understood within their wider context.

In this respect, Site 5 makes an important contribution to the setting of the Conservation Area.

The proposed development would replace a historically continuous agricultural landscape with a fundamentally different land use characterised by engineered infrastructure, security measures, operational lighting, access roads and electrical equipment. Even where vegetation filters particular views, the wider experience of the Conservation Area would change from one defined by open countryside to one influenced by major energy infrastructure throughout its proposed sixty year operational life.

Particular concern arises in relation to the northern extent of the Conservation Area around St Catherine's Church, Church Farm House and the associated historic farm buildings. The Environmental Statement appears to treat this area as being of lesser sensitivity because it lies

away from the principal concentration of dwellings within the village. That approach is not supported by the Conservation Area Character Appraisal.

The northern part of the designation was clearly included because it preserves the historic relationship between the church, the farmstead, the surrounding agricultural land and the wider rural approach into Fritton. Those elements collectively illustrate the historic evolution of the settlement. They should not be considered in isolation.

The relationship between Morningthorpe and Fritton further reinforces this point. The two settlements have developed within the same historic agricultural landscape and remain visually, historically and functionally connected through their shared countryside, lanes, public rights of way and agricultural land. Site 5 occupies part of that connecting landscape.

For these reasons, the Environmental Statement places insufficient weight on the wider contribution that Site 5 makes to the setting of Fritton Conservation Area. Its assessment is overly dependent upon visibility and does not adequately consider the historic, experiential and landscape qualities that collectively contribute to the significance of this designated heritage asset.

10.3 Impacts to Grade 1 Listed Churches

The most significant designated heritage assets surrounding Site 5 are the Grade I listed Churches of St Catherine, Fritton, and St John the Baptist, Morningthorpe. Together with the Grade I listed Church of St Margaret at Hempnall, these churches illustrate the exceptional concentration of nationally important medieval heritage within the immediate area. Their significance derives not only from their architectural and historic interest but also from the largely intact rural landscape in which they continue to be experienced.

Church of St Catherine, Fritton



Figure 10.2 Photo of St Catherine's Church - Grade I Listed

The Grade I listed Church of St Catherine occupies one of the most prominent historic positions within the parish. Although physically close to the village, it retains the character of a rural church set within open countryside, surrounded by historic farm buildings, mature trees, churchyard, agricultural land and narrow country lanes.



Figure 10.3 Photo showing View from lychgate of St Catherine's Church over Site 5b towards Clay Cottage

Its significance extends well beyond the fabric of the building. The church has remained at the heart of the surrounding landscape for more than eight centuries, and its relationship with the open farmland to the north has changed little during that time. The surrounding fields provide the foreground from which the church is approached and appreciated, whilst also preserving the

historic relationship between the church, Church Farm, Fritton Conservation Area and the wider agricultural landscape.



Figure 10.4 Photo of View from church lane to St Catherine's Church and site 5b to the right in the direction of the proposed 400KV substation.

This relationship is recognised within the Applicant's own Heritage Statement, which identifies the rural agricultural surroundings as contributing positively to the significance of both the church and the Conservation Area.

The proposed development would fundamentally alter that setting. Site 5 would accommodate extensive solar photovoltaic arrays together with inverter stations, internal access roads, security fencing, CCTV, operational lighting and the 400kV Project Substation. Rather than remaining surrounded by open agricultural land, the church would become immediately adjacent to one of the principal operational centres of the East Pye Solar Scheme.



Figure 10.5 Photo of View of St Catherine's Church towards land proposed for the 400kV substation and solar infrastructure.

The Environmental Statement concludes that the effect upon the setting of St Catherine's Church would be limited, relying heavily upon vegetation, existing hedgerows and the degree of direct intervisibility. Whilst visibility is clearly relevant, it does not provide a complete assessment of setting.

Historic England's *Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* makes clear that setting is not simply a visual concept. It includes the surroundings in which heritage assets are experienced, encompassing landscape character, tranquillity, historic relationships, movement through the landscape and the contribution made by wider environmental qualities.

In the case of St Catherine's Church, these wider qualities are fundamental to its significance. Visitors approaching the church experience a landscape that remains overwhelmingly agricultural, quiet and historically coherent. The church is understood within that landscape because the surrounding fields, hedgerows and historic routes have survived alongside it for centuries.

The introduction of substantial energy infrastructure into this landscape would alter that experience irrespective of whether every individual structure is continuously visible. The historic relationship between church and countryside would be replaced by one in which major electrical infrastructure forms part of the church's immediate setting throughout the proposed sixty year operational life of the Scheme.

The assessment also gives considerable weight to proposed mitigation planting. Whilst landscaping may soften certain views over time, it cannot recreate the historic agricultural

landscape that currently contributes to the church's significance. Indeed, substantial new planting may itself alter the open character that presently defines this part of the Conservation Area.

For these reasons, the Environmental Statement does not adequately explain how the acknowledged contribution made by the surrounding agricultural landscape can be substantially altered without resulting in a corresponding effect upon the significance of the Grade I listed Church of St Catherine.

Church of St John the Baptist, Morningthorpe



Figure 10.6 Photo of St John the Baptist, Morningthorpe - 770m from Site 5

Approximately 770 metres south of Site 5 lies the Grade I listed Church of St John the Baptist, one of Norfolk's distinctive medieval round tower churches.

Although more distant from the proposed development than St Catherine's Church, St John the Baptist forms part of the same historic landscape. The church remains closely associated with the surrounding agricultural countryside, historic lanes and dispersed rural settlement pattern that characterise Morningthorpe.

The Environmental Statement places considerable emphasis upon the separation distance between the church and Site 5. Distance is clearly an important consideration, but it should not be viewed in isolation. The significance of rural churches frequently derives from their position within an open agricultural landscape rather than from their immediate curtilage alone.

The proposed development would introduce a substantial concentration of infrastructure into land that currently forms part of that wider rural setting. Whilst the effect upon St John the Baptist is likely to be less pronounced than that upon St Catherine's Church, it nevertheless contributes to the cumulative change experienced across the historic landscape shared by the two parishes.

Church of St Margaret, Hempnall



Figure 10.7 Photo of St Margaret, Hempnall 800m from Site 5

The Grade I listed Church of St Margaret lies 800m from Site 5 and remains part of the wider concentration of nationally important medieval churches within this part of South Norfolk.

Its inclusion within the study area demonstrates the exceptional density of designated heritage assets surrounding the proposed development. Together with St Catherine's and St John the Baptist, it illustrates the historic pattern of medieval settlement that continues to define the wider landscape.

Whilst Site 5 does not form part of the immediate setting of St Margaret's Church in the same way as it does for St Catherine's, the presence of three Grade I listed churches within such a limited geographical area linked by Public Rights of Way, reinforces the need for particularly careful assessment of landscape change and cumulative heritage effects.



Figure 10.7 Photo of current Solar installation just off B1527 near the A140 (3kms away) showing smaller Solar arrays and view they now afford.

10.4 Listed Buildings Within 1Km of Site 5

The principal listed buildings on the Historic England website within one kilometre of Site 5 are summarised below.

Grade I Listed

Building	Historic England Entry
Church of St Catherine, Fritton	1373281
Church of St John the Baptist, Morningthorpe	1154001
Church of St Margaret, Hempnall	1050328

Grade II Listed

Building	Entry	Building	Entry	Building	Entry
Fritton Hall (Old Hall)	1154063	Church Farm House	1373256	Wayside Cottages	1303997
Fritton Rectory	1303982	K6 Telephone Kiosk	1252705	The Three Nags Public House	1154070
Barn south of Fritton Hall	1154067	Barn west of the Rectory	1050258	The Rectory	1373280
Manor House	1373257	Oak Tree Cottage	1154071	Sunnyside	1373258
Church Farmhouse	1050259	Forge Cottage	1373261	Pevensey House	1373262
Kirkstone, The Long House and Post Office	1304369	Thackery House	1304406	The Willows	1153209
Cottleston	1050337	Lord Nelson Public House	1050329	Manor Farmhouse	1050304
The Hollies	1373282	The Poplars	1153328	The Chequers	1153332
Lime Tree Cottage	1153509	Manor Farm Cottage	1153517	Manor Cottages	1050302
Cottages south of Mr Betts' House	1050254	Stables north of Parsonage	1304259	Disused Windmill	1050338
Barn north west of Church Farmhouse	1050260	Church Cottage	1050289	Malthouse Farmhouse	1050295
Parsonage	1373263	Bush Farmhouse	1050331	Island House	1050293
Stables north of Fritton Hall	1050291	Friars Farmhouse	1050290	Little Friars	1154026
Connaught House	1050301	Barn south of Fritton Hall Barn	1050292	The Thatched House	1153251
Fairstead Lane Farmhouse	1304377	Krons Manor	1373237	Hempnall War Memorial	1443914
Smithy Cottage and Priory Cottage	1050300				

Figure 10.8 Table showing Historical Assets within 1km of Site 5

_Photos of a few of the Historical Assets in close proximity to Site 5



Fritton Rectory, The Street



K6 Telephone Kiosk, The Street



The Three Nags, The Street



The Old Rectory, Morningthorpe



Church Farm House - The Street
The Hollies, Brick Kiln Lane



Old Hall (Formerly Fritton Hall)



Wayside Cottages, The Street

The exceptional number, density and proximity of listed buildings demonstrates that Site 5 occupies one of the most historically sensitive locations within the East Pye Solar Scheme. Many of these assets are not experienced in isolation. Their significance is derived from their continuing relationship with historic farmland, mature hedgerows, public rights of way, village approaches and the wider agricultural landscape that has survived around them.

Unlike more urban heritage assets, where the historic setting has often evolved through successive phases of development, many of the listed buildings surrounding Site 5 continue to be experienced within a landscape that remains recognisably agricultural. The proposed development would introduce a fundamentally different land use into that landscape for a period of sixty years.

This context is important when considering the conclusions reached within the Environmental Statement. The assessment of individual listed buildings should not be divorced from the wider historic landscape in which they are situated. Changes to that landscape have the potential to affect the significance of multiple heritage assets simultaneously, even where direct visibility varies between locations.

10.5 Impacts to Grade II Listed Buildings

The assessment of Grade II listed buildings surrounding Site 5 is one of the principal areas where the Environmental Statement understates the likely heritage effects of the proposed development. Whilst each asset has been considered individually, the assessment places considerable emphasis on direct visibility and separation distances, giving insufficient weight to the wider contribution that the surrounding agricultural landscape makes to their significance.

This approach is inconsistent with the established principles set out in Historic England's *Good Practice Advice Note 3: The Setting of Heritage Assets*, which recognises that setting extends beyond visual relationships alone. The significance of a heritage asset may derive from landscape character, historic associations, tranquillity, historic approaches, functional relationships and the way in which the asset is experienced within its surroundings. Visibility is an important consideration, but it is only one component of setting.

Many of the Grade II listed buildings surrounding Site 5 are historic farmhouses, cottages, barns and agricultural buildings whose significance is intrinsically linked to the rural landscape in which they remain situated. Unlike heritage assets within towns or cities, these buildings continue to be experienced within an agricultural landscape that has altered relatively little over many generations. The introduction of large scale energy infrastructure into that landscape therefore has implications extending beyond simple visual change.

Church Farm House

Of particular importance is Church Farm House, which lies immediately adjacent to the Grade I listed Church of St Catherine at the northern edge of Fritton Conservation Area.



Figure 10.9 View from Church Farm House, a Grade II Listed Building with red markings superimposed indicating fields where solar panels are proposed to be installed

The significance of Church Farm House is derived not simply from the historic fabric of the building but from its relationship with the church, associated agricultural buildings, surrounding farmland and the wider historic settlement pattern. Together these elements illustrate the historic evolution of Fritton as a small agricultural community centred upon its parish church.

The Applicant's own Heritage Statement acknowledges that the significance of both Church Farm House and St Catherine's Church is derived in part from their agricultural surroundings. However, the assessment subsequently concludes that the proposed development would result in no heritage harm to these assets.

That conclusion is difficult to reconcile with the scale and permanence of the proposed development.

Immediately beyond Church Farm House, approximately 90 hectares of agricultural land would accommodate extensive solar photovoltaic arrays, inverter stations, internal access roads, security fencing, CCTV infrastructure, operational lighting and, most significantly, the 3.5 hectare 400kV Project Substation together with associated electrical infrastructure and permanent operational facilities.

This represents a fundamental change to the landscape that currently forms part of the setting of the listed building. Whilst the building itself would remain physically unchanged, the agricultural surroundings that contribute to its significance would be substantially altered throughout the proposed sixty year operational life of the Scheme.

The Importance of Setting

Throughout the Heritage Statement, considerable reliance is placed upon limited or filtered intervisibility between heritage assets and the proposed development. Repeated reference is made to intervening vegetation, existing hedgerows and opportunities for additional planting.

This approach risks reducing the assessment of setting to a question of whether development can be seen.

Historic England's guidance makes clear that setting should not be assessed in this way. Heritage assets are experienced through movement, changing viewpoints, seasonal variation, landscape character, tranquillity, historic relationships and the contribution made by their surroundings as a whole.

The experience of approaching Church Farm House, for example, is currently characterised by open agricultural fields extending northwards beyond the Conservation Area. Visitors experience a coherent historic landscape in which the farmhouse, church, surrounding fields and historic lanes remain closely connected.

The proposed development would fundamentally alter that experience. Even where individual structures are partially screened, the wider agricultural landscape would become an engineered energy development incorporating permanent infrastructure of a wholly different character.

Visibility and Screening

The Environmental Statement places considerable reliance upon existing and proposed vegetation to reduce visual effects.

Vegetation undoubtedly has an important role in mitigating visual impacts. However, planting cannot recreate the historic landscape that presently contributes to the significance of listed buildings.

Existing hedgerows and mature trees are themselves historic landscape features that contribute positively to the character of the area. Additional mitigation planting may soften certain views but can also alter the openness that currently characterises the landscape.

Furthermore, vegetation is not constant throughout the year. Deciduous planting provides significantly less screening during winter months, whilst the effectiveness of newly planted mitigation will depend upon successful establishment and many years of growth. During much of the proposed operational life, particularly in the early years following construction, substantial areas of infrastructure are likely to remain visible.

The assessment therefore places greater confidence in landscape mitigation than is justified by the available evidence.

Historic Group Value

The Heritage Statement tends to assess individual listed buildings in isolation.

However, many of the designated heritage assets surrounding Site 5 derive additional significance from their relationship with one another.

The Church of St Catherine, Church Farm House, associated barns, Fritton Rectory, historic cottages along The Street and the surrounding agricultural landscape together form a coherent historic group illustrating the development of the parish over many centuries.

Similarly, historic farmhouses and cottages throughout Morningthorpe and the surrounding countryside continue to derive significance from their relationship with historic field patterns, rural lanes and agricultural land.

The proposed development would not simply affect isolated buildings. It would alter the wider historic landscape that links these assets together.

Scope of the Heritage Assessment

A further concern relates to the scope of the Applicant's assessment.

The Environmental Statement identifies a large number of designated heritage assets within the wider study area but subsequently scopes many of them out of detailed assessment on the basis of distance or limited intervisibility.

Whilst proportionate assessment is appropriate, this approach carries the risk that cumulative changes to the wider historic landscape are underestimated.

Historic landscapes do not function as a series of isolated viewpoints. The significance of many heritage assets derives from the continuity of the surrounding countryside and the historic relationships between settlements, churches, farmsteads, commons and agricultural land.

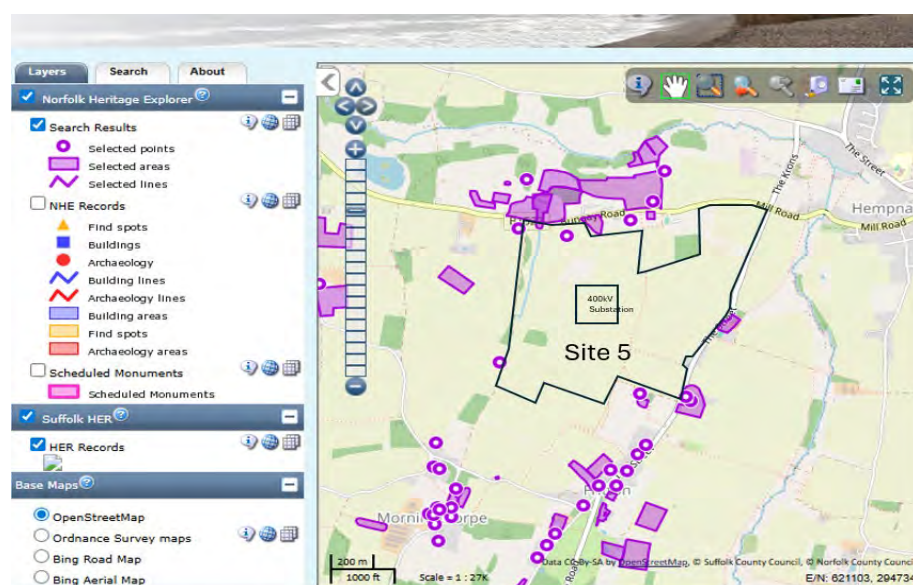
Where substantial change is introduced into that landscape, the cumulative effect upon multiple heritage assets may be greater than the sum of individual visual effects considered separately.

For Site 5, this is particularly relevant because the proposed development occupies one of the most historically sensitive parts of the East Pye Solar Scheme, immediately adjoining Fritton Conservation Area and lying within a landscape containing an exceptional concentration of designated heritage assets.

Accordingly, the Environmental Statement does not provide sufficient evidence to support its conclusion that the proposed development would result in little or no harm to the setting of many Grade II listed buildings surrounding Site 5. The assessment gives insufficient weight to the contribution made by the surrounding agricultural landscape, places undue reliance upon visibility and proposed planting, and does not fully consider the cumulative effect of introducing major energy infrastructure into a landscape whose historic character has remained largely intact for centuries.

10.6 Archaeology

This section sets out the archaeological concerns arising from the inclusion of Site 5 within the proposed large-scale solar development.



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Figure 10.10 (Based on map from <https://www.heritage.norfolk.gov.uk>) showing registered Heritage Assets in relation to Site 5

See **Appendix 2** for detailed description and locations of significant finds highlighted in the above map.

The proposed development lies within a landscape that is known to contain archaeological remains and which has clear potential to preserve additional buried heritage assets of local, regional and potentially national significance. Site 5 and the surrounding area has a well-documented history of human occupation and land use spanning multiple periods. Site 5 is situated in the historical areas of Fritton, Morningthorpe and Boyland which date back to the Domesday book, the former counting as one of the top 20% of recorded settlements for size in 1086.

Archaeological finds have shown that Site 5 has been at the centre of human activity since Neolithic/Palaeolithic times with recorded finds close to the boundaries of the site including items such as a worked hand axe now located in the British Museum as well as numerous finds recorded inside Site 5.

Site 5 forms part of a wider historic landscape that may contain further archaeological deposits which remain undiscovered. Such remains constitute a finite and irreplaceable resource, and once damaged or removed they cannot be recreated.

The Environmental Statement and associated heritage documentation appear to underestimate the archaeological sensitivity of the site and the potential impacts arising from the proposed development. Through accessing Norfolk Heritage Records and using their maps and grid references for the find locations from the individual records (rather than their overview map of the specified area) it can be seen that there have been significant finds from both within Site 5 as well as the close surrounding area that have been under represented. In addition to this, the assessment gives insufficient weight to the scale of ground disturbance required during construction and the cumulative effects of multiple infrastructure elements across the site.

The proposed development plans to use Site 5 for the construction compound, 400kV Substation and up to 4.5m tall tracking Solar Arrays.

Although large-scale solar developments are sometimes described as “low impact” or “reversible”, this characterisation does not adequately reflect the physical realities of construction. The installation of solar arrays typically requires extensive ground penetration through driven piles or other foundations, the construction of inverter stations and substations mounted on concrete bases, cable trenching across the site, access tracks, drainage works, and other associated infrastructure. These activities will inevitably disturb the subsoil and any archaeological deposits contained within it. The decommissioning plan is to leave in situ any buried cables and cut off concrete foundations below ground level leaving a permanent record of the development infrastructure sitting between Roman and Saxon remains.

The use of concrete foundations or concrete-mounted infrastructure is of particular concern. The creation of concrete bases for substations, transformers, inverter units, and other electrical infrastructure involves excavation, ground preparation, and permanent ground sealing. Such works can directly damage or destroy archaeological remains and can permanently remove sections of the archaeological record. Once sealed beneath concrete or removed during ground preparation, archaeological deposits cannot be recovered or meaningfully investigated.

Furthermore, the cumulative footprint of thousands of piles, cable routes, access tracks, and service compounds across a large solar installation can result in widespread and repeated disturbance of the archaeological horizon. Even where individual interventions are relatively small, the density and distribution of these works across the landscape significantly increases the risk of damaging or fragmenting buried archaeological remains.

Given the known archaeological potential of the wider area, the scale of the proposed development, and the intrusive nature of its construction methods, there is a substantial risk that important archaeological deposits could be damaged or destroyed.

With the building of the nearby gravel pit before planning regulations required archaeological surveys, resulting in a direct loss to the significant find of national importance (Saxon Burial Site) that was only picked up by a chance find, it demonstrates the importance of a thorough survey including areas not previously known for finds of archaeological significance. The information currently presented does not provide sufficient confidence that all heritage assets have been adequately identified.

With Site 5's strategic positioning between two major Roman Roads – Pye Road to the West and Stone Road to the East both connecting the Roman town of Venta Icenorum (Caister St Edmund) to the South, along with the evidence of Roman enclosures and ring ditches situated to the West of the site and evidence of a Roman road (NHER10199) to the East shows that there was a significant level of activity in this area.

Site 5 has been in long-standing agricultural use, which has limited the opportunity for casual archaeological discoveries during routine activity. Modern agricultural practice, particularly arable cultivation, generally disturbs only the upper soil horizons and does not necessarily expose deeper archaeological deposits. Consequently, the absence of frequent casual finds within the core of the site should not be taken as evidence that archaeological remains are absent. It is more likely that any surviving deposits remain buried below the depth typically affected by agricultural activity.

This interpretation is supported by archaeological discoveries at the margins of the site. A Saxon burial site has been recorded immediately to the north of Site 5, and multiple Neolithic and Palaeolithic finds have been identified within the surrounding area. Several of these discoveries have occurred in the northern part of Site 5, where more recent ground disturbance associated with the installation of a water main and the proximity of residential dwellings has increased the likelihood of chance finds being identified. However, significant finds have also been recorded along the south-eastern boundaries of the site. Taken together, this distribution of archaeological

material indicates that activity within the wider landscape was not confined to a single location and suggests that the eastern section of the site (identified as 5b) may also have the potential to contain significant archaeological remains.

The presence of these finds and recorded heritage assets around the edges of the site reinforces the conclusion that the wider landscape has been subject to sustained human activity across multiple periods. Archaeological landscapes rarely conform neatly to modern field boundaries, and features such as settlement remains, field systems, trackways, and burial sites frequently extend across large areas of land. As such, the presence of archaeological material at the site margins should reasonably be considered to increase the likelihood that related deposits extend into currently undeveloped areas within the application site.

Archaeological investigations carried out on behalf of East Pye Solar at Site 5 identified significant medieval remains, particularly within the north-western area of Site 5A and along the eastern edge of Site 5B. Geophysical surveys and trenching revealed enclosures, pits, ditches and settlement features likely associated with medieval and early post-medieval occupation linked to the deserted medieval village of Boyland and the later Boyland Hall estate.

The findings demonstrate continuity of settlement between the 11th and 14th centuries, supported by a substantial assemblage of medieval pottery, including glazed jugs associated with higher-status occupation. Archaeological evidence also suggests domestic and agricultural activity, including possible dairying and bread-making. Burnt flint and struck lithics indicate earlier prehistoric activity and occupation within the site.

The archaeological remains appear closely connected to the long-established manorial focus at the old Boyland Hall, with evidence supporting that Site 5 formed part of the wider settlement and agricultural landscape associated with the medieval village of Boyland before evolving later into parkland.

East Pye Solar's own evaluation confirmed that the site contains heritage assets of archaeological significance that contribute to the understanding of the extent, character and continuity of medieval settlement in the area. Features identified through geophysical survey, including enclosure systems and associated activity areas, were largely validated through trenching.

The assessment also identified historic field systems, former plantations, ponds and landscape features visible on historic mapping, aerial photography, LiDAR and geophysical survey data, demonstrating the long-term historic development of the landscape.

Importantly, several planned trenches within Site 5B were not excavated due to access constraints and layout changes, meaning the archaeological resource within parts of the site has not been fully assessed. Given the level of finds in Site 5A a thorough examination of Site 5B is also essential.

10.7 Community Identity and Well-Being Rooted in Cultural Heritage and Historic Landscape

The significance of Site 5 extends beyond designated heritage assets and archaeological remains. It also lies at the heart of a landscape that continues to shape the identity of the local community. Whilst cultural heritage is often considered through the designation of individual buildings or monuments, the National Planning Policy Framework and Historic England's guidance recognise that significance is also derived from the way historic places are experienced, understood and valued by those who live within them.

For the residents of Fritton and Morningthorpe, the surrounding countryside is not simply an attractive backdrop. It is the landscape through which people walk, travel, farm and experience daily life. Public Rights of Way, historic lanes, village approaches and open farmland provide the setting for community activities and maintain the historic relationship between the villages and their surrounding countryside.

Unlike many settlements where modern development has gradually altered this relationship, Fritton and Morningthorpe have retained a strong visual and functional connection with the agricultural landscape immediately surrounding the villages. The transition from open countryside into the historic settlement remains clearly legible, and the open fields of Site 5 continue to form part of that experience.

The Environmental Statement acknowledges many of these individual characteristics but largely considers them through separate technical disciplines, including landscape, cultural heritage, recreation and human health. This compartmentalised approach fails to reflect how the landscape is actually experienced by local communities.

Residents do not experience the setting of the Conservation Area separately from the surrounding countryside. Nor do they experience heritage, landscape, tranquillity, recreation and public rights of way as unrelated issues. These qualities combine to create a strong sense of place that has developed over many generations.

The proposed development would fundamentally alter that relationship.

For the proposed 60yr operational life of the Scheme, residents would no longer experience Site 5 as open agricultural land forming the northern setting of Fritton. Instead, the landscape would become characterised by extensive solar photovoltaic arrays, security fencing, access roads, inverter stations, CCTV, operational lighting and the 400kV Project Substation. This would represent a substantial change to the character of the area and to the way in which the surrounding heritage assets are experienced by those who live within the parish.

This is not simply a visual change. The introduction of industrial scale energy infrastructure into a historic rural landscape would alter perceptions of tranquillity, openness, remoteness and

continuity that currently contribute to the area's distinctive identity. Historic approaches into the villages, views across open countryside and the experience of moving along historic lanes and Public Rights of Way would all be influenced by infrastructure that has no historic relationship with the evolution of the landscape.

The significance of these changes should not be underestimated. Cultural heritage is concerned not only with preserving historic buildings but also with sustaining the relationship between people and the historic places in which they live. Where that relationship has remained largely intact for centuries, as it has at Fritton and Morningthorpe, changes to the surrounding landscape have consequences that extend beyond the physical fabric of designated heritage assets.

The Environmental Statement gives limited consideration to these wider cultural impacts. By assessing heritage, landscape, recreation and residential amenity largely in isolation, it fails to fully consider the cumulative effect that the proposed development would have upon the identity, character and lived experience of the local community.

Conclusion

Site 5 occupies one of the most historically sensitive locations within the East Pye Solar Scheme. Its significance derives not only from the presence of designated heritage assets, but from the continued survival of a **living historic landscape** in which medieval churches, the Fritton Conservation Area, historic lanes, archaeological remains and productive agricultural land continue to exist in their traditional relationship.

The strongest concerns are:

- **Site 5 forms an important part of the setting of Fritton Conservation Area**, contributing directly to its rural character, historic significance and northern approach.
- **The setting of the Grade I listed Church of St Catherine would be fundamentally altered** by the introduction of the 400kV Project Substation and associated energy infrastructure into its long established agricultural surroundings.
- **Nearly 50 listed buildings lie within one kilometre of Site 5**, demonstrating an exceptional concentration of designated heritage assets whose significance is closely linked to the surrounding rural landscape.
- **The Environmental Statement places undue reliance on visibility and mitigation planting**, rather than undertaking a holistic assessment of setting that reflects Historic England's guidance and established heritage practice.
- **The proposed development would erode a surviving living historic landscape**, weakening the long established relationship between village, church, farmland, historic lanes and countryside that has evolved over many centuries.
- **The archaeological assessment remains subject to uncertainty**, with incomplete evaluation and the potential for further significant remains to survive within Site 5.
- **Historic England's Relevant Representation confirms that impacts on the setting of designated heritage assets remain a significant issue for the Examination**,

reinforcing the need for careful scrutiny of the Applicant's assessment across historically sensitive parts of the Scheme.

Taken together, the evidence demonstrates that the Environmental Statement does not provide a sufficiently robust assessment of the cultural heritage impacts arising from the proposed development at Site 5. The assessment consistently underestimates the contribution that the surrounding agricultural landscape makes to the significance of designated heritage assets and gives insufficient weight to the cumulative effect of introducing major energy infrastructure into a landscape whose historic character has remained largely intact for centuries. As a result, the likely harm to the historic environment has not been fully identified or properly weighed in the overall planning balance.

Chapter 11: Transport and Access

11.1 Statutory Highway Authority Concerns

The concerns identified within this Chapter are reinforced by the Relevant Representations submitted by both **National Highways** and **Norfolk County Council**, the statutory authorities responsible for the Strategic Road Network and Local Highway Authority respectively. Whilst their responsibilities extend across the East Pye Solar Scheme as a whole rather than Site 5 specifically, both organisations conclude that important aspects of the Applicant's transport assessment require further work before the likely impacts of the Scheme can be properly understood.

National Highways maintains an objection to the application because it considers that further assessment is required in relation to construction traffic, cumulative impacts, junction performance, abnormal indivisible load routing and the Construction Traffic Management Plan. It also seeks amendments to the draft Development Consent Order to secure stronger traffic management controls before development can commence.

Norfolk County Council similarly objects to the application, citing strategic concerns regarding cumulative impacts, the scale of development and its effects on local communities and infrastructure. In its capacity as Local Highway Authority, the County Council identifies a number of unresolved transport issues and concludes that elements of the proposed transport strategy cannot currently be supported. In particular, it requires significant changes to the construction access strategy, confirms that Site 5 should be served by a **single access from the B1527 with internal routing between Site 5A and Site 5B**, and expects construction traffic to use internal access routes rather than local roads wherever possible.

This recommendation is particularly significant because the Applicant's proposed construction strategy for Site 5 relies upon **multiple access points** rather than the single B1527 access advocated by the Local Highway Authority. The Environmental Statement does not adequately explain why this advice has not been followed or demonstrate that four separate construction access points would provide a safer or more efficient solution. The use of multiple access locations increases the number of conflict points with general traffic, residents, agricultural vehicles and non-motorised users, contrary to the County Council's preferred approach of consolidating movements through a single principal access with internal routing between Site 5A and Site 5B.

Taken together, these representations demonstrate that concerns regarding the transport assessment are not confined to local residents. Both statutory highway authorities consider that important elements of the Applicant's assessment remain incomplete or insufficiently evidenced. This reinforces the conclusion that the Environmental Statement does not yet provide a sufficiently robust basis upon which the transport impacts of Site 5 can be confidently assessed

11.2 Impacts on Road Network

Highway Capacity and Safety – B1527 and Surrounding Rural Road Network

The proposed development would result in a substantial increase in HGV movements during the construction phase, placing additional pressure on the local highway network. Measurements taken along sections of the B1527 indicate carriageway widths of approximately 5.5m, 5.8m and 6.0m. These dimensions are at the lower end of those typically found on rural two-way roads and provide limited clearance when large construction vehicles are encountered.

A further concern is that these constrained sections are not confined to the proposed site access locations. They occur at various points along the route between the A140 and The Krons and would therefore be encountered by construction traffic travelling to and from the site. Whilst the applicant proposes localised carriageway widening and temporary works at access points to facilitate the movement of Abnormal Indivisible Loads (AILs), such measures do not address the wider constraints that exist along the route itself. Construction HGVs, including those serving the substation and associated infrastructure works, would still be required to travel through these narrower sections on a daily basis.

Given that HGVs can be up to 2.55m wide (excluding mirrors), the passage of construction traffic on roads of this width would significantly reduce available space for opposing vehicles, cyclists, pedestrians, equestrians and other vulnerable road users. The issue is exacerbated by the character of the surrounding highway environment. Along many parts of the route, verges are either absent or are narrow, steeply profiled and elevated above carriageway level. They do not provide a realistic place of refuge for non-motorised users when large vehicles are passing. Where two HGVs, or an HGV and another large vehicle, meet on these constrained sections, the limited carriageway width and lack of safe refuge space can leave vulnerable road users exposed to significant safety risks. In practice, pedestrians, cyclists and horse riders may have little opportunity to move clear of traffic without entering ditches, climbing steep banks or retreating considerable distances to find a safer location.

The concerns extend beyond the B1527 itself. The surrounding rural road network is also constrained and may be used by HGV drivers or other traffic seeking to avoid delays associated with traffic management measures required for construction access. Any temporary traffic controls, convoy systems, road narrowing, AIL movements or construction-related congestion on the B1527 are likely to encourage displacement of traffic onto neighbouring roads, thereby spreading the impacts of the development across a wider area than assessed by the applicant.

The Krons, proposed as an access route to Sites 7a–f, contains a narrowest measured width of approximately 3.66m and includes a bridge section measuring approximately 4.99m. The Street, which provides access to Site 5 from the A25 and A26, narrows to approximately 4.8m in places.

Brick Kiln Lane, which may be used as an alternative route when traffic is slow-moving on the B1527 and The Street, narrows to approximately 3.9m. These roads were not designed to accommodate frequent large HGV movements and have limited capacity for vehicles to pass safely without encroaching onto verges, road margins or areas used by non-motorised users.

Importantly, these impacts would not be short-lived. The proposed substation construction is expected to continue for a minimum of 24 months, resulting in a prolonged period of construction traffic on roads that are already constrained. The duration of these works materially increases the significance of the impacts. Local communities, businesses, cyclists, pedestrians, equestrians and other road users would be exposed to construction-related traffic disruption, noise, road safety risks and highway degradation over a period of at least two years.

The cumulative impact of sustained HGV traffic over a minimum 24-month construction period on the B1527 and the surrounding narrow rural roads has not been adequately assessed. The applicant has not demonstrated how HGV movements will be effectively controlled, how non-designated routes will be prevented from being used, or how highway safety, road condition, accessibility and residential amenity will be protected throughout the construction programme. The proposed access improvements address only specific access locations and do not overcome the fundamental constraints present along substantial lengths of the construction route and neighbouring roads. In the absence of robust evidence and enforceable mitigation measures, there remains significant uncertainty regarding the suitability of the local road network to accommodate the scale, frequency and duration of traffic associated with the proposed development. This should weigh significantly against the proposal in the planning balance.

These concerns are reinforced by the statutory consultees responsible for the highway network. Norfolk County Council, as Local Highway Authority, has identified a number of matters requiring further assessment and refinement before the transport impacts of the Scheme can be considered acceptable. National Highways has likewise sought further information and additional controls to ensure that impacts on the Strategic Road Network are properly understood and managed. Their representations demonstrate that the transport assessment remains subject to significant unresolved issues rather than providing a settled or agreed position.

Inconsistencies in Baseline Traffic Survey Data

Within *Environmental Statement Volume 1, Chapter 11 – Transport and Access*, paragraph 11.4.2 states:

“All surveys took place in September, which is considered a ‘traffic neutral’ month.”

However, paragraph 11.6.17 states:

“The ATC and MCC surveys were undertaken between Friday 1 November 2024 and Thursday 7 November 2024. ATC surveys were collected for a 7-day, 24-hour period and the MCC survey was for a one-day 24-hour period, on Thursday 7 November.”

This contradiction raises concerns regarding the reliability and transparency of the baseline traffic assessment.

The survey period also coincided with the Norfolk school half-term period. Schools closed on Friday 25 October 2024 and reopened on Monday 4 November 2024, meaning part of the survey period occurred during non-neutral traffic conditions.

In addition, the Baseline traffic flows used to assess the impact of the construction phase are flawed because the counts were performed in November 2024 and April/May 2025, when construction of the Long Stratton Bypass was ongoing (construction work started in April 2024, with all affected roads fully reopening in October 2025). This major infrastructure project resulted in:

- official diversions from the A140;
- additional speed restrictions
- increased congestion and delays;
- and significant “rat-running” through surrounding villages as drivers sought alternative routes.

These conditions would inevitably have affected traffic volumes, vehicle types, journey timings, and route selection across the local road network. As a result, roads such as the B1527 running east from the Hempnall Roundabout saw a temporary increase in the level of traffic flows, which has been included in the baseline figures used. This distorts the impact of the proposed development, giving an artificially high baseline and hence reducing the impact of the construction work. Despite this, East Pye Solar has failed to acknowledge or assess the impact of the bypass works on the survey data, rendering the baseline counts unreliable and flawed.

Coupled to the disruption caused by the Bypass works, November is also a peak period for the sugar beet harvest, a crop widely grown in this area. This seasonal activity results in a temporary but significant increase in HGV traffic and altered operating hours for agricultural and haulage vehicles. By failing to account for this seasonal activity and the altered routes taken due to the Long Stratton Bypass construction disruption, the applicant risks artificially inflating baseline HGV levels further, which then have been used to minimise the perceived impact of additional construction traffic associated with the development.

The applicant states that 12% of traffic passing Site 5 on the B1527 comprises HGVs. However, no definition of “HGV” has been provided in relation to the baseline survey. Under the Department for Transport classification, an HGV is any goods vehicle exceeding 3.5 tonnes. This definition captures a large proportion of delivery vans and small tradesperson vehicles which only marginally fall within the HGV category.

The construction phase, by contrast, will involve the use of substantially larger lorries. These vehicles will have a materially greater impact on highway safety, road user experience, and noise levels than the smaller vehicles included within the baseline HGV count. Consequently, although

the percentage increase in total HGV movements may appear moderate, the increase in **large** HGVs on this route will be significantly higher and is not reflected in the applicant's assessment.

In addition, the traffic count for the B1527 was undertaken at the Hempnall Roundabout. This location captures traffic associated with the Brick Kiln Lane industrial businesses, Hall Farm Industrial Estate and Self Storage Units, Morningthorpe Recycling Centre and the adjacent Richardson Recycling facility, both of which are situated before Site 5. As such, the baseline figures include HGV movements that do not travel past the development site. This results in an understatement of the actual impact of construction traffic on the section of the B1527 beyond these facilities, particularly in relation to larger HGV movements.

These uncertainties are particularly important because both Norfolk County Council and National Highways requested additional transport information during the examination process. Their responses indicate that the transport assessment required further clarification and refinement before its conclusions could be relied upon. This reinforces concerns that the baseline information used to assess construction traffic should be robust, transparent and representative of normal operating conditions.

Construction Phase

During the construction phase of Site 5 there will be intensive traffic generation associated with:

- HGV deliveries of panels, frames, inverters, cabling, fencing, aggregates, and construction materials;
- light vehicle traffic from construction workers travelling daily to and from the site;
- abnormal indivisible loads (AILs), including transformers and switchgear associated with the proposed 400kV substation.

These vehicle movements will place significant pressure on rural roads that are already narrow, lightly trafficked, and in poor condition.

Norfolk County Council's response also highlights the importance of robust Construction Traffic Management Plans, appropriate routing arrangements and effective monitoring throughout the construction period. Given the scale of infrastructure proposed within Site 5, including the 400kV Project Substation, construction compound and multiple access points, reliance upon comparatively low estimated traffic figures introduces further uncertainty into the assessment.

Underestimation of Construction Traffic

The Outline Construction Traffic Management Plan (CTMP) and Environmental Statement for Site 5 (5A and 5B) identify peak daily construction traffic as:

- 10 two-way HGV movements per day (5 per direction);

- 32 two-way car/LGV movements per day (16 per direction); and
- two abnormal transformer deliveries.

These figures appear significantly lower than those associated with comparable UK 400kV substation projects. East Pye Solar has based the estimated traffic volumes on other projects it claims are similar. However, many of the comparator projects used remain in the planning process and have not yet been constructed, meaning their traffic volume data are themselves based on estimates rather than observed construction traffic. This approach effectively uses estimates to generate further estimates rather than drawing upon historical data from completed projects.

The Wanlass Beck Substation Transport Statement is cited as a source for the East Pye Solar estimates. However, even the Wanlass Beck assessment identifies peak construction traffic of 21 HGV movements per day, more than double the 10 HGV movements per day estimated for the East Pye substation. No justification is provided as to why the East Pye development would require less than half the number of HGV movements.

Published Construction Traffic Management Plans and Transport Statements for comparable National Grid and transmission infrastructure projects commonly identify:

- 20–40 HGV movements per day; and
- 40–120 car/LGV movements per day during peak construction periods.

Examples include:

- the National Grid Hinkley Point C Connection Project CTMP (2016);
- the Scottish Power Bramford–Twinstead 400kV Reinforcement Project CTMP (2023); and
- other proposed 400kV substations, including Brinsworth near Rotherham, which estimates approximately 260 daily construction traffic movements, and Redshaw in South Lanarkshire, which estimates approximately 180 daily movements, including around 40 HGV movements.

In addition, the traffic estimates used for the installation of solar panels are derived from traffic assessments prepared for other projects promoted by the Applicant, with scaling applied according to project size. As these comparator projects also remain at the proposal stage, the methodology again relies on estimated traffic data rather than observed construction activity. No details are provided regarding the underlying assumptions or any assessment of differences between the respective site locations and construction methodologies.

The East Pye Solar estimates therefore appear materially understated and do not reflect realistic construction traffic volumes for a standalone 400kV substation development let alone a site with the 4.5m Solar Arrays too. The reliance on unvalidated estimates from other unbuilt projects, together

with the absence of comparison against historical data from completed substation developments, undermines confidence in the robustness of the traffic assessment.

Road Capacity and Congestion

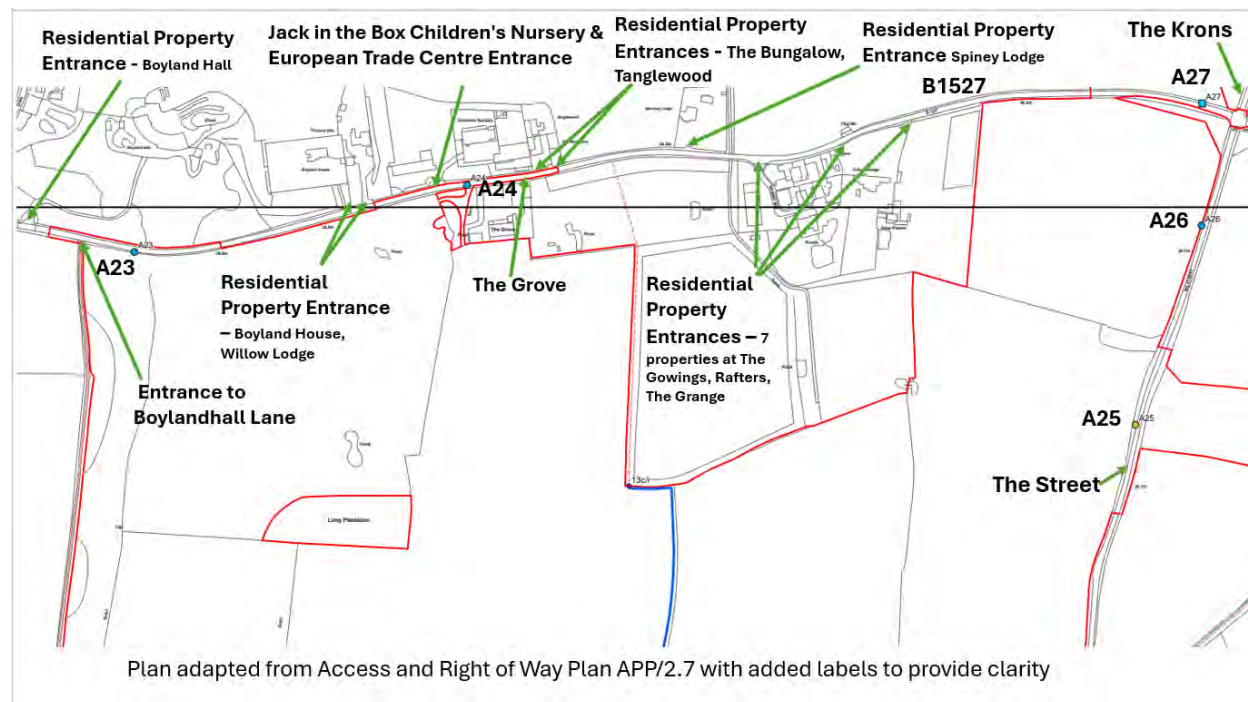


Figure 11.1 Plan showing all proposed access points into Site 5 off B1527 in relation to residential, Business and Children's Nursery Entrances

The applicant has stated that:

“Construction deliveries and collections by HGV will be scheduled to arrive and depart between 09:30 and 16:30 to avoid peak traffic periods of 08:00–09:00 and 17:00–18:00. Construction workers will arrive to site between 06:30–08:00 and depart between 16:30–19:00, therefore avoiding the morning peak period and with a staggered departure in the afternoon peak period.”

The applicant has not provided any evidence to justify the definition of peak traffic periods used for this rural location. Due to the greater distances between settlements and employment centres, journey times are generally longer and traffic flows are often spread across a wider time period than the one-hour peak periods assumed in the assessment.

No baseline traffic surveys have been undertaken at the proposed Site 5 access points to establish local traffic patterns. Consequently, the peak traffic periods identified by the applicant cannot be asserted with any degree of reliability. The proposed mitigation strategy is therefore based on unverified assumptions and provides limited confidence that construction traffic impacts will be effectively managed.

The assessment also fails to consider local traffic generators that are likely to influence traffic conditions during the proposed construction periods. In particular, no account appears to have been taken of traffic associated with Jack in the Box Nursery School, where drop-off and pick-up activity occurs over an extended period as parents and carers accommodate varying working hours.

Construction traffic has the potential to affect:

- peak-period congestion, particularly where deliveries coincide with commuter, school, and nursery traffic;
- junction performance, especially at the A140/B1527 roundabout and the junction of the B1527 with The Street, Fritton; and
- traffic operation and safety on narrow rural roads characterised by tight bends, weak verges, and limited passing opportunities.

Particular concern arises from the proximity of the proposed access arrangements to:

- Jack in the Box Nursery School;
- The European Trade Centre;
- Wheels4Less car showroom;
- Beeches Farm Equestrian;
- LRS Anglia – The Grove



Figure 11.2 Photo showing Entrance to Richardson's Recycling and Morningthorpe Recycling Centre on the B1527 near to proposed entrance/exit to Site 5

The applicant has failed to adequately assess how increased construction traffic, particularly HGV movements, will interact with existing traffic generated by these businesses and facilities.

National Highways also required further assessment of construction traffic impacts on the wider highway network, including the interaction with the Strategic Road Network and the management of abnormal loads. This demonstrates that the consequences of construction traffic extend beyond the immediate vicinity of Site 5 and require careful coordination across both local and strategic highways. It also reinforces concerns that congestion, delays and driver behaviour on the surrounding rural road network cannot be considered in isolation.

Road Safety Considerations

The B1527 is a rural B classification road which is narrow in places and shown through the erosion of verge edges to be difficult for large vehicles to pass comfortably. From shortly after exiting the A140 roundabout towards Hempnall, the B1527 is at the national speed limit and is limited to 30 on the approach to the crossroads with The Street, and The Krons before entering the Village of Hempnall where the natural sharp bends in the road further limit the amount of large HGVs that use this road.

The Street, Fritton is an unclassified road which also has verge erosion showing that passing of large vehicles is difficult.

The Krons. Another Unclassified road, is very narrow and has passing places along it to allow vehicles to manoeuvre down it.



Figure 11.3 Photo of the Crossroads adjacent to Site 5

This is the view where the Applicant proposes for HGV vehicles to turn left to access Site 7 and Right to access Site 5 (Access points A25, A26), having passed Access points A23 and A24 on B1527 first. This is not a large road.

Increased construction traffic will significantly increase highway safety risks for:

- Pedestrians accessing the various Public Rights of Way;
- cyclists;
- equestrians;
- school and nursery users;
- and other vulnerable road users.

The roads surrounding Site 5 are regularly used by horse riders associated with Beeches Farm Equestrian, which is situated directly opposite Site 5B on The Street, Fritton.

Cyclists also make extensive use of the rural roads surrounding Site 5, including organised cycling groups from across Norfolk. The area forms part of a popular approximately 45km cycling loop between Fritton and Dickleburgh and is also used annually for the Norfolk Churches Trust sponsored bike ride.

The B1527 is subject to the national speed limit and is characterised by:

- high-speed vehicle movements;
- narrow carriageways;
- undulating sections;
- poor forward visibility;
- Narrow high verges/ no verge at all
- and bends close to the proposed access points.

The proposed access point A23 is located:

- 50m from entrance to Boylandhall Lane (unmetalled, restricted vehicular access).
- Approximately 100m from the entrance to the residential property Boyland Hall to the West
- Approximately 200m from the entrance to the residential property Boyland House to the East
- 375m from the access to Hall Farm Industrial and self storage centre
- At a point where the road is dipping down and bending away - see photos.



Figure 11.4 Photo of A23 Proposed Access point into Site 5



Figure 11.5 Photo Showing View When Standing in Boylandhall Lane Looking West with back to proposed access point A23

At this point along the B1527, there is very little to no verge line available to act as an escape route for pedestrians, cyclists or horse riders and where there is it is high up from the road surface (60cm at this point). This makes it difficult/impossible to use as an escape route in the event of needing to escape the traffic. The access out of Hall Farm Industrial centre will be impacted by the increase of traffic due to vehicles accessing Site 5 at points A23, A24, A25 and A26 as well as accessing Cable Corridor CRC8 at point A27 and also Site 7 due to proposed access route along The Krons.

The proposed access point A24 is located:

- virtually opposite the entrance to Jack in the Box Nursery School and The European Trade Centre;
- approximately 50 metres from the access to The Groves motor vehicle business.
- Within 75m to residential properties to the East and 100m of residential properties to the West
- 150m East of the emergence of PRow - Morningthorpe FP5
- 400m from PRow - Boylandhall Lane

For those wishing to walk the footpaths and rights of way around Morningthorpe and Fritton, this section of the B1527 joins FP5 and Boylandhall Lane, further down the B1527, Boudica Way can be accessed.



Figure 11.6 Photo Showing View from exit of Jack in the Box Nursery School onto the B1527 - east view (proposed access point A24 seen on right of photo - metal gate, with entrance to The Groves seen just beyond that)

The Applicant's proposed temporary Public Rights of Way diversions would require walkers to leave existing traffic-free routes and instead use sections of the B1527 and The Street. Depending upon their direction of travel, users would be required to pass directly alongside the proposed Site 5 construction access points where HGVs, Abnormal Indivisible Loads (AILs) and other construction vehicles would be entering and leaving the site. The photographs within this chapter demonstrate that these roads frequently have narrow or no usable verges, poor forward visibility and limited opportunities for pedestrians to move clear of passing traffic. The Applicant's requirement to acquire Development Consent Order powers over land on the opposite side of the B1527 to facilitate construction access further illustrates the constrained nature of the highway. Consequently, the proposed diversion routes would expose walkers to a materially less safe environment than the existing Public Rights of Way.

Despite the complexity and sensitivity of this location, East Pye Solar has not undertaken any detailed traffic flow or turning movement assessment at this point.



Figure 11.7 Photo of View from exit of Jack in the Box Nursery School (and European Trade Centre) onto the B1527 - west view

This omission is particularly concerning given the accident history along this section of road. In the last ten years:

- eight recorded collisions have occurred along the stretch of the B1527 bordering Site 5;
- four of these incidents were classified as “serious”;
- two occurred at or near the entrance to Jack in the Box Nursery School.

The most recent collision occurred on 11 February 2026 and required emergency service attendance immediately outside the nursery access junction.

On 25th October 2025, an accident occurred less than 250m from this proposed access point that closed the road for several hours and required the attendance of the Air ambulance

A separate collision in 2003, approximately 400 metres east of the proposed access point, resulted in two fatalities.

The Proposed Access point A25 is located:

- Off the narrow unclassified The Street, Fritton

- Off a National Speed limit section
- Requires large vehicles to turn into/out of the narrow road slowing traffic on the B1527 further
- Route used by horse riders, cyclists, walkers and runners.
- Ditches either side of the road, road users unable to pull off the road safely to enable large vehicles to pass,
- No safe places for Non motorised Road Users



Figure 11.8 Photograph showing positions of proposed access points into Site 5 from the unclassified road known as The Street. Ditches are visible as well as showing that there is nowhere for vehicles to move easily out of each other's way.

The Proposed Access point A26 is located:

- Off the narrow unclassified The Street, Fritton
- Only 100m from the crossroads
- Just after speed derestriction so vehicles naturally increasing in speed away from crossroads
- Requires large vehicles to turn into/out of the narrow road slowing traffic on the B1527 further

- Route used by horse riders, cyclists, walkers and runners.



Figure 11.9 Photograph showing positions of proposed access points into Site 5 from the unclassified road known as The Street. Crossroads with B1527 and The Krons visible in the background



Figure 11.10 Photograph showing positions of proposed access points into Site 5 (A26) and into CRC7 (A27) in relation to the crossroads. Verge erosion due to the road being too narrow for large vehicles clearly visible on the right hand side.

Construction traffic will also increase:

- turning conflicts involving large vehicles;
- risks associated with mud and debris on the highway;
- reduced skid resistance;
- and dangerous manoeuvring on narrow rural roads.



Figure 11.11 Photo of Junction of B1527, The Street and The Krons - easterly view. Vehicles from The Street (right side) National Speed limit just before the crossroads.

Wildlife and Highway Safety Impacts

This section of the B1527 is well known locally for wildlife crossings, particularly involving Red Deer and Muntjac. Wildlife warning signs are already positioned between the proposed Site 5 access points A23 and A24.



Figure 11.12 Photo of View looking along Northern Boundary of Site 5 towards Boylandhall Lane showing where the B1527 dips and then rises meaning forward visibility is obscured by the road surface. Also showing the Wild Animal Warning Road Sign

The applicant's own ecological evidence references roadkill data relating to badger populations, demonstrating that wildlife interaction with the road network is already an established issue.

However, East Pye Solar has failed to assess:

- the increased likelihood of wildlife-vehicle collisions during construction;
- the impact of increased HGV traffic volumes;
- disruption to long-established wildlife corridors;
- and the effects of fencing and land severance across the Order Site.

Local observations confirm that herds of Red Deer move from Tyrells Wood in the south northwards through Site 5 towards further woodland habitats.

With the Long Stratton Bypass already affecting migration routes, the additional impacts arising from:

- a construction phase expected to exceed two years;
- extensive fencing;
- increased traffic levels;
- and fragmentation of the landscape corridor,

are likely to significantly increase wildlife-related road safety risks.

Road Condition and Structural Impacts

The applicant has not demonstrated that the local highway network is capable of accommodating the volume and frequency of construction traffic proposed during the construction phase of Site 5 without causing deterioration to road surfaces and highway infrastructure.

The roads surrounding Site 5 comprise a network of rural roads, many of which were not designed to accommodate sustained levels of heavy goods vehicle traffic. The cumulative effect of repeated HGV movements over an extended construction period has the potential to accelerate wear to carriageway surfaces, road edges, verges, drainage features, and highway structures.

Particular concern arises in relation to:

- the B1527;
- The Street, Fritton;
- Brick Kiln Lane; and
- other minor roads likely to experience increased traffic as drivers seek alternative routes to avoid construction-related delays.

The B1527 has recently undergone resurfacing works to address existing carriageway deterioration. The applicant has not assessed the extent to which construction traffic associated with the development may shorten the lifespan of these works or increase future maintenance requirements.

The surrounding rural roads are characterised by:

- narrow carriageways;
- limited or non-existent verges;
- weak road edges;

- localised surface defects;
- constrained drainage arrangements; and
- sections with limited structural resilience to repeated heavy axle loading.

Construction traffic will not be confined solely to the direct access route. Delays associated with construction vehicles entering and exiting the site are likely to encourage other road users to divert onto surrounding minor roads. This has the potential to increase traffic volumes on routes that were not designed to accommodate such levels of use, resulting in additional road surface deterioration and verge damage across the wider highway network.

The applicant has not provided:

- any assessment of pedestrian routes;
- any structural capacity assessment of roads likely to be affected by construction traffic;
- any baseline survey of carriageway, verge, drainage, or highway asset condition; or
- any mechanism for monitoring and repairing construction-related highway damage.

In the absence of such information, there is insufficient evidence to conclude that the local highway network can accommodate the proposed construction traffic without unacceptable impacts on road condition, highway maintenance liabilities, and the operation of the surrounding rural road network.

Recent examples of existing road fragility include:

- verge and brick damage outside Church Farm House in February 2026;
- major culvert repairs outside Beeches Farm in January 2026, requiring closure of The Street for five days;
- ongoing pothole repairs undertaken by Norfolk County Council twice yearly;
- Recent 7 night closure B1527 for surface dressing.

Whilst the bridge on The Krons is being examined to see if it can withstand the significant increase in traffic volume, no acknowledgement has been made by the applicant of the 16th Century brick tunneled stream that spans the entire width of the B1527 (and extends both North and South to a total distance in excess of 300m) at the point between the proposed access sites A23 and A24 which would be subjected to significantly increased volumes and weight of traffic. No assessment has

been made by the applicant as to the ability for this tunnel to be able to bear the proposed loads without sustaining damage and putting the safety of road users at risk if it collapses as well as the damage to the waterway.

These problems are already occurring under existing traffic conditions and are likely to worsen substantially under prolonged HGV construction traffic.

Norfolk County Council also sought commitments relating to highway condition surveys, monitoring and the repair of any damage attributable to construction traffic. These requests reflect recognition that prolonged heavy vehicle movements have the potential to adversely affect local roads and highway assets. Site 5, which would accommodate one of the principal construction compounds together with the Project Substation, is likely to generate a significant proportion of these impacts.

Site Access Impacts

The applicant has failed to demonstrate that the proposed site access arrangements can operate safely and efficiently during either the construction or operational phases of the development. The proposed access points are located on roads that are already constrained by their geometry, existing traffic movements, nearby businesses, residential properties, and vulnerable road users. The assessment appears to rely heavily on desktop analysis and does not adequately reflect the realities of the local highway network.

Access Point A23

Access Point A23 is proposed as a permanent access for Heavy Goods Vehicles (HGVs) and Abnormal Indivisible Loads (AILs) required for both construction and ongoing maintenance activities.

The access is situated on a section of the B1527 characterised by a combination of bends, changes in vertical alignment, and a national speed limit environment. These characteristics reduce visibility and increase the risks associated with vehicles slowing, stopping, or turning into and out of the site.

The operation of this access is likely to require:

- temporary traffic management measures;
- stop/go controls or temporary traffic signals;
- vegetation clearance;

- road widening works; and
- alterations to accommodate HGV and AIL turning movements.

Any requirement for traffic management on this section of the B1527 would create additional hazards by causing vehicles travelling at higher speeds to brake unexpectedly or queue on the carriageway. These concerns are amplified by the presence of another proposed HGV and AIL access point (A24) approximately 350 metres away, resulting in multiple locations where traffic flow could be disrupted within a short distance.

Access Point A24

Access Point A24 is proposed as a permanent access for HGVs and AILs during both construction and operation.

This access is located directly:

- Opposite Jack in the Box Children's Nursery
- Opposite The European Trade Centre
- Adjacent to The Grove motor vehicle business;
- Close Proximity to multiple residential properties

The introduction of frequent HGV movements at this location would significantly increase conflict between construction traffic and existing road users. Traffic management measures required to facilitate vehicle access would create delays and queuing on a section of the B1527 that is subject to the national speed limit.

The applicant has failed to adequately assess the cumulative impact of construction traffic interacting with nursery traffic, business traffic, residential access requirements, cyclists, equestrians, and pedestrians. The resulting impacts on local businesses, residents, and highway safety have therefore not been properly evaluated.

Access Point A25

Access Point A25 is proposed as a permanent access point and cable crossing location connecting infrastructure on either side of The Street, Fritton.

The Street is a narrow unclassified rural road that serves as one of the principal routes into and out of Fritton. The proposed crossing works and associated traffic movements would introduce additional delays and safety concerns on a road that already has limited capacity to accommodate large vehicles.

The applicant has not demonstrated how construction traffic, turning movements, and cable crossing operations can be undertaken without causing significant disruption to existing road users or adversely affecting highway safety.

Access Point A26

Access Point A26 is proposed as a construction access located within approximately 100 metres of the crossroads junction between The Street and the B1527.

The close proximity of this access to an important junction creates additional conflict points and introduces further turning movements in an area where driver attention is already focused on negotiating the crossroads.

Although localised highway widening is proposed, large vehicles entering and leaving the site are likely to occupy substantial portions of the carriageway, obstruct traffic flow, delay other road users, and increase the risk of collisions. The applicant has not demonstrated that this access can operate safely during peak construction activity.

Access Point A27

Access Point A27 is proposed on the B1527 immediately adjacent to the crossroads junction and within close proximity to both Access Points A24 and A26.

The concentration of multiple access points within a relatively short section of highway creates numerous conflict points and repeated interruptions to traffic flow. Locating an access close to a crossroads increases the likelihood of driver confusion, sudden braking, turning conflicts, and rear-end collisions.

The applicant has assessed the access points largely in isolation and has failed to consider their combined impact on the operation and safety of the local highway network.

Access to Land Parcels 7 via The Krons

The applicant proposes to use The Krons, a narrow unclassified rural road, as a two-way access route for HGVs serving land parcels 7.

To overcome the constraints of the route, the applicant proposes a vehicle management system whereby HGVs would be held at Hempnall Roundabout and released individually via radio communication to prevent vehicles meeting along the route.

This proposal appears highly reliant on precise vehicle timing, driver compliance, and uninterrupted communications. The applicant has not demonstrated:

- how vehicle release timings would be managed in practice;
- how delays and varying vehicle speeds would be accommodated;
- how vehicles would be prevented from catching up with one another;
- how system failures or communication issues would be managed; or
- how access for residents and emergency vehicles would be maintained.

The impacts on residents living along The Krons have not been adequately assessed, nor has the interaction between Site 7 traffic and Site 5 construction traffic been properly considered.

Cumulative Access Impacts

Taken as a whole, the proposed access strategy would introduce multiple HGV access points onto a constrained rural highway network already used by residents, businesses, cyclists, walkers, runners, equestrians, agricultural vehicles, and nursery traffic.

The applicant has failed to demonstrate that:

- the proposed access points can operate safely;
- traffic management measures will not create additional hazards;
- the cumulative impacts of multiple access locations have been properly assessed; or
- the surrounding highway network has sufficient capacity to accommodate the proposed construction traffic.

More significantly, the applicant has not undertaken a comprehensive assessment of the cumulative impact of the entire East Pye Solar project on the wider rural road network. The Transport Assessment largely considers individual access points and route sections in isolation rather than evaluating how all elements of the development will interact simultaneously during peak construction periods.

The proposed development will generate traffic associated with the construction of solar arrays, substations, cable routes, access tracks, compound areas, and associated infrastructure across multiple sites. This will result in construction traffic being distributed across a network of rural roads, junctions, access points, and settlements over an extended period. The cumulative effect of these

movements on highway safety, traffic flow, road condition, local businesses, residents, and vulnerable road users has not been adequately assessed.

In particular, the applicant has failed to consider:

- the combined operation of multiple access points along the B1527 and surrounding roads;
- interactions between traffic serving Sites 5 and 7 and other development parcels;
- the cumulative effects of multiple traffic management locations operating simultaneously;
- the impact of construction traffic on driver route choice and the likely diversion of vehicles onto alternative rural roads;
- the cumulative impact on road surface deterioration, verges, drainage infrastructure, and highway maintenance requirements; and
- the overall resilience of the local highway network should delays, accidents, breakdowns, or other disruptions occur during the construction period.

The absence of a whole-network assessment is particularly concerning given the rural nature of the surrounding highway network, where many roads have limited capacity, few alternative routes, and are heavily relied upon by local communities and businesses. Without a comprehensive cumulative assessment, it is not possible to understand the true scale of the project's transport impacts or to conclude that the proposed mitigation measures are adequate.

As a result, there is insufficient evidence to conclude that the proposed site access arrangements and associated construction traffic would not result in unacceptable impacts on highway safety, traffic operation, road condition, local businesses, residential amenity, and the wider functioning of the rural highway network.

Collectively, the responses of Norfolk County Council and National Highways demonstrate that access arrangements require careful scrutiny, additional information and detailed control through subsequent management plans. This is inconsistent with any suggestion that the highway impacts of Site 5 have already been fully resolved.

Operational Phase Impact

These works will inevitably disrupt normal traffic flow and reduce highway safety during construction.

The applicant's assessment places considerable emphasis on construction traffic impacts but gives limited consideration to the long-term transport implications of operating a major 400kV substation and associated infrastructure at Site 5.

Unlike the solar arrays, which may require relatively infrequent maintenance, the proposed 400kV substation represents a permanent piece of nationally significant electricity infrastructure that will continue to generate vehicle movements throughout the operational life of the development.

Operational traffic is likely to include:

- routine inspection and maintenance visits;
- specialist engineering and technical staff;
- servicing and repair vehicles;
- replacement of equipment and components;
- vegetation and site management activities;
- emergency response and fault-repair vehicles; and
- periodic infrastructure upgrades and refurbishment works.

In addition to substation-related traffic, the applicant has not adequately assessed the operational traffic associated with the maintenance of the solar arrays themselves. While solar developments are often described as generating minimal operational traffic, periodic panel cleaning may require significant volumes of water to be transported to the site.

The applicant has confirmed that local mains water supplies cannot be relied upon for this purpose. As Anglian Water has not agreed to provide the volumes of water required, it is likely that water for solar panel cleaning would need to be transported to the site by tanker. This would generate additional HGV movements throughout the operational life of the development, particularly during periods when panel cleaning is required to maintain generating efficiency.

No assessment has been provided of:

- the frequency of solar panel cleaning operations;
- the volume of water required;
- the number of tanker movements that would be generated;
- the routes that would be used by such vehicles; or

- the cumulative impact of these movements alongside other operational and maintenance traffic.

The omission of this information results in a potentially significant source of operational traffic being excluded from the assessment. Consequently, the applicant has failed to demonstrate that the full operational transport impacts of the development have been properly identified or assessed.

The applicant has not provided sufficient information regarding the frequency, scale, or routing of these operational vehicle movements. Nor has it assessed the impact of larger maintenance activities that may require specialist vehicles, cranes, abnormal loads, or temporary traffic management measures during the operational lifetime of the substation.

Given the constrained nature of the surrounding rural highway network, even relatively infrequent maintenance activities have the potential to affect local road users, businesses, residents, and vulnerable highway users. This is particularly relevant where access to the site relies upon roads with limited capacity, restricted visibility, national speed limits, and a history of traffic collisions.

The applicant has therefore failed to demonstrate that the long-term operational requirements of the proposed substation can be accommodated without giving rise to unacceptable impacts on highway safety, traffic operation, road condition, and local amenity.

Decommissioning Phase Impacts

The applicant has provided only limited information regarding the transport impacts associated with the eventual decommissioning of the development.

At the end of the operational life of the project, substantial elements of the development may require removal, including solar panels, mounting structures, inverters, transformers, electrical equipment, cabling, access infrastructure, and potentially elements of the substation itself. The scale of these activities suggests that decommissioning traffic could be comparable to, or in some respects exceed, that experienced during construction.

Decommissioning is likely to involve:

- significant HGV movements;
- abnormal load movements;
- demolition and removal plant;
- temporary traffic management measures;
- road closures or traffic restrictions;

- increased construction worker traffic; and
- the export of large quantities of material from the site.

The applicant has not provided any detailed assessment of how decommissioning traffic would be managed, nor has it assessed the cumulative effects of decommissioning activities occurring across multiple project sites and infrastructure elements.

This omission is particularly important given that the local highway network comprises narrow rural roads, constrained junctions, weak verges, and routes already identified as having highway safety concerns. Without a detailed assessment, there is no certainty that the highway network would be capable of accommodating decommissioning traffic without significant impacts on road safety, traffic flow, road condition, local businesses, and residential amenity.

The absence of a robust decommissioning traffic strategy effectively defers assessment of potentially significant impacts to an unknown point in the future. As a result, the applicant has failed to demonstrate that the full life-cycle transport impacts of the development have been adequately assessed or that appropriate mitigation measures can be secured.

11.3 Impacts on Public Rights of Way

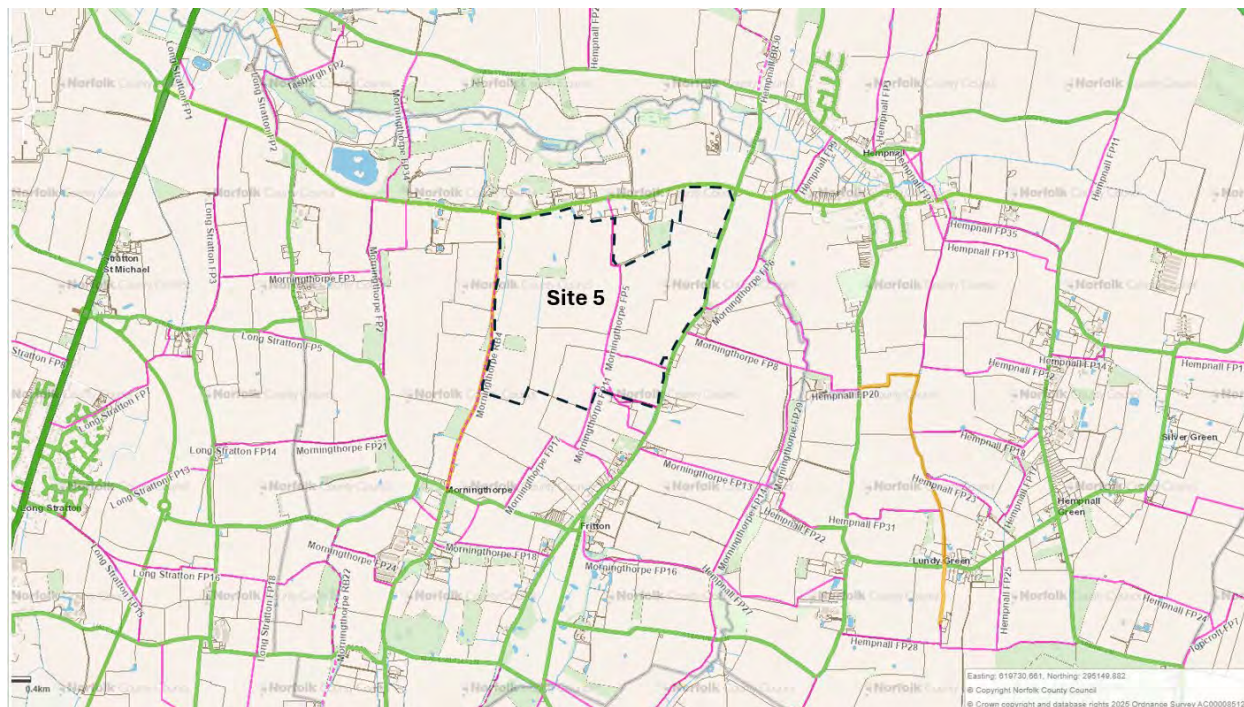


Figure 11.13 Map showing PRoW in and around Site 5 Adapted from map taken from Norfolk County Council Highways website.

Public Rights of Way and Non-Motorised User Impacts

The proposed East Pye Solar development will have significant and direct impacts on Public Rights of Way (PRoW) and Non-Motorised Users (NMUs) in and around Site 5, affecting accessibility, safety, connectivity, and the amenity value of these important community assets.

Temporary Closures and Network Disruption

Multiple Public Rights of Way, including Morningthorpe Restricted Byway RB4 and Footpaths FP5, FP9, and FP17, are proposed to be temporarily closed during the construction phase. These closures will restrict access for local residents, walkers, cyclists, equestrians, and other users, disrupting established routes and reducing connectivity across the local rights of way network.

The Draft Development Consent Order identifies extensive temporary closures, including:

- Morningthorpe Restricted Byway RB4 (approximately 182 metres);
- Footpath FP5 (approximately 704 metres);
- Footpath FP9 (approximately 296 metres); and
- additional sections of the wider PRoW network affected by construction activities.

Further uncertainty arises from Morningthorpe Restricted Byway RB4 itself. Whilst the application documents describe only a relatively short temporary closure, RB4 also forms part of the proposed diversion routes for Mon-FP5, Mon-FB9 and Mon-FP11. Any restriction affecting RB4 therefore has the potential to affect several diverted Public Rights of Way simultaneously. In addition, Section 56 notices displayed after the application was accepted for examination appear to identify a substantially greater length of Mon-RB4 than is shown within either the submitted Land Plans or the draft Development Consent Order. It is therefore unclear whether the diversion routes assessed within the Environmental Statement remain deliverable or what additional effects these later changes would have upon users of Mon-RB4 and those diverted from Mon-FP5, Mon-FB9 and Mon-FP11. In the absence of clear and consistent documentation, neither affected users nor the Examining Authority can properly assess the safety, convenience or environmental effects of the proposed diversion arrangements.

These are not minor or short-duration diversions but substantial interruptions to established routes relied upon by both local residents and recreational users. The cumulative effect of multiple simultaneous closures has not been adequately assessed, particularly in relation to how users will navigate between disconnected sections of the network.

The proposed diversion routes themselves have not been adequately assessed. Diversions onto the B1527 and The Street would require walkers to use roads with narrow or, in places, no pedestrian refuge, restricted forward visibility and significantly increased construction traffic. Depending upon their direction of travel, users would also have to pass the proposed Site 5 access points used by HGVs, AILs and other construction vehicles. The Applicant's requirement to acquire Development Consent Order powers over land on the opposite side of the B1527 to facilitate vehicle turning movements demonstrates the constrained nature of the highway and

reinforces concerns that these roads are not well suited to accommodating diverted pedestrians alongside intensive construction traffic.

Particular concern also arises in relation to Morningthorpe Restricted Byway RB4. Although the Environmental Statement describes only a relatively short temporary closure, RB4 also forms part of the proposed diversion routes for Mon-FP5, Mon-FB9 and Mon-FP11. Consequently, any restriction affecting RB4 has the potential to affect several diverted Public Rights of Way simultaneously.

Furthermore, Section 56 notices displayed after the application was accepted for examination appear to identify a substantially greater length of Mon-RB4 than is shown on either the submitted Land Plans or within the draft Development Consent Order. It is therefore unclear whether the diversion routes assessed within the Environmental Statement remain deliverable or what additional effects these later changes would have upon users of Mon-RB4 and the diverted users of Mon-FP5, Mon-FB9 and Mon-FP11. In the absence of clear and consistent documentation, neither affected users nor the Examining Authority can properly assess the safety, convenience or environmental effects of the proposed diversion arrangements.

Safety Risks to Non-Motorised Users

Construction traffic will cross Public Rights of Way at multiple locations, creating regular points of conflict between Heavy Goods Vehicles (HGVs) and non-motorised users. This raises significant safety concerns, particularly for:

- pedestrians;
- cyclists;
- equestrians;
- children;
- elderly users; and
- those with mobility impairments.

The temporary use of areas adjacent to, or crossing, PRoWs by construction traffic fundamentally alters the character and perceived safety of these routes. Even where access is maintained, many users are likely to be deterred from using the affected routes due to concerns over vehicle movements, noise, and personal safety.

The applicant's assessment of impacts on Non-Motorised Users is particularly concerning. The Transport Assessment appears to discount the significance of increased construction traffic on

the basis that users of the B1527 already experience an "Extreme" level of fear and intimidation and that additional traffic would therefore not materially worsen conditions.

This conclusion is fundamentally flawed. The construction phase will introduce a substantial increase in HGV movements, including some of the largest vehicles associated with the development. These vehicles are likely to be significantly more intimidating to cyclists, walkers, and equestrians than existing traffic and will increase both actual and perceived safety risks.

The fact that a route may already be challenging for non-motorised users cannot reasonably be used as justification for introducing further adverse impacts. Existing levels of fear and intimidation should be regarded as a baseline condition requiring improvement, not as a basis for dismissing additional harm.

Furthermore, despite the applicant's assessment, the B1527 continues to be regularly used by cyclists and walkers and is connected to a number of local footpaths and rights of way. It forms part of an established recreational network used by residents and visitors alike. The increased presence of construction traffic therefore has the potential to reduce use of these routes and diminish opportunities for active travel and recreation.

Loss of Amenity and Recreational Value

The amenity value of Public Rights of Way surrounding Site 5 will be substantially reduced by the presence of construction compounds, fencing, machinery, vehicle movements, lighting, and ongoing construction activities.



Figure 11.14 Views along Mon-FP5 towards B1527.

The Environmental Statement identifies significant visual impacts affecting several PRoW receptors, including Morningthorpe Restricted Byway RB4 and Footpath FP9. Users of these routes currently experience a predominantly rural landscape characterised by open views, tranquillity, and limited traffic intrusion.



Figure 11.15 Views along Mon-FP9 looking over to proposed 400Kv Substation position

During construction, this character will be replaced by an industrial environment associated with major infrastructure works. Noise, dust, traffic movements, construction compounds, and security fencing will substantially diminish the recreational value of these routes.



Figure 11.16 View from Mon-FP11 looking across area of proposed solar arrays with back towards St Catherine's Church

In addition, some impacts are likely to extend beyond the construction phase through the permanent introduction of infrastructure associated with the solar farm and 400kV substation, resulting in long-term changes to the landscape experienced by PRow users.

Inadequate Mitigation

The mitigation measures proposed by the applicant, including signage, temporary diversions, marshals, and post-construction surface repairs, are largely reactive in nature. While such measures may assist in managing some impacts, they do not address the fundamental loss of access, reduction in amenity, increased safety risks, and disruption to established recreational routes.

The applicant has also failed to adequately assess the cumulative effects of:

- multiple PRow closures;

- numerous construction traffic crossing points;
- increased HGV movements on roads used by walkers, cyclists, and equestrians;
- reduced route connectivity; and
- the interaction between construction activities occurring across different parts of the project.

The proposed development would result in substantial and prolonged disruption to Public Rights of Way and Non-Motorised Users across Site 5 and the surrounding area. The development would adversely affect accessibility, safety, recreational value, and user experience throughout the construction phase and, in some cases, beyond.

The applicant has failed to adequately assess or mitigate these impacts and has incorrectly discounted the effects of increased HGV traffic on walkers, cyclists, and other vulnerable users. Significant weight should therefore be given to the adverse effects on Public Rights of Way and Non-Motorised Users when determining the application.

The proposed East Pye Solar project will have significant and direct impacts on Public Rights of Way (PRoW) in and around Site 5, affecting both the accessibility and amenity of these important community assets.

11.4 Impacts on Pedestrians, Children and Cyclists

Risks to Children and Young People

The applicant has failed to adequately assess the specific risks that the proposed construction and operational traffic will present to children and young people using the local highway network.

Particular concern arises from the location of proposed Access Point A24, which is situated directly opposite Jack in the Box Nursery School on the B1527. The nursery generates regular vehicle movements throughout the day associated with child drop-off and collection activities, with peak periods often extending beyond conventional commuter hours as parents and carers accommodate varying work patterns.

The introduction of substantial construction traffic, including HGVs and abnormal loads, at a location immediately opposite the nursery will increase conflict between construction vehicles and vehicles entering and leaving the nursery. This is likely to result in increased congestion, reduced visibility, driver distraction, and additional safety risks for children, parents, carers, and staff.

The applicant has not provided any detailed assessment of:

- the interaction between construction traffic and nursery-related traffic movements;
- the potential impact of traffic management measures on access to the nursery;
- the risks associated with queuing traffic in the vicinity of the nursery entrance; or
- the cumulative effect of construction traffic operating alongside existing business and residential access requirements.

In addition to nursery traffic, the surrounding road network is used by school transport services and children travelling to and from educational facilities throughout the county, both state and independent sectors. Increased HGV movements on roads used by school buses create additional hazards at bus stops, crossing points, junctions, and locations where children are required to walk alongside or cross rural roads.

The applicant's assessment does not adequately consider the vulnerability of children as road users, particularly within an environment characterised by national speed limit roads, limited footway provision, narrow verges, restricted visibility, and frequent HGV movements. Children are less able to accurately judge vehicle speed and distance, making them particularly susceptible to increased highway risks associated with large construction vehicles.

The presence of a nursery school directly opposite a proposed HGV access point should have resulted in a detailed and site-specific assessment of child safety impacts. No such assessment has been provided. Consequently, the applicant has failed to demonstrate that the development can be constructed and operated without giving rise to unacceptable risks to children and young people using the local highway network.

Safety risks for cyclists

The small rural roads surrounding Site 5, lack formal cycle lanes or wide verges. There are numerous cycling clubs in the area, which utilise the tranquility and beauty of the area. Construction traffic is likely to cause:

- Narrowing the usable carriageway
- Forcing cyclists closer to the road edge
- Creating pressure for unsafe overtaking by impatient drivers

This is particularly risky on bends, hills, and single-track sections, which surround Site 5 and could result in serious injury to riders.

Construction vehicles and temporary works can reduce visibility for cyclists and drivers:

- HGVs entering or exiting the site may restrict views
- Temporary fencing, signage, or vegetation clearance can alter visibility
- Dust or mud on the road can reduce contrast and make cyclists harder to see

Cyclists are especially vulnerable where access points meet faster-moving roads, especially where the B1527 meets The Street on the north-east of Site 5.

Construction activity is likely to degrade surface conditions during the construction phase, including:

- Mud, gravel, or debris dropped by vehicles
- Damaged verges that reduce safe refuge space
- Uneven surfaces caused by rutting or edge wear

These hazards increase the risk of skidding or loss of control and impacts on the safety of the road users.

There are a number of children who cycle to the Primary School in Hempnall and they will be particularly vulnerable, during any construction phase of the proposal.

Cumulative Traffic Impacts on the B1527 Corridor

The applicant has failed to adequately assess the cumulative impact of construction traffic associated with the East Pye Solar project on the B1527 and the wider rural highway network.

The B1527 is not only proposed as the primary route for traffic accessing Site 5, but also forms a key transport corridor serving Sites 7A-F as well as the Construction Compound situated in Site 5 itself. As a result, the impacts of construction traffic cannot be assessed solely on the basis of individual site accesses or individual land parcels. The cumulative effect of traffic movements associated with multiple sites, construction compounds, cable routes, and associated infrastructure must be considered as a whole.

The Transport Assessment appears to focus on individual access points and specific sections of highway in isolation. However, road users will experience the combined effects of all construction traffic using the route simultaneously. This includes:

- HGVs serving Site 5;
- traffic associated with the construction of solar array parcels connected to Site 5;
- vehicles accessing other development sites via the B1527 corridor;
- staff and contractor vehicles travelling between different work areas;
- abnormal indivisible loads associated with substation construction;
- vehicles delivering materials, equipment, and plant; and
- maintenance and support vehicles operating across multiple construction locations.

The cumulative effect of these movements is likely to result in repeated interruptions to traffic flow along the B1527, particularly where vehicles are required to slow, stop, queue, or turn into one of the numerous proposed access points.

Particular concern arises from the concentration of access points proposed along a relatively short section of highway. Traffic associated with Access Points A23, A24, A26, and A27 will all interact with the same section of the B1527, creating multiple conflict points and increasing the likelihood of congestion, driver frustration, and collisions. Traffic management measures operating at one access point may also affect the operation of others, creating cumulative delays and queuing that have not been adequately assessed.

The applicant has also failed to consider the cumulative impact of construction traffic on the many existing users of the B1527, including:

- local residents;
- agricultural vehicles;
- businesses;
- cyclists;
- equestrians;
- walkers;
- school transport services; and

- parents and carers accessing Jack in the Box Nursery School.

The combined effect of increased HGV traffic, multiple access points, temporary traffic management measures, and prolonged construction activity has the potential to significantly alter the character and operation of the route for several years.

The assessment also fails to adequately consider the cumulative impact on road condition and network resilience. Repeated use of the B1527 by construction traffic serving multiple parts of the project is likely to accelerate wear to the carriageway, verges, drainage infrastructure, and junctions. Any disruption, collision, breakdown, or temporary road closure on the route could have consequences across multiple construction sites simultaneously, demonstrating the dependence of the project on a relatively constrained rural highway network.

Importantly, the applicant has not presented a comprehensive whole-network assessment demonstrating how the B1527 will function when traffic associated with all elements of the East Pye Solar project is considered together. Instead, impacts have been fragmented across individual assessments, making it difficult to understand the true scale of traffic generation and its effect on local communities.

Without a robust cumulative assessment of all construction traffic using the B1527 corridor, it cannot be concluded that the highway network has sufficient capacity to safely accommodate the development or that the resulting impacts on highway safety, traffic operation, vulnerable road users, local businesses, and residential amenity would be acceptable.

11.5 Impact on local Airfields

The applicant has assessed aviation impacts primarily through a Glint and Glare Assessment and consultation with selected aviation stakeholders. However, significant concerns remain regarding the adequacy of that assessment and whether the cumulative effects of the entire East Pye Solar Scheme have been properly considered. These concerns are reinforced by the Relevant Representation submitted by the General Aviation Awareness Council (GAAC), the national body representing general aviation interests, which concludes that important aviation safety issues remain unresolved.

Site 5 is located within an area of South Norfolk that experiences significant aviation activity. Norwich International Airport lies to the north, while several active aviation facilities operate within close proximity, including Hardwick Airfield, Tibenham Airfield (Norfolk Gliding Club), Seething Airfield, Old Buckenham Aerodrome, Long Stratton Airfield and Topcroft Farm Airfield. The surrounding airspace is regularly used by commercial, general aviation, gliding, military and training aircraft.

Particular concerns arise regarding:

- cumulative glint and glare effects from multiple solar array locations;
- impacts on pilot visibility and situational awareness;
- effects on aircraft operating under Visual Flight Rules (VFR);
- interactions with gliding and low-level aviation activity;
- the availability of suitable emergency landing areas; and
- cumulative impacts when considered alongside other existing and proposed solar developments.

While the applicant concludes that aviation impacts are not significant, the assessment focuses largely on individual receptors rather than the cumulative effect of a large-scale solar development extending across multiple sites throughout South Norfolk.

These concerns are heightened by the proposed use of single-axis tracking panels across Site 5 and the wider East Pye Solar scheme. Unlike fixed-tilt panels, tracking panels continuously alter their orientation throughout the day to follow the sun. As a result, the direction, intensity, timing and duration of reflected sunlight can change constantly, creating a far more dynamic reflection environment than a conventional solar farm.

Given the scale of the development and the extensive use of tracking technology, there is potential for cumulative glint and glare effects across a wider geographical area than would be expected from fixed-panel installations. The applicant has not adequately demonstrated how these changing reflections have been assessed in relation to aircraft operating from nearby airfields or transiting through the surrounding airspace.

Concerns Raised by the General Aviation Awareness Council

The General Aviation Awareness Council (GAAC) has objected to the Scheme, stating that aviation safety issues have not been adequately addressed despite raising concerns during the consultation process. In particular, GAAC states that the Applicant failed to engage directly with the operator of Tibenham Aerodrome, home to the Norfolk Gliding Club, and instead relied upon advice from its aviation consultant in relation to glint and glare. GAAC notes that no site specific appraisal of Tibenham Aerodrome has been undertaken and that the Civil Aviation Authority's guidance for prospective developers has not been properly followed.

GAAC further considers that the Environmental Impact Assessment should have assessed not only glint and glare, but also the wider implications for aviation safety, recreational aviation, the socio economic importance of Tibenham Aerodrome and its designation as a nationally significant sporting facility. It also concludes that the Applicant has not demonstrated compliance with the relevant requirements of National Policy Statement EN-1 or the National Planning Policy Framework in relation to aviation.

The applicant has previously acknowledged aviation constraints elsewhere within the scheme, including modifying layouts to preserve emergency landing opportunities. This demonstrates that aviation safety is a material consideration and that suitable emergency landing areas form part of the wider aviation environment.

While a Glint and Glare Assessment has been undertaken, it remains unclear whether it fully assesses the cumulative effects arising from thousands of moving solar panels operating simultaneously across the East Pye Solar project. In particular, the assessment should clearly demonstrate:

- how single-axis tracking has been modelled throughout the year;
- the timing, duration and intensity of potential glare events;
- impacts on all relevant aviation receptors, including commercial, military, gliding and general aviation operations; and
- the cumulative effects of all solar array parcels forming part of the project.

Given the concentration of aviation activity surrounding Site 5 and the scale of the proposed development, the Applicant has failed to provide sufficient evidence to demonstrate that the development would not result in unacceptable impacts on aviation safety, operational flexibility or the continued safe operation of nearby airfields. This conclusion is reinforced by the General Aviation Awareness Council's representation, which identifies unresolved concerns regarding stakeholder engagement, compliance with Civil Aviation Authority guidance, the adequacy of the Environmental Impact Assessment and the absence of a site specific assessment of Tibenham Aerodrome. Together these matters reduce confidence that the aviation effects of the Scheme have been comprehensively assessed.

Conclusion

The Environmental Statement has not demonstrated that the local highway network can safely accommodate the scale, duration and complexity of the construction and operational traffic associated with Site 5. The proposed development would introduce sustained HGV movements, abnormal indivisible loads and construction traffic onto a network of narrow rural roads that already experience physical constraints, existing safety issues and competing demands from residents, businesses, agriculture, vulnerable road users and recreational users.

Whilst the Applicant proposes mitigation measures, significant uncertainty remains regarding their effectiveness. Importantly, these concerns are not confined to local residents. Both National Highways and Norfolk County Council conclude that important elements of the transport assessment require further work before the impacts of the Scheme can be properly understood.

Key concerns include:

- **National Highways and Norfolk County Council both identify significant unresolved transport issues**, requiring further assessment, stronger controls and additional mitigation before the Scheme can proceed.
- **The B1527, The Street, The Krons and surrounding rural roads are physically constrained**, making them poorly suited to prolonged construction traffic associated with one of the Scheme's principal operational hubs.
- **Norfolk County Council concludes that Site 5 should be served by a single construction access from the B1527 with internal routing between Site 5A and Site 5B.** The Applicant has not demonstrated why this approach has not been adopted and instead proposes multiple access points on an already constrained rural highway network, increasing conflict with residents, agricultural traffic, walkers, cyclists, equestrians and other vulnerable road users.
- **Construction traffic associated with the 400kV Project Substation appears to be underestimated**, whilst baseline traffic surveys contain significant uncertainties that reduce confidence in the Applicant's conclusions.
- **The proposed development would adversely affect pedestrians, cyclists, equestrians and other vulnerable road users**, increasing conflicts with construction traffic on roads and Public Rights of Way that currently serve both everyday journeys and recreation.
- **Public Rights of Way crossing and adjoining Site 5 would experience a significant change in character**, with reduced tranquillity, increased construction activity and the long term presence of major energy infrastructure affecting users' enjoyment of the rural landscape.
- **The assessment does not adequately demonstrate that nearby airfields and aviation operations, including general aviation, have been fully considered**, leaving uncertainty regarding the effects of the development on aviation safety and operations.
- **The proposed diversion of Public Rights of Way would direct walkers onto sections of the B1527 and The Street that the Applicant's own assessment identifies as causing "Extreme" pedestrian intimidation.** Diverted users would also be required to pass Site 5 construction access points used by HGVs, AILs and other construction traffic, materially increasing risks to vulnerable road users.
- **The Applicant has not demonstrated that the surrounding transport network can safely accommodate the proposed development without unacceptable impacts on highway safety, accessibility, residential amenity or the wider rural environment.**

Chapter 12: Noise and Vibration

Site 5 contains some of the largest and most intensive elements of infrastructure proposed within the East Pye Solar Project. Unlike areas consisting primarily of solar arrays, Site 5 is proposed to accommodate a major 400kV substation, associated electrical infrastructure, construction compounds, welfare facilities, internal access roads, cable routes and extensive engineering works.

Consequently, residents living within and around Site 5 are likely to experience substantially greater noise and vibration impacts than would be expected from the installation of solar panels alone. Significant concerns remain regarding whether the Applicant's assessment adequately identifies all affected receptors and accurately characterises the full extent of the likely impacts.

12.1 Impact to residents caused by noise and vibration

Accuracy of identification of affected Sensitive Receptor

The applicant in the Environmental Statement Volume 1 Chapter 12, has stated that they have assessed the impacts on the Sensitive receptors at the different Site locations based on the following distance of that receptor from the works:

Assessment	Distance
Construction noise	300 m (515 m for overnight works)
Construction vibration	100 m
Construction traffic noise	50 m from the centre of the highway
Operational noise	500 m from the Order Limits
Decommissioning noise	300 m
Decommissioning traffic noise	50 m from the centre of the highway

Figure 12.1 Table of the Applicants distant criteria for phases of the project

For Site 5, the Applicant has identified a series of Nearest Sensitive Receptors (NSRs) and based the assessment upon those receptors.

However, a review of the submitted plans indicates that several residential properties located closer to the proposed works have not been identified. As a consequence, the assessment underestimates both the extent and significance of the likely noise and vibration impacts.

Omitted Sensitive Receptors

The following residential properties appear to satisfy the Applicant's own assessment criteria but have not been included within the assessment:

- Boyland Hall
- Boyland House
- Willow Lodge
- The Bungalow

The distances quoted in this representation are based upon the actual residential curtilage and property boundaries rather than desktop measurements to dwelling centrelines.

Similarly, NSR36 groups together Public Rights of Way but omits Boyland Hall Lane, a Restricted Byway running along the western boundary of Site 5. This route is frequently used by walkers and forms an important recreational asset. Recent Section 56 Notices also indicate that significant parts of BoylandHall Lane may be subject to Development Consent Order powers, yet this has not been reflected within the Applicant's assessment.

When the Applicant's receptor schedule is compared with its own location plans and mapping of residential properties within 500 metres of the Order Limits, it becomes apparent that the number of potentially affected receptors has been materially understated.

The consequence is that the assessment may underestimate the scale of noise and vibration effects experienced by nearby residents, businesses and users of Public Rights of Way.

Furthermore, construction activities are predicted to generate sound power levels approaching 120 dB(A). In those circumstances, limiting the construction assessment to receptors within 300 metres may not fully capture the extent of potential impacts, particularly when cumulative effects from neighbouring construction areas and cable corridors are taken into account. The assessment on noise and vibration to Sensitive receptors is flawed due to the omission of numerous residential properties as shown in the following diagrams.

The applicant has stated that for site 5 there are the following receptors in respect to Noise and Vibration:

1.12

Receptor Reference	Receptor Description	Use	Sensitivity
NSR25	Dwelling in Tasburgh	Residential dwelling	High
NSR26	St Michael's Church	Religious facility	High
NSR27	Long Stratton FP1-7 Morningthorpe FP1	Public Rights of Way	Medium
Site 5			
NSR28	Dwellings on Bungay Road	Residential dwelling	High
NSR29	Commercial facilities on Bungay Road	Commercial Facility	Medium
NSR30	Jack in the Box Nursery	Nursery	High
NSR31	Beech Farm, The Street	Residential dwelling	High
NSR32	Dwellings on The Street	Residential dwelling	High
NSR33	Church Farm House, The Street	Residential dwelling	High
NSR34	St Catherine's Church	Religious facility	High
NSR35	Hall Farm Cottage and Commercial Facilities	Residential dwelling and commercial facility	High
NSR36	Hempnall FP33 Morningthorpe FP5,6,7,9,10,11,12,17,31,32	Public Rights of Way	Medium



Figure 12.2 Applicants List and Location Plan of Nearest Sensitive Receptors around Site 5 taken from the Environmental

Statement

The map below has been marked up to show all the residential properties that fulfil the Applicants criteria for at least inclusion in the operational phase assessment due to being within 500m of the boundary to Site 5 as well as the location of the NSRs missed by the Applicant on the Northern boundary of Site 5.

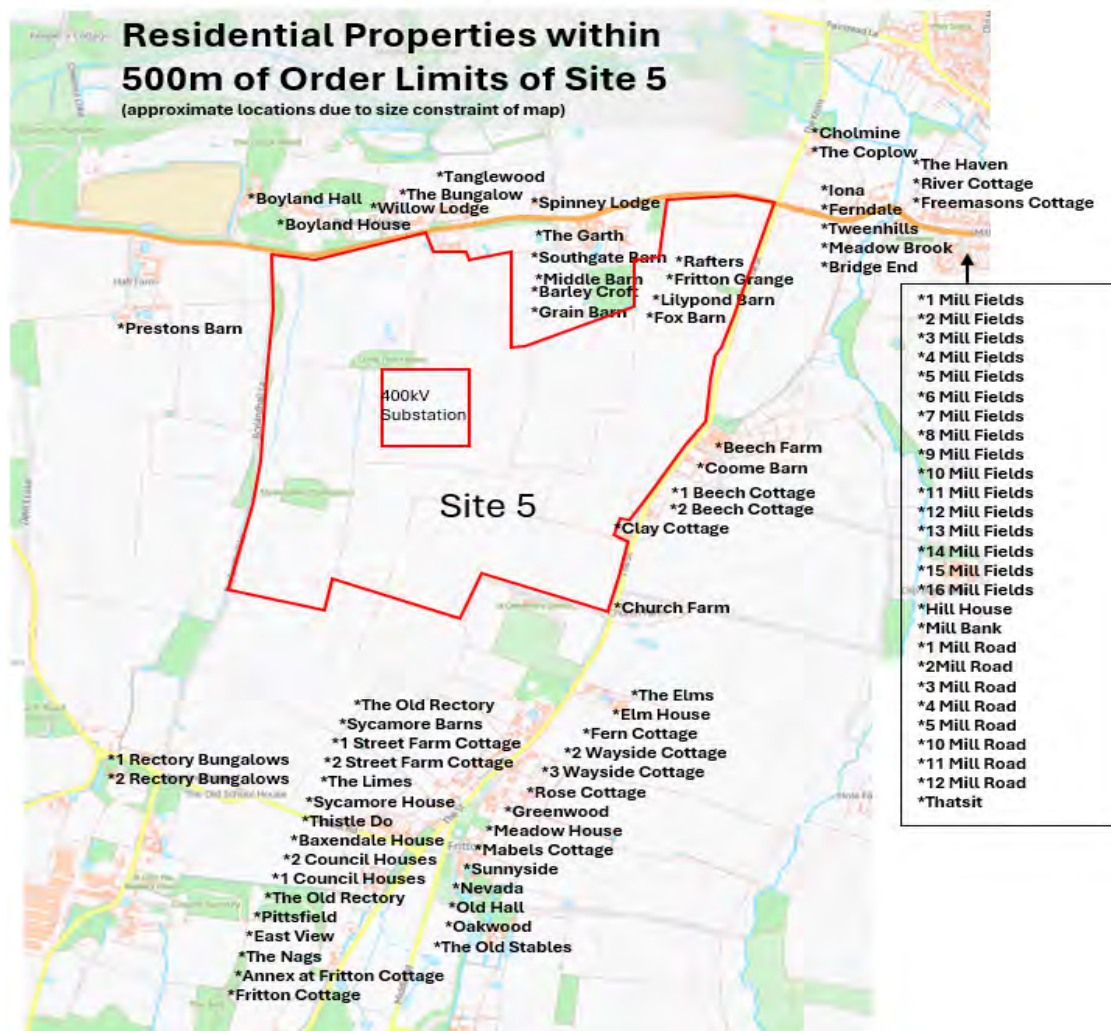


Figure 12.3 Map of Site 5 showing locations of Residential Properties within 500m of Boundary.

As can be seen from the Applicants plan below for the proposed infrastructure for Site 5 they have failed to identify and therefore assess the impact on all of the sensitive noise and vibration receptors.

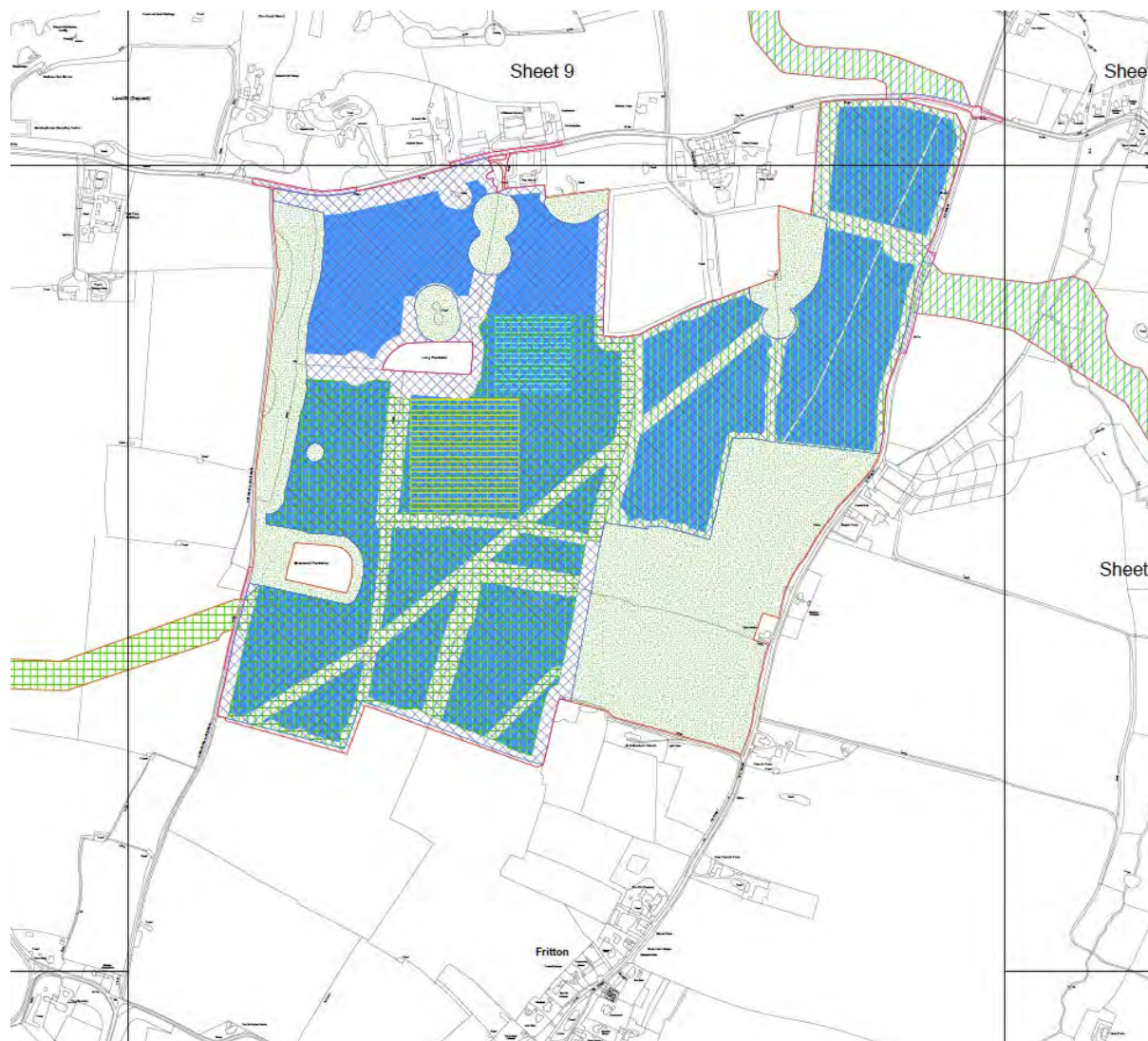


Figure 12.4 Section covering Site 5 taken from The Works Plan showing position of infrastructure proposed for Site 5

Assessment of Receptors within Site 5

The Applicant's mapping indicates that the following receptors should have been included in addition to those already recognised within the assessment but have not been assessed against the relevant noise and vibration criteria.

Construction Noise (within 300 metres)

The following residential properties that have not been recognised in the Applicants document, lie within 300 metres of proposed construction activities and should therefore have been included in the construction noise assessment:

- Boyland Hall
- Boyland House
- Willow Lodge
- The Bungalow
- Tanglewood
- Spinney Lodge
- Preston Barn

Construction Vibration (within 100 metres)

The following receptors fall within the Applicant's stated assessment distance for construction vibration:

- Boyland Hall, including the historic underground brick tunnel beneath the property and road in front;
- Boyland House, including the historic walled garden structures;
- Willow Lodge; and
- The Bungalow.

These heritage assets may be more susceptible to vibration than modern buildings and warrant specific assessment.

Construction Traffic Noise (within 50 metres)

The following residential properties fall within 50 metres of construction traffic routes:

- Boyland Hall
- Boyland House
- Willow Lodge
- The Bungalow
- Tanglewood
- Spinney Lodge

These receptors should have been assessed in accordance with the Applicant's own methodology. The Applicant has also failed to recognise that some of the properties it has grouped together in NSR29 have parts of their buildings abutting the highway and therefore any increase in road traffic due to construction activities on Site 5 utilising the proposed access points A25 and A26, CRC7 with proposed access point A27 or Sites 7A-F accessing via The Krons will be directly impacted and within the 50m limit they have imposed.

Operational Noise (within 500 metres)

A review of the Applicant's plans indicates that approximately **70 residential properties** are located within 500 metres of the Site 5 Order Limits. These include, but are not limited to:

Boyland Hall	East View	Old Hall	10 Mill Road
Boyland House	The Nags	Oakwood	11 Mill Road
1 Mill Fields	Annex at Fritton Cottage	The Old Stables	12 Mill Road
2 Mill Fields	Fritton Cottage	The Old Rectory	Thatsit
3 Mill Fields	1 Rectory Bungalows	Sycamore Barns	The Elms
4 Mill Fields	2 Rectory Bungalows	1 Street Farm Cottage	Elm House
5 Mill Fields	Prestons Barn	2 Street Farm Cottage	Fern Cottage
6 Mill Fields	Iona	The Limes	Nevada
7 Mill Fields	Ferndale	Sycamore House	2 Wayside Cottage
8 Mill Fields	Tweenhills	Thistle Do	3 Wayside Cottage
9 Mill Fields	Meadow Brook	Baxendale House	Rose Cottage
10 Mill Fields	Bridge End	2 Council Houses	Greenwood
11 Mill Fields	The Haven	1 Council Houses	Meadow House
12 Mill Fields	River Cottage	The Old Rectory	Mabels Cottage
13 Mill Fields	Freemasons Cottage	Pittsfield	Sunnyside
14 Mill Fields	16 Mill Fields	Mill Bank	2 Mill Road
15 Mill Fields	Hill House	1 Mill Road	3 Mill Road
4 Mill Road	5 Mill Road		

Figure 12.5 Table of residential properties within 500m of the boundary to Site 5 (measured to residential curtilage)

As these properties lie within the Applicant's own operational assessment distance, they should have been included within the operational noise assessment.

Similarly, these receptors have also been omitted from the decommissioning assessment, despite being subject to the same assessment criteria.

Grouping of Sensitive Receptors

The Applicant has grouped the following residential properties together under NSR28:

- The Garth
- Southgate Barn
- Middle Barn
- Barley Croft
- Grain Barn
- Rafters
- Fritton Grange
- Fox Barn
- Lilypond Barn

Although grouping receptors can simplify presentation, it may obscure important differences in separation distance, orientation, screening and exposure. Individual properties may therefore experience materially different noise effects, and these differences are not apparent from the grouped assessment.

Furthermore, with the exception of Lilypond Barn, which is identified within the Book of Reference due to land interests, none of these properties appear to have been identified as Category 3 parties despite being specifically recognised within the noise assessment.

Similarly, the Applicant groups all Public Rights of Way surrounding Site 5 into a single receptor (NSR38). Given the extent of the rights of way network and the varying proximity of individual routes to construction activities and operational infrastructure, this approach risks masking significant local variations in likely impacts.

Baseline Noise Assessment

Representativeness of Monitoring Locations

The reliability of the baseline noise assessment is open to question.

One of the Applicant's monitoring locations was positioned adjacent to a commercial vehicle workshop and is therefore influenced by existing industrial and mechanical noise sources. This location is unlikely to be representative of the predominantly quiet rural sound environment experienced across much of Site 5 and its surrounding residential area.

Where baseline noise levels are elevated by existing commercial activity, there is a risk that predicted project impacts will appear less significant than they would under genuinely representative background conditions.

In addition, none of the monitoring locations were positioned along the extensive network of Public Rights of Way crossing Site 5. Several sections of these routes lie more than 600 metres from the nearest monitoring point. Consequently, the assessment does not adequately represent the tranquil acoustic environment experienced by recreational users. These PRoW are more than a means to get from one place to another and the tranquil nature is fundamental to the character.

The existing character of Site 5 is defined by:

- open agricultural land;
- low background noise levels;
- limited industrial activity;
- rural tranquillity; and
- quiet countryside conditions.

Taken together, the selection of monitoring locations does not provide sufficient confidence that the baseline acoustic environment experienced by nearby residents or users of Public Rights of Way has been fully characterised.

Accordingly, the Applicant has not demonstrated with sufficient certainty that the baseline conditions used within the assessment are representative of the environment likely to be affected by the proposed development.

Reliance on Existing Vegetation as Mitigation

The Applicant places considerable reliance on existing hedgerows, trees and other vegetation to mitigate both construction and operational noise. However, the assessment appears to assume that these landscape features will remain present and continue to provide effective acoustic screening throughout the lifetime of the development. This assumption is not fully justified and introduces a significant uncertainty into the assessment.

Unlike engineered acoustic barriers, hedgerows and tree belts are living features whose condition and effectiveness may change over time as a result of:

- construction activities;
- access creation;
- installation of utility corridors;
- maintenance operations;
- disease;
- storm damage;
- natural ageing; and
- changes in land management over the proposed 60-year operational life of the project.

In some locations, existing vegetation may also require removal, thinning or disturbance during construction, reducing any screening benefit at the time when construction noise is likely to be greatest.

The Environmental Statement and supporting documents do not adequately quantify or model the increase in noise levels that would occur if these vegetative features are lost, significantly degraded or fail to provide the level of acoustic attenuation assumed within the modelling. Given that hedgerows and trees generally provide only moderate noise attenuation, and that their effectiveness can vary considerably over time, greater consideration should be given to the uncertainty associated with relying upon them as a long-term mitigation measure.

Without robust sensitivity testing, including explicit worst case modelling that assumes the loss or substantial reduction of vegetative screening, there is a risk that noise impacts on nearby residents have been underestimated. Similarly, without robust, enforceable commitments to

inspect, maintain, enhance and promptly replace lost or degraded screening vegetation throughout the lifetime of the development, the effectiveness and durability of the proposed mitigation strategy cannot be assured. There is therefore a real possibility that local communities could be exposed to higher noise levels than those predicted in the assessment.

The Planning Inspectorate should therefore require the Applicant to undertake explicit worst case noise modelling assuming reduced or absent vegetative screening and secure legally enforceable long-term management, maintenance, monitoring and replacement obligations for all vegetation relied upon for acoustic screening as part of any development consent.

Accuracy of Receptor Distances and Residential Amenity Assessment

Further concern arises regarding the methodology used to determine distances between proposed infrastructure and nearby sensitive receptors.

The assessment appears to rely primarily upon desktop mapping rather than detailed verification of residential boundaries, curtilages and receptor locations.

In rural environments, residential amenity extends beyond the external walls of a dwelling and includes gardens, patios, driveways and other outdoor areas that are regularly used by occupants. Where distances have been measured to the dwelling rather than the nearest point of the residential curtilage, the true proximity of construction activities, operational infrastructure and traffic routes may have been underestimated.

The assessment also appears to focus principally on ground-floor receptor locations and does not clearly assess noise exposure at upper-storey windows, including first-floor bedrooms, where residents may be particularly sensitive to operational noise during the evening and night-time. This is especially relevant given that the proposed 400 kV substation incorporates buildings up to 6m and associated plant up to approximately 13 metres in height. With the Substation location being at the highest point in relation to the surrounding area, noise from this elevated plant and equipment may not be screened to the same extent as ground-level sources and may therefore result in higher noise levels at upper-storey receptors than those predicted by the assessment.

These issues are significant because predicted noise and vibration levels are highly dependent upon both the horizontal and vertical position of receptors. Relatively small differences in receptor location or elevation can materially influence predicted noise levels and, consequently, the significance of the impacts reported within the Environmental Statement.

The Applicant has not demonstrated that residential curtilages surrounding Site 5 have been accurately identified or verified on the ground, nor that representative receptor heights adequately reflect the conditions experienced by occupants throughout their properties. Consequently, uncertainty remains as to whether the assessment fully reflects the noise and vibration environment likely to be experienced by residents within their homes, at upper-storey windows and bedrooms, and within their gardens and other outdoor amenity spaces.

This issue is particularly relevant for properties located close to proposed access roads, construction compounds, cable corridors and the proposed 400 kV substation, where both outdoor residential amenity and upper-storey living spaces may be affected to a greater extent than suggested by desktop measurements and ground-level receptor modelling alone.

Calculation of noise impact over distance

The calculations presented within Environmental Statement Volume 3, Appendix 12.2 (Noise Modelling and Calculation) indicate that the Applicant may have underestimated the potential noise impacts arising from several phases of the proposed development.

One reason for this appears to be the method used to determine separation distances. In a number of cases, distances appear to have been measured from central points within work areas rather than from the closest point of construction activity to each sensitive receptor. In addition, several nearby receptors do not appear to have been identified within the assessment.

Both factors have the potential to underestimate the noise levels likely to be experienced by surrounding residents, businesses and users of Public Rights of Way.

Using the baseline monitoring data presented within Environmental Statement Volume 1, Chapter 12, the typical background noise levels surrounding Site 5 are summarised below.

MP31

- Typical background (LA90,15min):
 - o Daytime: 38 dB
 - o Night-time: 21 dB
 - o Early morning (04:00–07:00): 34 dB

MP32

- Typical background (LA90,15min):
 - o Daytime: 35 dB
 - o Night-time: 25 dB
 - o Early morning (04:00–07:00): 33 dB

MP33

- Typical background (LA90,15min):
 - o Daytime: 41 dB
 - o Night-time: 27 dB
 - o Early morning (04:00–07:00): 33 dB

MP34 Monitor placed behind The Groves Motor Vehicle Business

- Typical background (LA90,15min):
 - o Daytime: 41 dB
 - o Night-time: 23 dB
 - o Early morning (04:00–07:00): 32 dB

The following calculations have been undertaken using the Applicant's own propagation formula:

$$L_p = L_w - 20 \log_{10}(r) - 8$$

The calculations use distances measured from the nearest practical point of the proposed works to the affected receptor, based upon the Applicant's Works Plans.

These tables are intended to illustrate the potential sound pressure levels experienced at surrounding residential properties and Public Rights of Way using the Applicant's published methodology but with revised receptor distances.

For clarity:

- **Red** indicates predicted noise levels exceeding the Applicant's Significant Observed Adverse Effect Level (SOAEL) of **65 dB(A)**.
- **Yellow** indicates predicted levels exceeding the nearest recorded background level by **6 dB(A)** or more, corresponding to the Applicant's classification of impacts between the Lowest Observed Adverse Effect Level (LOAEL) and SOAEL.

Because the Applicant has not yet published the final alignment of several internal access roads within Site 5, the distances used represent the best estimates available from the submitted plans.

Similarly, Section 56 Notices served following acceptance of the application indicate that additional land may be required for access arrangements. These proposals are not reflected within the currently accepted Works Plans or draft Development Consent Order and have therefore not been included within these calculations. Should these proposals proceed, they may result in additional impacts upon nearby residents and users of Public Rights of Way.

The Applicant has also not confirmed for how long the existing Public Rights of Way within and around Site 5 will be closed for throughout construction. In the absence of that information, the calculations assume that these routes remain accessible and therefore continue to function as sensitive receptors.

Access Point A23
Applicants Stated level at Point of Origin (db) - 108

Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	12	78.4	High
Boyland House	160	55.9	High
Boylandhall Lane RB4	50	66.0	Medium

Figure 12.6a Tables showing residential properties and calculated sound levels of Construction of Access Point A23

Access Point A24			
Applicants Stated level at Point of Origin (db) - 108			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland House	94	60.5	High
Willow Lodge	80	61.9	High
European Trade Centre	29	70.8	Medium
Jack in the Box	25	72.0	High
The Groves	5	86.0	Medium
The Bungalow	26	71.7	High
Tanglewood	80	61.9	High

Figure 12.6b Tables showing residential properties and calculated sound levels of Construction of Access Point A24

Access Point A26			
Applicants Stated level at Point of Origin (db) - 108			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Iona	148	56.6	High

Figure 12.6c Tables showing residential properties and calculated sound levels of Construction of Access Point A26

Piling – Solar PV Arrays – Applicants Criteria Within 300m of construction point			
Applicants Stated level at Point of Origin (db) - 117			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	37	77.6	High
Boyland House	43	76.3	High
Willow Lodge	51	74.8	High
European Trade Centre	45	75.9	Medium
Jack in the Box	81	70.8	High
The Groves	20	83.0	Medium
The Bungalow	83	70.6	High
Tanglewood	127	66.9	High
Spinney Lodge	160	65	High
Fritton Grange	117	67.6	High
Rafters	182	63.8	High
The Garth	210	62.6	High
Southgate Barn	207	62.7	High
Middle Barn	192	63.1	High
Barley Croft	205	62.8	High
Grain Barn	202	62.9	High
Fox Barn	198	63.1	High
Lillypond Barn	192	63.3	High
The Gowings Shared Tennis Court	142	66.0	Medium
Iona	160	64.9	High
The Coplow	180	63.9	High
Cholomine	235	61.6	High
Fendale	185	63.7	High
Tweenhills	223	62.0	High
Meadow Brook	262	60.6	High
Bridge End	293	59.7	High
River Cottage	281	60.0	High
Coomb Barn	86	70.3	High
Beech Farm	120	67.4	High
1 Beech Cottage	190	63.4	High
2 Beech Cottage	192	63.3	High
Clay Cottage	170	64.4	High
St Catherines Church	111	68.1	High
The Old rectory	282	60.0	High
Preston Barn	296	59.6	High
Boylandhall Lane RB4	20	83.0	Medium
FP5	15	85.5	Medium
FP11	15	85.5	Medium
FP17	15	85.5	Medium

Figure 12.6d Tables showing residential properties and calculated sound levels of Piling Solar Arrays

Temporary Compound Construction			
Applicants Stated level at Point of Origin (db) - 108			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	298	54.5	High
Boyland House	278	55.1	High
Willow Lodge	274	55.2	High
European Trade Centre	273	55.3	Medium
Jack in the Box	298	54.5	High
The Groves	219	57.2	Medium
The Bungalow	288	54.8	High
The Gowings Shared Tennis Court	292	54.7	Medium
FP5	53	69.5	Medium

Figure 12.6e Tables showing residential properties and calculated sound levels of Temporary Construction Compound

400kV Substation construction			
Applicants Stated level at Point of Origin (db) - 112			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	377	60.5	High
Boyland House	381	60.4	High
Willow Lodge	415	59.6	High
European Trade Centre	426	59.4	Medium
Jack in the Box	442	59.1	High
The Groves	372	60.6	Medium
The Bungalow	433	59.3	High
Tanglewood	475	58.5	High
Spinney Lodge	506	57.9	High
Fritton Grange	548	57.2	High
Rafters	575	56.8	High
The Garth	529	57.5	High
Southgate Barn	538	57.4	High
Middle Barn	550	57.2	High
Barley Croft	518	57.7	High
Grain Barn	525	57.6	High
Fox Barn	535	57.4	High
Lillypond Barn	470	58.6	High
The Gowings Shared Tennis Court	469	58.6	Medium
Coomb Barn	577	56.8	High
Beech Farm	540	57.4	High
1 Beech Cottage	495	58.1	High
2 Beech Cottage	495	58.1	High
Clay Cottage	450	58.9	High
St Catherines Church	392	60.1	High
Preston Barn	498	58.1	High
Boylandhall Lane – RB4	250	64.0	Medium
Mo-FP5	150	68.5	Medium
Mo-FP9	184	66.7	Medium
Mo-FP10	255	63.9	Medium
Mo-FP11	332	61.6	Medium

Figure 12.6f Tables showing residential properties and calculated sound levels of 400kV Substation Construction

Operational Noise Experienced By Sensitive Receptors

The Applicant identifies several permanent items of infrastructure within Site 5 that will generate operational noise. Unlike construction activities, these sources will remain throughout the operational life of the development and will introduce continuous mechanical and electrical noise into what is currently a predominantly rural sound environment.

However, the Environmental Statement provides only limited information regarding the specification, number and precise location of several key components. This lack of design detail makes it difficult to fully assess the likely operational noise environment or to verify the assumptions used within the Applicant's modelling.

Based upon the Works Plans, the Draft Development Consent Order and the Environmental Statement, the principal operational noise sources are expected to comprise:

- a 400 kV electricity substation;
- power transformers and associated cooling equipment;
- solar PV arrays;
- tracking motors (should tracking panels be selected);
- inverters;
- 33 kV switching stations and control buildings; and
- associated electrical plant.

Because detailed engineering information has not yet been published, uncertainty remains regarding both the overall sound power generated by these assets and their cumulative impact on nearby sensitive receptors.

400 kV Substation

The proposed 400 kV substation represents the principal permanent source of operational noise within Site 5.

The Applicant adopts a sound power level of **85 dB(A)** for the substation. However, insufficient information has been provided regarding:

- the number of transformers;
- transformer ratings;
- cooling arrangements;
- switching equipment;
- auxiliary plant; or
- the final layout of the substation compound.

Without this information it is difficult to determine whether the adopted sound power level represents a realistic worst-case assessment.

Comparable Nationally Significant Infrastructure Projects have adopted higher design values.

For example:

- **Droves Solar** uses a transformer sound power level of approximately **93 dB(A)**.

- **Tillbridge Solar** adopts **95 dB(A)**.
- **Cleve Hill Solar Park** identifies transformer sound power levels ranging between **83 dB(A)** and **100 dB(A)** depending upon transformer type and cooling arrangements.

Switching equipment associated with these installations may also generate short-duration impulsive noise significantly above normal operational levels during switching events.

Taken together, these examples indicate that the Applicant's assumed sound power level of 85 dB(A) may not represent a robust worst-case assessment.

For the purposes of this assessment, an indicative sound power level of **92 dB(A)** has therefore been adopted, representing the approximate midpoint of values used in comparable Nationally Significant Infrastructure Projects.

Location of Operational Plant

The Applicant has not identified the final positions of individual transformers or other significant noise-generating equipment within the proposed substation.

Accordingly, the following assessment measures distances from the boundary of the proposed substation compound shown on the Works Plans. This provides a reasonable worst-case assessment until the detailed engineering design has been finalised.

Similarly, the Applicant has not disclosed:

- the number of solar tracking motors;
- their proposed locations;
- their operating regime;
- the specification of inverters; or
- the location of inverter compounds.

The Environmental Statement merely states that tracking panels will reset overnight but provides no indication of the duration, timing or frequency of this activity.

Consequently, potential operational noise from tracking motors and inverters has been assessed by measuring distances from the boundaries of Solar PV Areas 1 and 1d identified on the Applicant's Works Plans.

This approach is necessarily precautionary but reflects the absence of sufficient design information within the submitted application.

Existing Background Noise Levels

The Applicant's baseline monitoring records typical background noise levels surrounding Site 5 as follows:

Period	Typical Background
Night-time	21–27 dB(A)
Early morning	33–34 dB(A)
Daytime	35–41 dB(A)

These values demonstrate that Site 5 currently experiences a relatively quiet rural acoustic environment.

Accordingly, even modest increases in continuous mechanical or tonal noise may be readily perceptible, particularly during periods of low ambient sound, such as at night or during the early morning.

The following calculations illustrate the potential operational noise levels experienced by nearby receptors using the assumptions described above.

Solar PV Arrays - Invertors			
Applicants Stated level at Point of Origin (db) - 91			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	37	50	High
Boyland House	43	48.8	High
Willow Lodge	51	47.6	High
European Trade Centre	45	48.5	Medium
Jack in the Box	81	44.1	High
The Groves	20	54	Medium
The Bungalow	83	43.8	High
Tanglewood	127	40.4	High
Spinney Lodge	160	39	High
Fritton Grange	117	41.1	High
The Gowings Shared Tennis Court	142	39.5	Medium
Iona	160	38.5	High
Coomb Barn	86	43.5	High
Beech Farm	120	40.9	High
St Catherines Church	111	41.5	High
Boylandhall Lane RB4	20	54.1	Medium
FP5	15	55.8	Medium
FP11	15	55.8	Medium

Blue = +6 above early morning baseline **Purple** = +6 above BOTH Daytime and Early Morning

Figure 12.7 Table showing calculated noise levels at measured residential curtilage for Solar Invertors

400kV Substation Operation 24/7			
Applicants Stated level at Point of Origin (db) - 92			
Sensitive Receptor	Distance to Point of Origin as Measured from the Works plan (metres)	Level at Sensitive Receptor Curtilage (dB)	Sensitivity of Receptor (as Per Applicants Criteria)
Boyland Hall	377	32.3	High
Boyland House	381	32.2	High
Willow Lodge	415	31.5	High
European Trade Centre	426	31.3	Medium
Jack in the Box	442	30.9	High
The Groves	372	32.4	Medium
The Bungalow	433	31.1	High
Tanglewood	475	30.3	High
Spinney Lodge	506	29.8	High
Fritton Grange	548	29.1	High
Rafters	575		High
The Garth	529	29.4	High
Southgate Barn	538	29.3	High
Middle Barn	550	29.1	High
Barley Croft	518	29.6	High
Grain Barn	525	29.5	High
Fox Barn	535	29.3	High
Lillypond Barn	470	30.4	High
The Gowings Shared Tennis Court	469	30.4	Medium
Boylandhall Lane – RB4	250	35.8	Medium
Mo-FP5	150	40	Medium
Mo-FP9	184	38.3	Medium
Mo-FP10	255	35.6	Medium

Orange =+6 above nearest recorded baseline as per ES Vol 1 Chapter 12

Figure 12.8 Table showing calculated noise levels at measured residential curtilage for 400kV Substation

References

Droves Solar NSIP Appendix 10.3 (<https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0110013-000200-6.4%20ES%20Appendix%2010.3%20Construction%20and%20Noise%20Modelling.pdf>)

Tillbridge Solar development, in ES Vol 6 Appendix 13.4 (<https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010142-000295-6.2%20Appndx%2013-4%20Noise%20Modelling.pdf>)

Interpretation of Results

The calculations indicate that several operational noise sources have the potential to exceed existing background sound levels by margins that may be perceptible to nearby residents.

Although the predicted sound pressure levels may remain in some cases below the Applicant's adopted Significant Observed Adverse Effect Level (SOAEL), the assessment should not rely solely upon numerical thresholds.

Transformer noise is typically characterised by low frequency and tonal components, which are generally more noticeable than broadband environmental noise and may be perceived as intrusive even where overall sound pressure levels are relatively low.

This is particularly relevant during calm weather conditions and at night, when background sound levels are lowest and masking from other environmental noise sources is limited.

Furthermore, unlike construction activities, operational noise from the electrical infrastructure would be continuous and would remain present for the full operational life of the development of 60 yrs.

Consequently, the assessment should consider not only compliance with numerical criteria but also the long term effects on residential amenity and the character of the surrounding rural soundscape.

12.2 Impact on wildlife caused by noise and vibration

The Environmental Statement does not provide a sufficiently robust assessment of the effects of construction and operational noise, vibration and, in particular, low frequency sound on the protected and conservation priority species recorded within Site 5.

Whilst assessments have been undertaken for human receptors (see section above), there is no equivalent ecological assessment considering whether these sources of disturbance may adversely affect the wildlife. This is a significant omission given the ecological importance of Site 5 and the scale of the proposed electrical infrastructure, including a 400 kV substation, transformers, 33 kV switchgear, solar inverters, tracker motors, access roads, construction compound and associated infrastructure.

The applicant's own ecological surveys (Environmental Statement Appendix 8.1 and Appendix 8.6) confirm that Site 5 supports numerous protected and priority species, including Skylark and Lapwing (both UK Red List species); Barbastelle, Serotine, Nathusius' Pipistrelle, Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared, Daubenton's, Natterer's and Noctule bats; Great Crested Newt; Badger; Red Deer; Muntjac Deer; Buzzard; and Red Kite. Many of these species are recognised as being sensitive to prolonged disturbance, particularly where noise, vibration, habitat loss, lighting and increased human activity occur in combination.

Construction Noise and Vibration

Construction of Site 5 is expected to continue for at least two years and will involve piling, earthworks, trenching, concrete foundations, heavy plant, crane operations, construction compounds and sustained HGV movements. These activities will generate prolonged noise, vibration and ground disturbance across much of the site and beyond.

The Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for Ecological Impact Assessment* identify noise and vibration as important sources of ecological disturbance, while Natural England's Standing Advice recognises that prolonged construction activity can affect breeding, commuting, foraging and sheltering behaviour of protected species.

However, the Environmental Statement does not appear to assess how these construction effects may influence the species known to occupy Site 5. Nor does it evaluate the cumulative effects of construction disturbance alongside habitat loss, fencing, lighting and increased human presence and the cumulative effects from across the entire Order Limit due to is spanning such a vast area.

Operational Low-Frequency Sound

Operational impacts also appear to have been underestimated. The proposed 400 kV substation and associated electrical infrastructure will generate continuous operational noise from transformers, cooling systems, switchgear and inverters, together with intermittent mechanical noise from tracker motors.

The Environmental Statement assesses operational noise primarily in relation to residential amenity using predicted overall sound levels. However, it does not appear to include a specific assessment of the low-frequency component of operational noise generated by the proposed electrical infrastructure, nor does it consider whether this aspect of the operational sound environment may affect ecological receptors. No species specific assessment has been undertaken despite the confirmed presence of numerous protected species within the zone of influence.

This omission is particularly important because baseline surveys identify a relatively quiet rural sound environment, with night-time LA90 levels of approximately 23–32 dB. Even comparatively modest increases in continuous low-frequency sound may therefore alter the acoustic character of habitats currently used by sensitive wildlife.

Protected Species

Bats

The Environmental Statement confirms the presence of at least eight bat species within Site 5, including Barbastelle, Serotine, Nathusius' Pipistrelle, Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared, Daubenton's, Natterer's and Noctule bats.

Although bats primarily echolocate using ultrasonic frequencies, many species also rely upon passive listening and lower-frequency hearing to detect prey-generated sounds, environmental

cues and social vocalisations. Experimental studies have shown that anthropogenic noise can reduce foraging efficiency, alter commuting behaviour and discourage the use of otherwise suitable habitat, particularly in species that depend heavily on passive listening (Jones, 2008; Schaub et al., 2008).

Of particular concern is the presence of the Barbastelle Bat, one of Britain's rarest bat species and a European Protected Species. Natural England research (Billington, Norman & Jones, 2011) identifies Barbastelles as highly sensitive to environmental disturbance and dependent upon quiet, dark and well-connected landscapes. The Environmental Statement does not consider whether construction disturbance or continuous operational noise from transformers, switchgear, inverters and tracker motors could reduce habitat suitability or disrupt commuting and foraging behaviour.

Brown Long-eared, Daubenton's and Natterer's bats are similarly recognised as species that rely heavily upon passive listening during prey detection and are therefore potentially vulnerable to persistent background noise. No species-specific assessment has been undertaken despite their confirmed presence within Site 5.

Skylark and Lapwing

The applicant has confirmed breeding Skylark and Lapwing within Site 5. Both are included on the UK Birds of Conservation Concern Red List owing to severe long-term population declines and are closely associated with open agricultural landscapes characterised by relatively low levels of disturbance.

Construction activity, vibration and prolonged human presence may lead to nest abandonment, reduced breeding success, displacement from feeding areas and increased predation risk. Operational low frequency sound will also impact on these species. Although transformer noise occurs predominantly at lower frequencies than bird song, persistent background noise may raise ambient sound levels, reduce communication distance and contribute to habitat avoidance. The Environmental Statement does not assess these potential effects despite the acknowledged presence of these nationally declining species.

Great Crested Newts

Great Crested Newts are European Protected Species and are known to be vulnerable to ground disturbance, excavation, soil compaction, construction vibration and changes to local hydrology.

Residents have identified watercourses, field drains and wetland features within Site 5 that may provide suitable breeding and terrestrial habitat. Construction activities including piling, trenching, earthworks and altered drainage have the potential to affect these habitats. Whilst the Environmental Statement considers some of these impacts individually, it does not assess their cumulative interaction with prolonged construction disturbance or operational infrastructure.

Badgers

Badgers are present within Site 5 and may be affected by prolonged construction activity, vibration and increased human presence. Continuous activity close to active setts can alter emergence behaviour and reduce foraging opportunities.

The Environmental Statement does not consider whether operational low frequency sound from the electrical infrastructure, acting in combination with construction disturbance and habitat fragmentation, could influence sett use or foraging behaviour.

Red Deer and Muntjac Deer

Site 5 forms part of a wider wildlife corridor used by Red Deer and Muntjac Deer moving between surrounding woodland habitats.

Construction disturbance, operational activity and extensive deer fencing have the potential to alter established movement routes and displace animals into adjacent farmland and local roads. NatureScot has reported that large infrastructure projects can modify deer movement patterns in response to disturbance.

Particular concern arises because diversion of established routes towards the B1527, The Street, Fritton and surrounding highways may increase the likelihood of wildlife-vehicle collisions. The ES does not appear to assess these cumulative behavioural effects or the interaction between disturbance and proposed fencing.

Buzzard and Red Kite

Buzzard and Red Kite have also been recorded using Site 5 and the surrounding landscape.

Whilst these species are generally less sensitive to operational noise than ground nesting farmland birds, construction disturbance during the breeding season may reduce nesting success where territories occur close to works. The industrialisation of an otherwise rural landscape may also alter foraging behaviour through increased human activity, traffic and habitat fragmentation.

The ES does not provide a species specific assessment of these potential effects.

Cumulative Effects and Mitigation

The ES largely considers ecology, noise, vibration, lighting and landscape change separately. In practice, wildlife will experience these pressures simultaneously. For sensitive species such as Barbastelle Bat, Skylark, Lapwing and Great Crested Newt, the combined effects of habitat loss, fragmentation, construction activity, operational noise, lighting, fencing and increased human presence are likely to be greater than any individual effect considered in isolation.

Although the Environmental Statement refers to embedded mitigation, such as buffer zones, seasonal timing restrictions and habitat management, it does not provide low frequency sound modelling, ecological thresholds, real time monitoring or adaptive management measures should adverse effects occur. Consequently, it has not been demonstrated that significant ecological effects arising from construction and operational noise can be avoided.

Conclusion

The Applicant has not demonstrated with sufficient certainty that the likely effects of construction and operational noise, vibration and low frequency sound arising from Site 5 have been fully characterised or robustly assessed. While the Environmental Statement concludes that significant effects can be avoided through embedded mitigation, important uncertainties remain regarding both human and ecological receptors.

In particular, concerns remain regarding:

- the **identification of all** relevant sensitive receptors;
- the **representativeness of the baseline** monitoring locations;
- the **assessment of Public Rights of Way**;
- the **cumulative effects** of prolonged construction activity;
- **construction** of the proposed 400 kV substation and associated infrastructure;
- **repetitive piling and foundation** installation;
- **construction traffic noise and vibration**;
- potential **impacts on historic structures, culverts and drainage infrastructure**;
- **permanent operational noise** from the electrical infrastructure;
- the **assessment of operational low frequency** sound on protected and conservation priority wildlife;
- **reliance upon existing vegetation** as long term mitigation; and
- the **level of uncertainty** arising from the absence of detailed engineering design.

Taken together, these matters create uncertainty as to whether the Environmental Statement fully reflects the environmental effects likely to be experienced by residents living within close proximity to and around Site 5, or by the protected and conservation priority species known to occupy the site. This is of particular concern given the confirmed presence of eight bat species, including the rare and disturbance-sensitive Barbastelle, together with Great Crested Newt, Badger, Red Deer, Muntjac, Skylark, Lapwing and other notable species.

In the absence of more detailed evidence, it has not been demonstrated that the proposed mitigation would avoid significant adverse effects throughout the construction and operational phases of the development. A more comprehensive assessment of construction noise, vibration, operational low frequency sound, cumulative effects and species specific ecological impacts should therefore be undertaken before the likely significance of the proposal can be determined with confidence.

Chapter 13: Air Quality

Construction Phase Air Quality Impacts

Site 5 includes a proposed 400kV Project Substation together with associated infrastructure. The Environmental Statement identifies construction activities including excavation, trenching, earthworks, installation of electrical infrastructure, concrete works, heavy plant operation and HGV movements.

The reliability of the air quality assessment is also dependent upon the robustness of the transport assessment, as predicted emissions are directly related to forecast traffic movements, routing and construction logistics. As set out in Chapter 11, both National Highways and Norfolk County Council conclude that important elements of the transport assessment require further assessment and refinement before the impacts of the Scheme can be fully understood. Consequently, any uncertainty regarding construction traffic volumes, routing or traffic management also reduces confidence in the air quality assessment presented for Site 5.

These activities are recognised sources of nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), diesel emissions and construction dust. The Environmental Statement's Construction and Decommissioning Dust Risk Assessment identifies a high dust risk during the construction phase.

Construction dust is generated through excavation, soil handling, vehicle movements, stockpiles and the tracking of material onto local roads. Dust deposition affects residential amenity, vegetation, watercourses, ecological habitats and users of Public Rights of Way. Site 5 is located within a rural landscape containing residential properties, public footpaths, heritage assets and ecological receptors in close proximity to the Order Limits.

The Environmental Statement concludes that impacts can be controlled through standard mitigation measures. However, the assessment does not include site-specific monitoring data and relies principally upon baseline datasets and assumed mitigation effectiveness. As a result, there remains uncertainty regarding the extent of dust and particulate exposure at individual receptors.

Traffic Management, Queuing and Idling Emissions at Access Point A24

A significant omission from the air quality assessment is the absence of any detailed consideration of emissions associated with vehicle queuing, waiting and idling at Access Point A24.

The applicant identifies Access Point A24 as a principal access serving Site 5 and acknowledges that traffic management measures will be required to facilitate the safe movement of construction traffic into and out of the site. Access Point A24 is located directly opposite Jack in the Box Nursery, one of the most sensitive receptors in the vicinity of the development.

The purpose of traffic management is to regulate vehicle movements where normal highway operation is constrained. By definition, such measures involve vehicles slowing, stopping, waiting, turning and manoeuvring in close proximity to the access point. Construction HGVs, delivery vehicles, abnormal loads and workforce transport vehicles entering or leaving Site 5 will therefore spend periods operating at low speed or stationary immediately adjacent to the nursery.

Diesel vehicles continue to emit nitrogen oxides (NO_x), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}) and exhaust pollutants while idling. Emissions can be particularly concentrated where vehicles repeatedly accelerate, decelerate and wait to gain access to a construction site. These emissions occur at ground level and in close proximity to nearby receptors.

Despite identifying the need for traffic management at Access Point A24, the Environmental Statement does not provide any specific assessment of air quality impacts arising from vehicle queuing, idling, waiting times or stop-start traffic conditions at this location. Nor does it assess the implications of these emissions for Jack in the Box Nursery, which lies less than 21 metres from the Order Limits and directly opposite the proposed access point.

The omission is particularly important because the nursery accommodates babies and young children, a receptor group recognised as especially sensitive to airborne pollutants. The applicant has already recognised the nursery as a sensitive receptor within the noise assessment, yet no equivalent location-specific assessment is presented for air quality.

The issue is compounded by the wider construction strategy. The Krons forms part of the access network serving Sites 7A–7F as well as Site 5. Construction traffic associated with multiple sites will utilise the same constrained rural road network, increasing interactions between vehicles and the need for managed movements. This cumulative use of shared access routes has direct implications for vehicle idling, queuing and localised emissions, yet the air quality assessment contains no detailed evaluation of these effects.

Given the acknowledged requirement for traffic management at Access Point A24, the presence of a highly sensitive receptor directly opposite the access, and the cumulative use of surrounding roads by construction traffic serving multiple sites, the Environmental Statement does not provide sufficient evidence to demonstrate that air quality impacts at this location have been adequately assessed.

The reliability of the air quality assessment is also dependent upon the robustness of the transport assessment, as predicted emissions are directly related to forecast traffic movements, routing and construction logistics. As set out in Chapter 11, both National Highways and Norfolk County Council conclude that important elements of the transport assessment require further assessment and refinement before the impacts of the Scheme can be fully understood. Consequently, any uncertainty regarding construction traffic volumes, routing or traffic management also reduces confidence in the air quality assessment presented for Site 5.

Operational Phase Air Quality Impacts

The operational phase requires routine inspection, maintenance and vegetation management activities. Whilst lower in intensity than construction activities, these activities generate vehicle movements throughout the operational life of the development.

Site 5 is located within a rural area characterised by relatively low background pollution levels. Consequently, the assessment of operational emissions requires particular scrutiny, especially when considered alongside other planned development and infrastructure projects within the wider area.

Cumulative Air Quality Effects

The Environmental Statement assesses cumulative effects; however, Site 5 forms part of a much larger development comprising multiple solar sites, cable routes, substations and associated infrastructure.

Construction activities across the wider East Pye Solar scheme involve substantial HGV movements, staff transport, earthworks and construction compounds. These activities share transport corridors and occur within the same geographical area. The cumulative effect of these activities is a key consideration under National Policy Statement EN-3.

In addition, Site 5 sits within a wider area experiencing ongoing development pressure, including housing growth, highway works, utility infrastructure and agricultural traffic. These factors form part of the environmental baseline against which air quality effects should be assessed.

National Highways also identifies the need for additional assessment of cumulative construction traffic associated with the Scheme before impacts on the wider highway network can be understood. Whilst this concern relates principally to the Strategic Road Network, it reinforces the wider principle that cumulative construction traffic remains insufficiently quantified. If cumulative traffic movements remain uncertain, the cumulative emissions arising from those movements are similarly uncertain.

Sensitive Receptors

The Environmental Statement identifies residential receptors in and around Hempnall, Bungay Road, The Krons and Field Lane. These receptors are located within the environmental influence of Site 5 and its associated construction routes.

Public Rights of Way cross and surround the site, bringing walkers, cyclists and horse riders into close proximity with construction activities and construction traffic.

The setting of St Catherine's Church and other heritage assets also forms part of the local environmental resource potentially affected by dust deposition and changes in environmental quality.

Ecological receptors, including hedgerows, field margins and associated habitats, are similarly sensitive to dust deposition during prolonged construction activity.

Jack in the Box Nursery – Highly Sensitive Receptor

A significant concern is the proximity of Jack in the Box Nursery to Site 5. The nursery is situated less than 21 metres from the Order Limits and is identified within the Environmental Statement as Noise Sensitive Receptor NSR30.

The applicant has therefore already recognised the nursery as a receptor requiring specific assessment. However, no equivalent receptor-specific assessment is provided within the air quality chapter.

The nursery accommodates babies and young children, a group widely recognised as particularly sensitive to particulate pollution and poor air quality. Despite its proximity to the proposed development boundary and project substation, the Environmental Statement does not provide detailed assessment, modelling, monitoring proposals or receptor-specific mitigation measures for air quality impacts at this location.

The absence of a receptor specific air quality assessment is particularly difficult to reconcile with the Applicant's own Environmental Statement, which already identifies the nursery as a sensitive receptor for noise. The same construction activities, HGV movements and traffic management measures that justified detailed noise assessment should also have prompted detailed assessment of airborne pollutants affecting babies and young children.

Concerns Regarding the Environmental Statement

The Environmental Statement concludes that air quality effects are not significant. However, that conclusion relies upon assumptions regarding construction traffic, baseline conditions, dust mitigation and screening thresholds. As demonstrated elsewhere in this Written Representation, important elements of the transport assessment remain disputed by both statutory highway authorities. Where predicted traffic movements form the basis of the air quality assessment, any uncertainty regarding those traffic forecasts inevitably reduces confidence in the conclusions presented for air quality.

The Dust Risk Assessment identifies a high construction dust risk but relies primarily on standard mitigation measures. The assessment does not demonstrate how the effectiveness of those measures will be monitored, enforced and verified throughout the construction programme.

Traffic related air quality impacts are screened using threshold criteria which conclude that detailed modelling is not required. This approach is dependent upon the accuracy of the traffic forecasts used throughout the assessment.

Concerns Regarding Baseline Air Quality Data

The reliability of the air quality assessment is dependent upon the accuracy and representativeness of the baseline data used to characterise existing conditions.

The Environmental Statement reports low baseline concentrations for NO_x, NO₂, PM₁₀ and PM_{2.5} at Sites 5A and 5B. However, it is unclear whether the baseline data adequately reflects conditions experienced by receptors located along the roads that will accommodate construction traffic associated with Site 5, namely the B1527, The Street and The Krons.

Particular concern arises where baseline data has been derived from locations influenced by historic traffic conditions that differ materially from those currently experienced within the rural road network surrounding Site 5. If baseline monitoring or modelling inputs are informed by data collected within more heavily trafficked urban locations, including conditions that existed prior to major traffic redistribution measures such as the Long Stratton bypass, the resulting baseline may not accurately represent the receptors most affected by construction traffic associated with the Proposed Development.

The roads surrounding Site 5 are rural in character and currently experience comparatively low traffic flows and low background levels of air pollution. Receptors along these routes therefore experience a different air quality environment to receptors located within larger settlements or on strategic transport corridors. It is these rural receptors that will be exposed to the additional construction traffic associated with the Proposed Development.

The Environmental Statement does not clearly demonstrate that baseline conditions have been verified at key receptor locations, including residential properties on The Street and The Krons, properties adjacent to the B1527, and Jack in the Box Nursery opposite Access Point A24. Consequently, it is difficult to determine whether the baseline data used in the assessment accurately reflects the locations where construction-related emissions will be concentrated.

This issue is particularly important given that Access Point A24, located opposite Jack in the Box Nursery, requires traffic management measures to facilitate construction access. Any assessment of air quality impacts at this location should be based upon a baseline that is demonstrably representative of existing local conditions rather than broader area averages or historic traffic conditions from materially different locations.

In the absence of evidence demonstrating that the baseline data accurately represents conditions along the B1527, The Street, The Krons and at Access Point A24, there remains uncertainty regarding the reliability of the conclusions presented within the air quality assessment.

As set out elsewhere in this objection, there are concerns regarding the assumptions underpinning HGV and workforce traffic forecasts. Any underestimation of construction traffic directly affects the reliability of the air quality assessment.

Reliance on the Temporary Nature of Construction Effects

The Environmental Statement places significant weight on the temporary nature of construction impacts when concluding that air quality effects are not significant. However, the duration of construction activity proposed for Site 5 must be considered in the context of the receiving environment and the receptors affected.

The construction phase is expected to extend over approximately two years and includes prolonged periods of HGV movements, workforce traffic, earthworks, excavation, trenching and substation construction. For residents living adjacent to construction routes such as the B1527, The Street and The Krons, these activities represent a sustained period of exposure rather than a short-term or intermittent event.

The same is true for other sensitive receptors surrounding Site 5. Users of Public Rights of Way, nearby businesses and Jack in the Box Nursery would all be exposed to construction related emissions over a prolonged period rather than a short lived or isolated event. In planning terms, a construction programme extending for approximately two years represents a sustained environmental effect that should not be dismissed simply because it is ultimately temporary.

This is particularly relevant in a rural environment where baseline traffic volumes and background pollution levels are relatively low. Changes in traffic-related emissions and construction activity are therefore more noticeable than in urban locations where elevated traffic levels already form part of the baseline environment.

The assessment also does not adequately address the fact that construction traffic associated with Site 5 will coincide with movements serving other parts of the East Pye Solar scheme, including Sites 7A–7F accessed via The Krons. As a result, affected communities would experience construction-related emissions over an extended period across multiple locations within the local road network.

The temporary nature of an impact does not in itself determine significance. A construction period lasting approximately two years represents a material duration in planning terms, particularly where highly sensitive receptors are present, including residential properties, users of Public Rights of Way and Jack in the Box Nursery. The Environmental Statement does not adequately explain why a sustained increase in construction-related emissions over this period should be regarded as insignificant.

Air Quality Monitoring

Despite identifying a high construction dust risk, the Environmental Statement provides no site specific commitment to continuous dust or particulate monitoring at the most sensitive receptors surrounding Site 5. In particular, no monitoring locations are proposed for Jack in the Box Nursery, nearby residential properties, or Public Rights of Way immediately adjoining the Order Limits. Without clearly defined monitoring locations, trigger levels and intervention measures, there is

limited confidence that any deterioration in local air quality would be identified promptly or appropriate remedial action taken.

Conclusion

The Environmental Statement concludes that the proposed development would not give rise to significant air quality effects. However, in relation to Site 5, this conclusion is not supported by a sufficiently robust assessment of the likely impacts arising from prolonged construction activity, construction traffic and the proximity of sensitive receptors. The assessment relies heavily on generic assumptions, outline mitigation measures and transport forecasts that remain subject to significant uncertainty.

Key concerns include:

- **The air quality assessment relies upon transport assumptions that remain unresolved**, with both National Highways and Norfolk County Council identifying the need for further assessment and refinement of the transport strategy before the impacts of the Scheme can be fully understood.
- **Construction dust and vehicle emissions have not been adequately assessed for Site 5**, particularly in relation to prolonged earthworks, the construction of the 400kV Project Substation and sustained HGV movements.
- **Insufficient consideration has been given to sensitive receptors**, including nearby residential properties, Jack in the Box Nursery, local businesses and users of Public Rights of Way who would experience prolonged exposure throughout the construction period.
- **The assessment underestimates the significance of a construction programme lasting approximately two years**, treating its effects as temporary despite the sustained duration of construction activity.
- **The Environmental Statement relies heavily upon mitigation measures without sufficient detail regarding monitoring, trigger levels or enforceable intervention measures**, reducing confidence that adverse effects would be identified and effectively managed.
- **The cumulative effects of construction traffic, vehicle idling, dust generation and other nearby developments have not been fully assessed**, leaving uncertainty regarding the overall impact on local air quality.

Taken together, these matters demonstrate that the Environmental Statement does not provide a sufficiently robust, transparent or site specific assessment of the likely air quality impacts arising from the proposed development at Site 5. As a result, there is insufficient evidence to conclude that local communities and other sensitive receptors would be adequately protected throughout the construction phase.

Chapter 14: Socio-Economics

The landscape surrounding Site 5 supports a diverse range of tourism, recreational, heritage and environmental assets that contribute to the attractiveness of South Norfolk. These include:

- **The Boudica Way**, a nationally recognised 36-mile long-distance footpath between Norwich and Diss, which passes alongside Site 5A and attracts walkers from across the region and beyond.
- **St Catherine's Church**, Fritton, a Grade I listed Norman church dating from the twelfth century, together with numerous Grade II listed farmhouses, barns and cottages that contribute to the area's historic rural character.
- **Historic agricultural landscapes**, characterised by ancient lanes, historic field patterns, scattered farmsteads and traditional village settlements centred on medieval churches, which form an important part of Norfolk's cultural landscape.
- **Archaeological interest**, with numerous recorded discoveries within Site 5, including a medieval building, a Roman occupation site, an early Saxon brooch declared Treasure in 2014, together with many other archaeological finds demonstrating the area's long history of human occupation.
- **Public rights of way and quiet rural lanes**, providing opportunities for walking, cycling, horse riding and informal recreation through an open agricultural landscape.
- **Nature conservation sites**, including nearby Fritton Common, a Site of Special Scientific Interest (SSSI), recognised for its ancient trees, natural ponds, invertebrate communities and populations of protected bird species, making it a destination for walking, birdwatching and wildlife appreciation.
- **Rural sporting activities**, including pheasant shoots and other countryside pursuits that attract visitors and provide income for local estates, accommodation providers, hospitality businesses and other rural enterprises.

Taken together, these assets create a visitor destination whose appeal derives not from any single attraction, but from the combination of its historic environment, open countryside, biodiversity, tranquillity and recreational opportunities. The applicant's assessment should therefore consider the cumulative effect that the proposed development would have on the attractiveness of this wider landscape as a tourism and recreation resource, rather than assessing individual assets in isolation.

14.1 Impact to Tourism

The applicant's assessment appears to place limited weight on the contribution that landscape quality, tranquillity and the rural environment make to the local visitor economy. Norfolk's tourism sector is a significant component of the county's economy, supporting approximately 54,000 jobs and generating around £2.8 billion annually. Visitors are attracted not only to specific destinations

but also to the wider landscape, heritage, wildlife and countryside experiences that define the character of the county (Norfolk County Council, 2025).

The countryside surrounding Site 5 forms part of a wider network of rural landscapes, quiet lanes and public rights of way, including the nationally recognised Boudica Way. These assets contribute to the area's attractiveness for walking, cycling, recreation and rural tourism. The introduction of extensive solar arrays, substations, battery storage facilities, security fencing, CCTV infrastructure and associated development would alter the character of this landscape irreversibly over a considerable area.

Whilst it may be difficult to quantify precisely the effect of such changes on visitor behaviour, the applicant should demonstrate that the potential implications for tourism-dependent businesses have been adequately considered. Given the importance of tourism to Norfolk's economy, it is not sufficient to assume that large-scale landscape change would have no socio-economic consequences for businesses that rely upon the continued attractiveness of the countryside.

This concern is consistent with the views expressed by neighbouring local authorities. Mid Suffolk District Council notes that the cumulative impact of multiple Nationally Significant Infrastructure Projects has the potential to place additional pressure on tourism businesses and rural communities, and considers that cumulative effects on the tourism sector require more robust assessment. Similarly, Suffolk County Council considers that socio economic benefits should only be afforded weight where they are supported by robust evidence and should not be assumed without detailed assessment. These concerns reinforce the need for a site specific assessment of the effect that long term industrialisation of the Site 5 landscape may have upon tourism dependent businesses and the wider visitor economy.

14.2 Impact to local businesses and Local Labour Market

The socio-economic assessment places considerable emphasis on the temporary employment opportunities associated with the construction of East Pye Solar. However, considerably less weight is given to the extent to which these jobs will actually benefit the local workforce.

The applicant's own Employment, Skills and Supply Chain Strategy recognises that utility-scale solar developments require a specialist construction workforce and that many of these skills are not available in sufficient numbers within Norfolk. The assessment indicates that only a relatively small proportion of direct employment is expected to be drawn from the immediate area, with a significant proportion of workers likely to travel from elsewhere in the East of England or from across the UK. Consequently, many of the headline employment figures represent the temporary relocation of an existing specialist workforce rather than the creation of new long-term employment opportunities for local residents.

This distinction is important when assessing the weight that should be attributed to the project's economic benefits. Whilst the construction phase may support several hundred workers at its peak, many of those workers are likely to move from project to project as part of an established

national labour pool. Their employment cannot therefore be regarded as a substantial increase in local employment or a lasting enhancement of Norfolk's labour market.

The temporary influx of construction workers may also generate secondary pressures within surrounding communities. Workers requiring accommodation during the construction period may increase demand for hotels, guest houses, holiday accommodation and privately rented housing. In areas where accommodation supply is already constrained, this has the potential to reduce availability for tourists, increase pressure on the private rental market and contribute to higher accommodation costs for local residents and businesses. These effects may be particularly significant during peak tourist seasons, when visitor accommodation forms an important part of Norfolk's economy.

Mid Suffolk District Council similarly raises concerns regarding cumulative demand for temporary worker accommodation arising from concurrent infrastructure projects. It identifies potential pressure on tourism accommodation, the private rented sector and housing affordability, and considers that these effects require fuller assessment together with effective cross project coordination

Increased demand from a transient construction workforce may also place additional pressure on local services and infrastructure, including GP practices, pharmacies, local roads, parking, retail facilities and other community services. Whilst individual impacts may be modest, the cumulative effects should be considered alongside the temporary nature of the employment benefits claimed by the applicant.

Furthermore, expenditure by a largely transient workforce should not automatically be assumed to represent a lasting economic benefit. Whilst construction workers may spend money locally on food, fuel and accommodation, much of their income is likely to leave the local economy when they return to their permanent homes. By contrast, expenditure by permanent local employees generally circulates more extensively through the local economy, supporting a wider range of businesses over the longer term.

The applicant should therefore demonstrate that the socio-economic assessment has appropriately distinguished between temporary construction employment and genuine long-term local economic benefit. In particular, the assessment should explain why substantial weight should be given to employment figures where many of the workers are anticipated to come from outside Norfolk and where permanent operational employment following construction will be minimal.

This concern reflects the position of Suffolk County Council, which concludes that the application does not provide sufficient evidence to demonstrate how employment opportunities would translate into meaningful benefits for the local workforce. The Council notes that workforce modelling, labour market analysis and delivery mechanisms remain insufficiently evidenced and concludes that only limited weight should be attached to the claimed socio economic benefits until these matters are addressed.

Response to Leakage Assumptions in Paragraph 14.8.14

Paragraph 14.8.14 relies upon leakage assumptions derived from other Development Consent Order applications rather than empirical evidence from completed projects. The comparator schemes cited, including Cottam Solar, West Burton Solar and Heckington Fen Solar, were themselves based upon forecast workforce assumptions prepared during the planning process and do not provide verified post-construction evidence demonstrating that the assumed leakage rates accurately reflected the actual origin of the workforce. Consequently, the applicant has not demonstrated that the leakage assumptions adopted for East Pye Solar are supported by observed evidence.

Furthermore, the examination of comparable schemes illustrates that the employment benefits were not accepted without qualification. During the examination of West Burton Solar, concerns were raised regarding construction workforce displacement and the management of socio-economic effects. The Examining Authority relied upon secured employment, skills and local supply chain commitments when concluding that the benefits would outweigh the adverse effects. The applicant should therefore demonstrate not only that the leakage assumptions are robust, but also that equivalent measures are capable of delivering genuine and measurable employment benefits for South Norfolk, rather than relying upon forecast assumptions imported from other planning applications.

In the absence of evidence from completed comparator projects demonstrating that the forecast leakage assumptions accurately predicted local employment outcomes, the claimed direct employment benefits should be treated with caution. The direct employment assessment therefore represents a forecast based on professional judgement rather than a prediction supported by observed construction workforce data. These concerns are consistent with Suffolk County Council's conclusion that the employment evidence remains insufficiently robust to demonstrate meaningful local economic benefits.

14.3 Impact to Agricultural Contractors and the Wider Rural Economy

The socio-economic assessment places considerable emphasis on the economic benefits associated with temporary construction employment and renewable energy generation but gives comparatively limited consideration to the potential impacts on the established rural economy surrounding Site 5.

Site 5 supports a network of established businesses that depend upon reliable access, local customers and the continued operation of the surrounding rural economy. These include agricultural contractors, machinery operators, agricultural engineers, haulage companies, suppliers, local retailers, accommodation providers, hospitality businesses and other small and medium-sized enterprises that serve residents, visitors and farming businesses. Many of these businesses employ local people on a permanent basis and form an important part of the local economy.

The construction of Site 5 would extend over a prolonged period and is expected to generate significant construction traffic, the movement of abnormal loads, temporary traffic management measures and increased use of rural roads. Whilst these impacts may be temporary in planning terms, they would persist for the predicted 24 month construction phase and will disrupt normal trading conditions for existing businesses. Reduced accessibility, increased journey times, delays to deliveries and changes to established travel patterns may discourage customers from visiting local businesses and increase operating costs for those reliant upon regular vehicle movements.

Unlike the temporary construction workforce, these businesses are already embedded within the local economy and provide established employment for local residents. Any reduction in turnover arising from construction disruption has the potential to affect business viability, reduce investment and place pressure on existing employment. Small rural businesses often operate on relatively narrow profit margins, and prolonged disruption may result in reduced staffing levels, fewer employment opportunities or, in some cases, threaten the long-term sustainability of the business.

The assessment appears to assume that expenditure by a temporary construction workforce will offset these effects. However, many construction workers are expected to originate from outside Norfolk and are likely to remain in the area only for the duration of the works. Whilst they may generate some expenditure on accommodation, food and fuel, this should not be regarded as directly equivalent to the sustained economic contribution made by established local businesses and permanent employees. Furthermore, any increase in demand for accommodation from transient workers may reduce availability for visitors and place additional pressure on the local rental market, potentially affecting both tourism businesses and local residents.

The socio-economic assessment also relies upon the assumption that participating farm businesses will benefit from long-term diversification through lease income whilst retaining ownership of their land. However, if the applicant's delivery model is now based upon outright land acquisition rather than long-term leasing, this materially changes the economic balance. Under a purchase model, the continuing diversification benefit to local farming businesses is largely removed. Instead of receiving a stable long-term income whilst retaining productive land, landowners receive a one-off capital payment and permanently relinquish ownership. This reduces one of the principal long-term economic benefits identified by the applicant whilst leaving the wider impacts upon the rural economy unchanged.

In these circumstances, the socio-economic benefits associated with Site 5 become increasingly concentrated in temporary construction employment, much of which is expected to be undertaken by workers from outside the area, whilst the communities surrounding Site 5 bear the longer-term consequences of construction disruption, reduced accessibility and potential impacts on established businesses and local employment. The applicant should therefore provide a site-specific assessment of the likely effects of construction on existing businesses and demonstrate that these impacts have been fully considered within the overall socio-economic balance.

The assessment also appears to focus primarily on the financial benefits accruing to participating landowners, whilst giving limited consideration to the wider agricultural economy that supports farming activity across the affected area.

The proposed development would remove a substantial area of agricultural land from conventional agricultural production for two generations (60 years). Whilst grazing may continue in some locations, the scale of the development would inevitably reduce the intensity and extent of agricultural operations across the site. This has potential implications for a wide range of businesses that support farming activities, including agricultural contractors, machinery operators, agronomists, seed and fertiliser suppliers, livestock service providers, agricultural engineers and haulage companies.

These businesses form an important part of the rural economy and derive income from the ongoing cultivation and management of agricultural land. A reduction in actively farmed acreage may therefore have indirect economic consequences extending beyond the landowners directly involved in the scheme.

The applicant should provide a more comprehensive assessment of these wider economic effects to ensure that the socio-economic impacts of the proposal are fully understood. Mid Suffolk District Council also emphasises that cumulative infrastructure projects have the potential to place wider pressure upon rural businesses and local economies unless assessed through a coordinated regional approach. This reinforces the importance of considering indirect effects on agricultural contractors, suppliers and other businesses that support the farming economy rather than limiting assessment to participating landowners alone.

14.4 Impact on Residential Amenity, Mental Wellbeing and Community Health

The applicant's assessment gives insufficient consideration to the contribution that the existing landscape surrounding Site 5 makes to the health, wellbeing and quality of life of local residents and visitors.

Site 5 is characterised by open agricultural landscapes, expansive views, quiet rural lanes, dark skies and an extensive network of interconnected public rights of way, including links to the nationally recognised Boudica Way. These routes provide opportunities for walking, cycling, horse riding and informal recreation and are regularly used by residents and visitors to experience the tranquillity and openness of the South Norfolk countryside.

The value of this network lies not simply in maintaining physical access, but in the quality of the landscape through which it passes. Natural England's **Green Infrastructure Framework** recognises that accessible green infrastructure, including rights of way, contributes significantly to physical health, mental wellbeing, social interaction and quality of life by enabling people to connect with nature and enjoy attractive outdoor environments. Similarly, Natural England's

Strategy: Underpinning Evidence identifies access to nature and green space as making an important contribution to healthier communities, improved mental wellbeing and reduced stress.

The proposed development would fundamentally alter this experience. Throughout the construction phase there will be closures of the PRowS that cross through Site 5 as well as border it. Once completed and reopened, users would no longer pass through open countryside but through an extensive energy infrastructure development comprising large solar arrays, a 400kV substation, welfare offices, security fencing, CCTV systems, access tracks and other associated infrastructure. The effects will not just be visual, but audible too as discussed in the Noise and Vibration section, due to the footpaths passing close to where the planning infrastructure is to be placed. South Norfolk Council similarly concludes that the project would introduce significant visual intrusion and industrial infrastructure into open countryside, resulting in substantial impacts on landscape character, residential amenity and the appreciation of heritage assets. It considers that these harms are inherent in the nature and location of the project and should be afforded significant weight in the planning balance.

The cumulative impact on the rights of way network is a significant concern. Site 5 contains numerous interconnected footpaths and bridleways that are used both individually and as part of longer circular walks linking surrounding villages and the wider countryside. Whilst the applicant has assessed impacts on individual routes, insufficient consideration appears to have been given to the cumulative experience of users travelling through the wider network. Rather than encountering isolated sections of development, walkers, cyclists and equestrians would experience repeated views of industrial-scale infrastructure across a substantial area. This would progressively erode the openness, tranquillity and rural character that currently define the landscape and contribute to its recreational value.

The proposed 400kV substation is of particular significance. Unlike the solar arrays, which may be partially screened over time, the substation and associated electrical infrastructure would effectively introduce a permanent concentration of industrial development into the heart of an otherwise agricultural landscape. The resulting change in landscape character would be experienced not only from neighbouring properties but throughout the surrounding rights of way network, fundamentally altering the relationship between people and the countryside they have traditionally enjoyed.

Whilst property values are not generally a material planning consideration, they can provide evidence of how changes in environmental quality and residential amenity are perceived. Peer-reviewed research by Maddison, Ogier and Beltrán Hernández (2023) found measurable reductions in residential property values close to large utility-scale solar developments, suggesting that the market recognises the disamenity effects associated with extensive energy infrastructure in rural settings. Although individual financial impacts are not determinative in planning, they reinforce concerns regarding the long-term effects of the proposal on residential amenity.

The proposed development would remain in place for over two generations (60 years). For many residents this would represent a permanent change throughout their adult lives and that of their currently young children rather than a temporary interruption. The applicant has not adequately

assessed the cumulative impact that the long term industrialisation of Site 5 would have on residential amenity, mental wellbeing, recreational enjoyment and the overall quality of life experienced by those living in and visiting the surrounding communities.

The applicant has not adequately assessed these cumulative effects. The assessment focuses largely on retaining physical access to public rights of way, but gives insufficient weight to the degradation of the landscape experience itself. The planning issue is not simply whether people can continue to walk these routes, but whether they will continue to experience the open, tranquil and predominantly agricultural countryside that gives those routes their value. That distinction is fundamental when considering the long-term effects of a development of this scale. South Norfolk Council also recognises that historic footpaths, bridleways and rural lanes are themselves important elements of the historic landscape rather than simply access routes. It notes that these routes contribute to the experience and appreciation of the surrounding countryside and heritage assets, reinforcing the importance of assessing the quality of the user experience rather than merely maintaining physical access.

Conclusion

The Environmental Statement concludes that the East Pye Solar Scheme would deliver significant socio-economic benefits through renewable energy generation, temporary employment and investment. However, in relation to Site 5, these benefits are uncertain and are not supported by a sufficiently robust, site-specific assessment. The assessment places considerable weight on temporary and largely unquantified economic benefits whilst giving insufficient consideration to the long-term effects on tourism, established rural businesses, agriculture, recreation and the wellbeing of local communities.

Key concerns include:

- **The claimed employment and supply chain benefits are uncertain**, with much of the specialist construction workforce expected to come from outside Norfolk and only minimal long-term operational employment being created.
- **The assessment gives insufficient weight to the contribution that tourism, heritage, tranquillity and the rural landscape make to the local economy**, particularly in relation to businesses that depend upon visitors and outdoor recreation.
- **The wider rural economy has not been adequately assessed**, including the potential impacts on agricultural contractors, suppliers, local businesses and other enterprises that rely upon continued agricultural activity and unrestricted access.
- **Temporary construction benefits are given greater weight than long-term socio-economic harms**, despite the proposed development remaining in place for approximately 60 years.

- **The cumulative effects on residential amenity, mental wellbeing and recreational enjoyment have been underestimated**, particularly for residents and users of the surrounding Public Rights of Way network whose experience of the landscape would be fundamentally altered.
- **The socio-economic assessment relies on assumptions regarding employment, workforce accommodation, local expenditure and agricultural diversification that are not supported by sufficient evidence**, reducing confidence in the Applicant's conclusions.

Taken together, these matters demonstrate that the Environmental Statement does not provide a sufficiently robust assessment of the likely socio-economic effects arising from the proposed development at Site 5. Consequently, the claimed public benefits should be afforded limited weight unless and until they are supported by stronger evidence demonstrating that they outweigh the long-term impacts on the local economy, rural businesses and surrounding communities

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- Norfolk County Council (2024). *EXPERIENCE – Experiential Tourism to Extend the Visitor Season*.

Chapter 15: Soils and Agriculture

The Applicant selected Site 5 on the basis of provisional Agricultural Land Classification (ALC) mapping and desk-based evidence, which identified the site as predominantly undifferentiated Grade 3 agricultural land with only a moderate likelihood of containing Best and Most Versatile (BMV) land. This assumption was reflected in the Site Selection Assessment, which treated the Order Limits as largely undifferentiated Grade 3 land because the available mapping did not distinguish between Grade 3a (BMV) and Grade 3b (non-BMV). However, subsequent detailed ALC surveys established that Site 5 is, in fact, comprised predominantly of Grade 2 BMV agricultural land. This represents a fundamental change in the understanding of the site's agricultural value. Rather than reconsidering the suitability of Site 5 in light of this evidence, the Applicant continued to promote the site despite the significantly greater permanent loss of high-quality agricultural land. There is no clear evidence that the discovery that Site 5 is predominantly Grade 2 BMV land triggered a meaningful reassessment of site selection or a renewed comparison with reasonable alternatives, despite the clear implications for compliance with national planning policy and the need to protect BMV agricultural land.

Site 5, adjacent to Fritton, is a landscape of high agricultural value, historically managed as productive arable land with a network of hedgerows, ditches, and field boundaries. The Agricultural Land Classification (ALC) map (ES Figure 5.2, 15.1) confirms that Site 5 is predominantly Grade 2 land—classified as Best and Most Versatile (BMV)—with a small area of Grade 3b land where the 400 kV substation is proposed. This land supports arable farming and is integral to the rural economy and local food production.

The importance of protecting high quality agricultural land is reinforced by South Norfolk Council, which considers that the Scheme would result in the long term industrialisation of extensive areas of productive countryside and raises concerns regarding the adequacy of mitigation and the reliance placed upon outline management plans. These concerns are particularly relevant to Site 5, where the majority of the land comprises Grade 2 Best and Most Versatile agricultural land. *(South Norfolk Council Relevant Representation)*

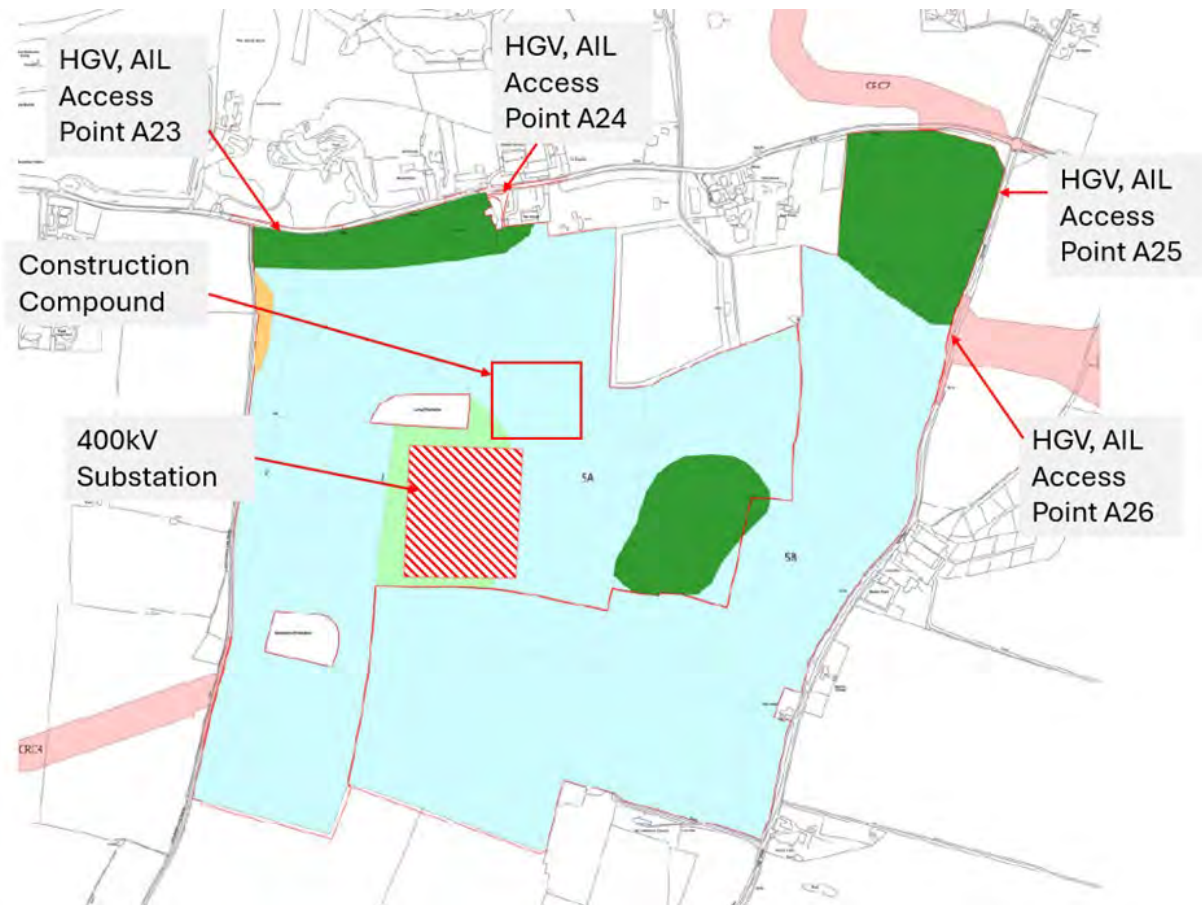


Figure 15.1 Adapted from ES Vol 2 Appendix 15.1 ALC results and the Works Plan to show positioning of infrastructure on Site 5

ALC Results - Light blue = Grade 2, Dark Green = Grade 3a, Light Green = Grade 3b, Site 5 does not contain any Grade 4 soils, with the vast majority being Grade 2.

15.1 Impact of Solar Infrastructure on Soil Quality

Loss of Best and Most Versatile (BMV) Land

The development will result in the long term removal of a substantial area of Grade 2 BMV land from agricultural production for up to 60 yrs. The Environmental Statement (ES) acknowledges that BMV land should be avoided where possible, yet Site 5's selection means high-quality soils will be lost to solar infrastructure, access tracks, and compounds. The small area of lower quality (Grade 3b) land that the 400kV Substation has been sited on, is insufficient to offset the loss of BMV land. The 400kV Substation will require an access road to it for the duration of the proposed timescales of 60yrs for use during day to day operations as well as to allow access of AILs in the future for the scheduled replacement of the transformers. The siting of this on the small pocket of 3b does not mitigate the wider impact.

The Applicant has not acknowledged that the majority of the construction compound and access routes across the site will also be through Grade 2 land. The Environmental Statement does not provide robust evidence that dual use (e.g., grazing) will be viable or that soil health will be maintained over the operational life of the scheme. The Applicant actually states that the vegetation will be managed by either mechanical means or herbicides. Grazing is only mooted as a possible consideration in the future.

The Outline Soil Resource and Management Plan (OSRMP) (APP-204) lacks enforceable detail on how soil quality will be protected, improved, or remediated. The impact on the soil quality of repeated use of herbicides aimed at suppressing the vegetation growth under the panels and around the site has not been assessed. Stating that the quality of the soil is currently affected by farming practices including the use of herbicides and then include the proposal to utilise them themselves without details of the type, quantity or schedule to show a reduction cannot be justified to support their argument that soil quality will improve under the solar arrays, access road, substation and other structures, and that the proposed infrastructure will protect and enhance the quality.

South Norfolk Council also questions whether the long term impacts on productive agricultural land have been fully justified when balanced against the benefits claimed for the Scheme. Its representation recognises that mitigation and future restoration cannot remove the fact that extensive areas of productive farmland would cease to perform their existing agricultural function for many decades. This supports the conclusion that the proposed development would remove Grade 2 Best and Most Versatile agricultural land from productive use for approximately 60 yrs. Such a prolonged period should not be regarded as a short term interruption to agricultural production and should be afforded substantial weight in the planning balance.

15.2 Soils and Compaction

Site 5 comprises slowly permeable, seasonally wet, loamy and clayey soils that are inherently susceptible to structural damage when trafficked under wet conditions. These soils have developed over many centuries through agricultural management and are difficult to restore once their natural pore structure has been compressed.

The Applicant acknowledges that soil compaction is a construction risk but relies primarily upon standard good practice measures such as restricting vehicle movements in wet weather, temporary tracking and post-construction subsoiling. These measures are generic and are not supported by site specific evidence demonstrating that they will successfully restore the physical characteristics of the soils following construction.

Construction of the proposed infrastructure on Site 5 will involve repeated movements of heavy goods vehicles, piling rigs, cranes, excavators, concrete wagons and abnormal loads associated with the 400 kV substation. Unlike temporary agricultural operations, these activities involve significantly greater axle loads and repeated trafficking over the same routes for an extended construction period.

Compaction affects both topsoil and subsoil. While topsoil can sometimes be loosened through cultivation, compaction of the subsoil is considerably more difficult to remediate and may persist for decades. Also, due to the design of the scheme on Site 5, no cultivation will be possible. Loss of soil pore space reduces infiltration, increases surface water runoff, restricts root penetration, limits oxygen availability and impairs biological activity. Collectively these changes reduce soil resilience, agricultural productivity and natural drainage.

The Applicant proposes no measurable performance standards against which successful soil restoration can be assessed. There are no commitments to routine bulk density testing, penetration resistance surveys, infiltration testing or independent verification during construction, operation or decommissioning. Instead, reliance is placed upon an Outline Soil Resource and Management Plan, the detailed content of which remains subject to later approval.

More generally, South Norfolk Council expresses concern that the Environmental Statement repeatedly relies upon outline management plans while deferring important implementation details until after consent. This reinforces concerns that the Outline Soil Resource and Management Plan does not contain sufficiently detailed, measurable or enforceable provisions to demonstrate that soil structure and agricultural capability can be successfully restored following construction.

This is particularly significant at Site 5 because the agricultural land is intended to return to productive use following a proposed operational period of up to 60 years. Without long term monitoring and enforceable restoration criteria there can be no certainty that the soil resource will be returned to its existing agricultural capability and Grade 2 quality.

The Applicant's assertion that soil quality will improve beneath the solar arrays is therefore unsupported by robust evidence. Improvement cannot simply be assumed where soils have been subject to prolonged construction traffic, permanent access roads, substations and repeated maintenance activities over many decades.

The installation of solar PV arrays, substations, access tracks, and compounds across Site 5 and the wider project area will result in the loss of agricultural land and the long term removal of soils from productive use. The Environmental Statement acknowledges a "Minor Adverse" effect on agricultural land during construction and a "Moderate Adverse" effect during decommissioning (ES Ch. 20, Table 20.1), this appears to understate the impact due to being based on the original assumptions made on Land quality based solely on desk-based research. The scheme will take high quality (Best and Most Versatile, BMV) land out of production for up to 60 years, with no guarantee that soil structure and fertility can be fully restored after decommissioning. The Environmental Statement does not provide robust evidence that dual use (e.g., grazing) will be viable or that soil health will be maintained over the operational life of the scheme.



Figure 5.2 Photo of Site 5 view from Boylandhall Lane showing Oilseed Rape growing in May 2025.

15.3 Soils and Contamination

The Environmental Statement concludes that the risk of contamination during construction and operation is negligible. However, this conclusion is based on generic risk assessments rather than the specific environmental characteristics of Site 5.

Site 5 contains numerous drainage ditches and watercourses that ultimately discharge to the River Tas, a chalk stream. In addition, several private water supplies are located within approximately 50 metres of the Order Limits. The combination of seasonally wet soils, artificial drainage and shallow groundwater pathways increases the potential for contaminants to migrate beyond the Site should pollution occur.

Despite these sensitive receptors, the Environmental Statement provides no site specific assessment of the potential for long term leaching from solar panels, transformers, electrical equipment or associated infrastructure. Similarly, the cumulative effects of accidental spills, equipment failure or contamination over the proposed 60 year operational life of the Scheme are not fully assessed.

The Environmental Statement also contains no commitment to routine monitoring of soil or groundwater quality, no programme of periodic contaminant testing and no clearly defined trigger levels requiring investigation or remediation. Without these safeguards, there is no mechanism for

demonstrating that contamination would be identified before it affected agricultural land, watercourses or nearby private water supplies.

Given the sensitivity of the receiving environment, a precautionary approach is warranted. A site specific contamination management strategy should therefore be secured through the Development Consent Order, including baseline soil and groundwater sampling, routine monitoring throughout the operational life of the Scheme, transparent reporting of results and enforceable remediation measures in the event that contamination is identified.



Figure 15.3 Photo of Waterlogged field in December 2025 adjacent to Site 5



Figure 15.4 Photo from The Street, Fritton across Site 5 to Fritton Grange showing standing water

15.4 Impact of Microcracking, Leaching, Glass

The Environmental Statement does not provide a robust, site-specific assessment of the potential risks arising from microcracking, glass fragmentation and the long term leaching of substances from solar panels and associated infrastructure at Site 5. This omission is particularly significant given the proposed 60 year operational life of the Scheme and the predominantly Grade 2 Best and Most Versatile agricultural land affected.

The Environmental Statement acknowledges that solar panels, transformers and other electrical equipment will require maintenance and replacement during the lifetime of the Scheme and recognises that these activities may present an increased risk to ecological receptors. However, it does not consider the potential for microcracking of solar panels through weathering, handling or maintenance, nor does it assess whether microscopic glass fragments or other debris could accumulate within agricultural soils over time. There is no assessment of the cumulative effect that repeated panel replacement or accidental damage could have on soil quality, agricultural productivity or the wider environment throughout the operational life of the Scheme.

Similarly, the Environmental Statement contains no commitment to monitoring for glass fragments, microplastics or other debris resulting from damaged panels, nor does it set out a strategy for their identification, removal or remediation. This is of particular concern at Site 5, where seasonally wet soils, field drainage systems, and numerous watercourses could facilitate the movement of contaminants beyond the immediate development area as well as the potential to contaminate the private water supplies within close proximity.

The Applicant also concludes that the risk of contamination from construction and operation is negligible. However, this conclusion is based on generic risk assessments rather than a detailed consideration of the potential for long-term leaching of trace metals or other substances from solar panels, panel coatings, mounting systems, transformers or associated infrastructure. The Environmental Statement does not evaluate how these risks may change over six decades as materials weather and degrade.

The Applicant states that herbicide use will be minimised during operation, but provides no details of the products that may be used, the anticipated quantities, application frequency or how this would compare with the current agricultural management of the land. Consequently, the Environmental Statement provides no evidence that chemical inputs would be reduced over the lifetime of the Scheme or that any cumulative effects on soil quality, groundwater or surface water have been adequately assessed.

Taken together, these omissions create uncertainty regarding the long-term condition of the agricultural soils at Site 5. Given the quality of the land, the extended operational life of the Scheme and the sensitivity of the surrounding water environment, a site-specific assessment of microcracking, glass fragmentation and long-term chemical leaching should be undertaken, together with appropriate monitoring and remediation measures where necessary.

15.5 Lack of Land Management Detail

Site 5 comprises predominantly Grade 2 Best and Most Versatile agricultural land that has been managed for arable production for generations. The long-term protection of this finite soil resource should therefore be a fundamental consideration of the Scheme.

The Environmental Statement does not provide sufficient, enforceable detail on how these soils will be protected, managed and restored throughout the construction, operational and decommissioning phases. Instead, it relies on the Outline Soil Resource and Management Plan and the Outline Landscape and Ecology Management Plan, both of which establish broad principles while deferring the detailed management measures until after development consent has been granted. South Norfolk Council raises wider concerns regarding the Applicant's reliance on outline management plans across the Scheme, noting that important environmental protections remain dependent upon documents that would only be prepared after consent. These concerns reinforce the lack of certainty surrounding the long term management and restoration of the soils at Site 5.

The Environmental Statement acknowledges that extensive soil stripping, storage and reinstatement will be required during construction of the solar arrays, the 400 kV substation, construction compounds, access roads and cable routes. It also recognises that the seasonally wet soils at Site 5 are vulnerable to structural damage and compaction. However, it provides no measurable restoration objectives, no success criteria against which restoration can be assessed and no evidence that the existing agricultural capability of these Grade 2 soils can be fully recovered following a proposed operational life of up to 60 years.

The Applicant also states that land beneath and between the solar arrays will be managed as grassland with reduced fertiliser and herbicide inputs. However, no site specific management regime is provided, no evidence is presented to demonstrate that soil quality will improve, and no explanation is given as to how agricultural productivity will be maintained or restored. The Environmental Statement also acknowledges that vegetation will be managed through mechanical cutting or herbicide application, which introduces further uncertainty regarding the long term condition of the soil resource.

Overall, the Environmental Statement does not provide sufficient certainty that the quality, structure and agricultural capability of the soils at Site 5 can be maintained throughout the lifetime of the Scheme or successfully restored at decommissioning. Given the importance of this Grade 2 agricultural land, detailed and enforceable soil management and restoration measures should be secured before any development commences.

15.6 Soil Recovery Plan

The Environmental Statement for East Pye Solar, including Site 5, does not provide a detailed or enforceable soil recovery plan specific to this location or the wider scheme. Instead, the Environmental Statement refers to the Outline Soil Resource and Management Plan as the document that will guide soil handling, storage, and restoration during construction, operation, and decommissioning. However, the OSRMP is a high-level framework and does not set out specific protocols, restoration targets, or monitoring requirements for soil recovery at Site 5.

In the Environmental Statement Volume 1, Chapter 15: Soils and Agricultural Land the Applicant acknowledges that soil stripping, storage, and reinstatement will be required, and that best practice will be followed to minimise compaction and degradation. Yet, it does not specify how soil recovery will be monitored, what standards will be used to assess successful restoration, or how long term soil health will be verified post decommissioning. There is no commitment to regular soil testing, transparent reporting, or adaptive management if soil recovery is not achieved.

For Site 5 specifically, the Environmental Statement recognises the presence of high quality (Grade 2) agricultural land and the risk of compaction and degradation from construction activities (Environmental Statement Vol 3 Appendix 10.3). However, it does not provide a tailored soil recovery plan or detailed management protocols for this location.

In summary, the Environmental Statement relies on outline management plans for soil recovery but lacks detailed, enforceable measures or monitoring protocols for Site 5. This lack of specificity increases the risk that soils will not be adequately restored to their original quality or productivity after the scheme. Without measurable restoration standards, independent monitoring and enforceable success criteria, there is no objective basis upon which the restored agricultural capability of Site 5 can be demonstrated following six decades of industrial use.

15.7 Lack of Decommissioning Bond

The Environmental Statement for East Pye Solar does not propose or commit to a decommissioning bond or any form of financial guarantee to secure the costs of decommissioning and site restoration at the end of the scheme's operational life. Across the main Environmental Statement chapters and supporting documents, there is no reference to a financial bond, escrow, or other security mechanism to ensure that funds will be available for decommissioning and restoration, regardless of the operator's financial position at the end of the project.

Instead, the Environmental Statement and Draft Development Consent Order set out a process whereby a Decommissioning Environmental Management Plan must be prepared and approved by the relevant planning authority prior to decommissioning. While this plan will include details of how decommissioning will be managed, there is no requirement for a financial bond or security to guarantee that decommissioning and restoration will be fully funded if the operator is unable or unwilling to pay for these activities at the end of the scheme's life.

This concern is particularly important given the proposed operational life of approximately 60 years. It cannot reasonably be assumed that the ownership, financial position or corporate structure of the project company will remain unchanged over such a period. In the absence of an enforceable financial guarantee, there remains a risk that the cost of restoring this nationally important agricultural land could ultimately fall upon landowners or the public sector.

This lack of a financial guarantee is a significant omission, as it exposes the local community and public authorities to the risk that the site could be left unrestored or only partially remediated if the operator is insolvent or otherwise unable to meet its obligations.

The Planning Inspectorate is therefore urged to require, as a condition of any consent, a robust and enforceable decommissioning bond or equivalent financial security to ensure that full decommissioning and restoration of the site can be achieved at the end of the project's operational life

Conclusion

The Environmental Statement does not demonstrate that the quality, integrity or long-term agricultural capability of the soils at Site 5 can be protected throughout the construction, operational and decommissioning phases of the Scheme. Instead, it relies upon outline management plans, assumptions regarding restoration and mitigation that have not been supported by measurable standards or enforceable commitments.

The principal concerns are:

- **Predominantly Grade 2 Best and Most Versatile agricultural land would be removed from productive agricultural use for approximately 60 yrs**, with no convincing evidence that its agricultural capability, soil structure or wider environmental functions can be fully restored.
- **The assessment of soil compaction and degradation is not supported by measurable restoration targets, independent verification or long-term monitoring**, despite the acknowledged sensitivity of the soils at Site 5.
- **The risks of contamination to soils, groundwater, the River Tas catchment and nearby private water supplies have not been adequately assessed**, and the proposed monitoring and remediation measures lack sufficient detail and enforceability.
- **The potential long-term effects of microcracking, panel degradation, glass fragmentation and contaminant leaching have not been assessed in a site-specific or cumulative context** over the proposed 60-year operational life of the Scheme.
- **The Outline Soil Resource and Management Plan does not provide a detailed or enforceable Soil Recovery Plan**, with no measurable restoration standards, independent monitoring or objective success criteria to demonstrate that the land can be returned to its existing agricultural quality.
- **No financial guarantee or decommissioning bond is proposed** to ensure that decommissioning and full restoration of Site 5 would be completed should ownership, financial circumstances or the project structure change during the lifetime of the Scheme.

Taken together, these deficiencies mean the Environmental Statement has **not demonstrated that the nationally important soil resource at Site 5 can be adequately protected, monitored or restored**, nor that the risks associated with its long-term industrial use have been satisfactorily assessed. The resulting uncertainty should attract significant weight in the planning balance

Chapter 16: Ground Conditions

The Environmental Statement does not provide sufficient site specific evidence or enforceable mitigation to demonstrate that the ground conditions at Site 5 can be adequately protected throughout the construction, operational and decommissioning phases of the Scheme. Instead, it relies on generic assessments, outline management plans and post consent investigations, leaving significant uncertainty regarding contamination risks, groundwater protection and the effectiveness of the proposed mitigation measures.

These concerns are reinforced by the Environment Agency, which concludes that further information and amendments are required before it can be satisfied that groundwater, water quality and pollution risks have been adequately addressed. The Environment Agency identifies shortcomings in the assessment of groundwater protection, pollution prevention, environmental management and long term monitoring, demonstrating that important aspects of the environmental assessment remain unresolved.

This lack of certainty is particularly concerning because Site 5 accommodates some of the Scheme's principal large infrastructure, including a proposed 400 kV substation, access road, construction compounds, cable infrastructure as well as 4.5m high Single axis trackers. These works are located within a sensitive hydrogeological setting where any failure to adequately characterise or manage ground conditions could have long term consequences for groundwater, surface water, agricultural land and nearby receptors.

16.1 Baseline Ground Conditions

The Environmental Statement identifies Site 5 as being underlain by two groundwater-bearing geological formations. The upper Lowestoft Formation is classified as a Secondary Aquifer, while the underlying Norwich Crag Formation is classified as a Principal Aquifer. This makes Site 5 particularly sensitive to contamination, as pollutants have the potential to affect both shallow groundwater and the more important underlying aquifer. These groundwater resources are particularly sensitive to disturbance and contamination and therefore require a precautionary approach.

The Environment Agency similarly recognises the sensitivity of groundwater resources and requires additional information regarding groundwater protection, particularly where construction activities have the potential to disturb soils, groundwater pathways or introduce pollutants into underlying aquifers.

Site 5 is characterised by slowly permeable, seasonally wet soils, together with an extensive network of field drains, drainage ditches and watercourses along both its eastern and western boundaries that ultimately discharge to the River Tas. In addition, several private water supplies are located within approximately 50 metres of the Order Limits. According to the MAGIC mapping system, Site 5 also lies within an area of medium to high groundwater vulnerability and is identified as having a soluble rock groundwater risk, indicating that pollutants released at ground level have an increased potential to reach underlying groundwater resources. Collectively, these

characteristics make Site 5 particularly sensitive to contamination and increase the potential for pollutants to migrate beyond the Site if accidental releases or ground disturbance occur. The Applicant has not acknowledged that there are private water supplies close to the proposed Substation location and has failed to include them in the assessment even though they are well within the 1km range they state they have used.

The omission of these receptors is particularly concerning given the Environment Agency's emphasis on protecting groundwater resources and ensuring appropriate monitoring and mitigation where sensitive water receptors may be affected.

The settlements of Morningthorpe and Fritton, where Site 5 is located, date back to the Domesday book. The North West section of Site 5 was originally parkland and part of the Boyland Estate dating back to 1571. The historical finds of a Saxon cemetery within 150m of the Site's Northern boundary, along with Roman finds in line with settlements demonstrate the area has been historically low intensity with the majority down to agriculture since before the 19th century thereby having a low baseline contamination risk as well as reinforcing the historical importance of the stream in the West of Site 5.

16.2 Construction and Contamination Risks

Construction at Site 5 will involve extensive excavation, cable trenching, foundation works, construction compounds, permanent access infrastructure and the installation of the 400 kV substation. These activities have the potential to alter groundwater pathways, disturb previously undisturbed ground and create new pathways for contaminant migration. The Environment Agency also considers that further information is required regarding pollution prevention during construction, including the management of fuels, oils, concrete works, drilling fluids, wheel washing and contaminated runoff. These matters have direct relevance to Site 5, where construction of the 400 kV Project Substation, cable infrastructure and extensive earthworks would significantly increase the potential for accidental pollution unless robust controls are secured.

The Environmental Statement also identifies a historic landfill approximately 100 metres north west of Sub-site 5A, together with other potentially contaminative land uses within the surrounding area. However, it provides no detailed assessment of whether contaminants from these historic sources could be mobilised during construction or affect groundwater beneath the Site.

During operation, the Scheme will introduce transformers, electrical equipment, underground cables and associated infrastructure that represent potential sources of contamination through accidental spills, hydraulic fluids, insulating oils and equipment failure. The Environment Agency further requires additional information regarding pollution containment and emergency response arrangements, including the management of contaminated firewater. The Environmental Statement provides limited site specific evidence demonstrating that accidental releases associated with the proposed electrical infrastructure could be effectively contained throughout the operational life of the development. The Environmental Statement concludes that these risks are negligible but provides little site specific evidence to support that conclusion or to demonstrate

how the cumulative effects of such risks have been assessed over the proposed 60-year operational life of the Scheme.

16.3 Reliance on Future Investigation

Rather than demonstrating that ground condition risks have been fully assessed before submission of the application, the Applicant proposes that further ground investigations and risk assessments will be undertaken after development consent has been granted through the Outline Construction Environmental Management Plan. This reflects a wider concern identified by South Norfolk Council, namely that the application repeatedly relies upon outline management plans while deferring important environmental safeguards until after development consent has been granted. In the absence of detailed investigations before consent, there is limited confidence that the likely effects on ground conditions have been fully identified or that the proposed mitigation would be effective.

This approach effectively seeks consent before the environmental risks have been fully characterised. The absence of comprehensive intrusive investigations, hydrogeological modelling and quantitative risk assessment means that the Examining Authority cannot be certain that likely significant effects have been fully identified or that the proposed mitigation measures will be effective.

The Environmental Statement also provides no enforceable commitments for long term groundwater monitoring, contaminant trigger levels, independent verification or routine reporting throughout the operational life of the Scheme. This concern is reinforced by the Environment Agency, which seeks substantially greater detail regarding environmental monitoring, pollution prevention and groundwater protection before it can be satisfied that the risks have been adequately addressed.

Conclusion

The Environmental Statement has not demonstrated that the ground conditions at Site 5 have been sufficiently characterised or that the risks to groundwater, surrounding watercourses, private water supplies and agricultural land can be adequately managed throughout the construction, operational and decommissioning phases of the proposed development. The assessment relies heavily on generic assumptions, outline management plans and post consent investigations, leaving significant uncertainty regarding the effectiveness of the proposed mitigation.

Key concerns include:

- **Site 5 occupies a sensitive hydrogeological setting**, underlain by both a Principal Aquifer and a Secondary Aquifer, with groundwater vulnerability, field drains and watercourses increasing the potential for pollutants to migrate beyond the Site.
- **The Environmental Statement does not adequately assess the risks to nearby private water supplies**, despite their close proximity to the proposed 400 kV Project Substation and associated infrastructure.

- **Construction and operation introduce potential sources of contamination**, including extensive earthworks, cable trenching, transformers, insulating oils and other electrical infrastructure, without sufficient site specific evidence to demonstrate that risks have been adequately assessed or mitigated.
- **The assessment relies on future investigations and outline management plans**, rather than providing comprehensive site investigations, quantitative risk assessments and enforceable mitigation before development consent is granted.
- **The Environmental Statement contains insufficient commitments for long term groundwater monitoring, independent verification and clearly defined intervention measures**, reducing confidence that contamination would be identified and effectively managed throughout the 60 year operational life of the development.
- **The Environment Agency has identified the need for further information and stronger environmental controls** relating to groundwater protection, pollution prevention and environmental management, reinforcing concerns that important matters remain unresolved.

Taken together, these matters demonstrate that the Environmental Statement does not provide a sufficiently robust or site specific assessment of ground conditions at Site 5. In the absence of further investigation and enforceable safeguards, there is insufficient evidence to conclude that the proposed development would not give rise to unacceptable risks to groundwater, agricultural land and other sensitive environmental receptors.

Chapter 17: Electromagnetic Fields

The Environmental Statement concludes that the proposed electrical infrastructure would comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and that significant effects from electromagnetic fields (EMFs) are therefore unlikely. However, this conclusion is based almost entirely on desk based modelling, generic assumptions and compliance with design standards rather than a detailed, site specific assessment of Site 5.

Site 5 would contain one of the highest concentrations of electrical infrastructure within the Scheme, including a 400 kV Project Substation, transformers, switchgear, underground 132 kV and 400 kV cable circuits, inverter stations and associated electrical equipment. Despite this, the Environmental Statement provides limited evidence demonstrating how EMF levels would vary across the Site or how nearby sensitive receptors would experience the combined effects of this infrastructure throughout the proposed 60 yr operational life of the development.

17.1 Site Specific Assessment

The Environmental Statement provides no detailed mapping showing predicted EMF levels around the proposed 400 kV Project Substation, underground cable corridors, inverter stations or other principal electrical infrastructure within Site 5.

Instead, the assessment relies upon generic modelling and assumes that compliance with recognised engineering standards will ensure acceptable effects. Whilst compliance with ICNIRP guidelines is an important consideration, it does not remove the need for a robust, transparent and site specific assessment demonstrating how predicted EMF levels relate to nearby residential properties, Public Rights of Way, Jack in the Box Nursery and other sensitive receptors surrounding Site 5.

Given the concentration of electrical infrastructure proposed within a relatively confined area, the Environmental Statement should have included detailed contour mapping identifying predicted magnetic field strengths across the Site and at its boundaries, together with a clear explanation of how combined emissions from multiple electrical components have been assessed.

17.2 Combined Infrastructure

For the proposed underground 132 kV and 400 kV cable circuits, the Environmental Statement predicts a maximum magnetic field of 95 microteslas at one metre above ground, close to the ICNIRP public exposure reference level of 100 microteslas.

However, the assessment does not explain how this prediction interacts with the proposed 400 kV Project Substation, transformers, switchgear, inverter stations and other electrical infrastructure located within Site 5. The Environmental Statement considers individual components but provides little evidence that the cumulative EMF environment created by this concentration of infrastructure has been fully assessed.

17.3 Ecological Effects

The assessment of ecological effects is similarly limited. The Environmental Statement concludes that predicted EMF levels are below those reported in published research to cause biological effects, but this conclusion relies upon generic scientific literature rather than a site specific assessment of the habitats and protected species present within and surrounding Site 5.

Given the proximity of mature hedgerows, veteran trees, watercourses and ecological corridors, together with the importance of Site 5 for bats, birds and other wildlife identified elsewhere in the Environmental Statement, greater justification should have been provided to demonstrate why no localised ecological effects are anticipated.

17.4 Monitoring and Verification

The Environmental Statement contains no commitment to post construction EMF monitoring to verify that operational field strengths correspond with those predicted during the assessment.

Nor does it establish monitoring locations, reporting requirements, trigger levels or corrective actions should measured EMF levels differ from those assumed within the assessment. Given the proposed operational life of approximately 60 yrs, reliance solely upon pre construction modelling provides limited confidence that compliance would continue throughout the lifetime of the development.

Conclusion

The Environmental Statement concludes that electromagnetic field effects would not be significant. However, in relation to Site 5, this conclusion is based largely on generic modelling and compliance with design standards rather than a robust, site specific assessment of the proposed electrical infrastructure and nearby sensitive receptors.

Key concerns include:

- **The assessment relies primarily on desk based modelling**, with no site specific EMF measurements or detailed contour mapping for the principal electrical infrastructure proposed within Site 5.
- **The Environmental Statement does not adequately assess the combined effects** of the 400 kV Project Substation, transformers, inverter stations and underground cable network operating together within a concentrated area.
- **Insufficient consideration has been given to nearby sensitive receptors**, including residential properties, Public Rights of Way and Jack in the Box Nursery.
- **The ecological assessment relies on generic scientific literature**, without demonstrating that the habitats and species present at Site 5 would not be affected by the concentration of electrical infrastructure.
- **No provision has been made for long term operational monitoring**, independent verification or clearly defined corrective action should measured EMF levels differ from those predicted.

Taken together, these matters demonstrate that the Environmental Statement does not provide a sufficiently robust or site specific assessment of electromagnetic field effects at Site 5. Consequently, there is insufficient evidence to conclude that the long term operation of the proposed electrical infrastructure would not give rise to unacceptable impacts on nearby receptors or the surrounding environment.

Chapter 18: Other Environmental Matters

18.1 Utilities

Site 5 has multiple Utilities running along the boundary edges and through it which have not been addressed adequately by East Pye Solar.

Water

Site 5 – Risk to Existing Water Infrastructure

The Environmental Statement significantly underestimates the potential impacts of the Proposed Development on existing water supply infrastructure within Site 5 and does not provide sufficient engineering detail to demonstrate that these impacts can be safely or effectively managed.

Site 5 contains an existing Anglian Water mains water supply pipeline running immediately adjacent to the northern boundary of the site beneath the B1527. In addition, a second water main is located immediately behind the northern hedgerow. According to a local resident who witnessed its installation, this pipeline is approximately 8 inches (approximately 200 mm) in diameter and has served the area for several decades. Together these pipelines form part of the local strategic water supply network serving surrounding communities.

The Applicant proposes two principal construction accesses into Site 5 from the B1527 for Heavy Goods Vehicles (HGVs) and Abnormal Indivisible Loads (AILs). These access points would require the construction of permanent or temporary crossings over roadside drainage ditches directly above or immediately adjacent to the buried water mains.

No detailed engineering design has been provided within the Environmental Statement or supporting documents explaining:

- how these crossings would be constructed without imposing unacceptable loading on the buried water mains;
- whether protective slabs, bridging structures or pipe diversions would be required;
- how minimum stand-off distances required by Anglian Water would be maintained;
- how vibration, ground compaction and repeated heavy vehicle loading would be managed during construction; or
- how uninterrupted water supply would be maintained should accidental damage occur.

This omission is significant because Anglian Water's Relevant Representation confirms that the project intersects with numerous existing water supply assets and specifically requires detailed assessment of interfaces with its infrastructure, clash detection, technical assurance reviews and agreed protective measures before construction can proceed. Anglian Water also states that such engagement has not yet been adequately undertaken and that further discussion is required

regarding access works, haul roads, crossings, trenchless construction techniques and protection of water infrastructure. Anglian Water also advises that the Applicant must demonstrate that its assets remain accessible for inspection, maintenance, repair and future replacement throughout both construction and operation. The Environmental Statement provides little evidence demonstrating how these ongoing operational requirements have influenced the design of Site 5 or how access to existing strategic water infrastructure will be maintained without compromising the operation of the proposed development.

Anglian Water further emphasises that construction activities involving haul roads, access roads and heavy plant present risks from ground compaction, vibration and direct loading which could damage buried mains unless appropriate protective measures are designed and agreed in advance.

For water mains exceeding 400 mm diameter, Anglian Water requires stand-off distances to be determined on a case-by-case basis. Even where the locally identified pipe is approximately 200 mm in diameter, no evidence has been presented demonstrating compliance with the utility company's protective requirements or confirming the precise location and depth of the asset.

Failure of either water main during construction could have significant consequences including:

- interruption of potable water supplies to local communities;
- flooding of adjacent highways and nearby residential properties;
- erosion of newly constructed access roads;
- delays to construction activities;
- emergency repair works requiring road closures; and
- increased environmental impacts through uncontrolled discharge of treated water.

The Environmental Statement therefore fails to demonstrate that the proposed access arrangements are deliverable without unacceptable risk to existing utility infrastructure.

Furthermore, Chapter 18 relies heavily upon future detailed design and protective provisions rather than demonstrating at the Development Consent Order stage that the proposed accesses are physically achievable whilst maintaining the integrity of critical water infrastructure. This is inconsistent with the requirement for a robust Environmental Statement to assess likely significant effects based upon sufficient design information.

The Applicant has also failed to assess the cumulative risk arising from two separate access points crossing the same corridor of buried utilities, together with associated drainage works, ditch crossings and repeated HGV movements throughout the construction period.

Given that Anglian Water has specifically identified the need for further technical assurance work, clash detection and agreement on protective measures, it cannot presently be concluded that the proposed Site 5 access arrangements are feasible or that significant adverse effects on water supply infrastructure can be avoided.

Accordingly, the Planning Inspectorate should conclude that the assessment of water utility impacts for Site 5 is incomplete and that the Applicant has not discharged the burden of demonstrating that the proposed development can be constructed without unacceptable risk to existing strategic water infrastructure.



Figure 18.1 Photo of Hydrant on Eastern Boundary Site 5 Opposite Beech Farm, The Street.



Figure 18.2 Hydrant in hedge off B1527 opposite Willow Lodge. Northern boundary Site 5. Together with Fig. 18.2 they demonstrate Mains Water Management is integral to Site 5

Gas

Major Accidents and Disasters / Utilities – Objection (Site 5)

The Environmental Statement acknowledges that Site 5 is crossed by National Gas Transmission's Feeder Main FM05 (Yelverton to Stowmarket), a strategic high-pressure gas transmission pipeline forming part of the National Transmission System. The proposed development also locates the Scheme's principal electrical infrastructure, including the 400 kV substation, in close proximity to this nationally important asset.

Measurements taken from the Applicant's Works Plans indicate that solar infrastructure is proposed within approximately **12.5 metres** of the marked pipeline alignment in parts of Site 5, while the area identified for the proposed 400 kV substation lies approximately **20 metres** from the pipeline. Given the scale of the proposed construction activities, including excavation, cable trenching, reinforced concrete foundations, heavy plant movements and the installation of substantial electrical infrastructure, the Environmental Statement provides insufficient site-specific evidence to demonstrate that these works can be undertaken without affecting the integrity, operation or future maintenance of the pipeline.

These concerns are reinforced by the Relevant Representation submitted by National Gas Transmission on 9 June 2026. National Gas confirms that Feeder Main FM05 and its associated cathodic protection equipment are located within and adjacent to the Order Limits and states that it requires protective provisions to safeguard its infrastructure, maintain unrestricted access for inspection, maintenance, renewal and emergency repair, and ensure compliance with the relevant engineering standards during construction and operation.

National Gas further states that, despite attempting to engage with the Applicant since August 2025, no agreement has been reached regarding these protective provisions. Consequently, National Gas maintains an objection to the Development Consent Order unless and until satisfactory protections are secured. The continuing objection from the statutory undertaker responsible for the National Transmission System is a significant material consideration and raises legitimate concerns regarding the adequacy of the current assessment.

The Environmental Statement also gives limited consideration to the consequences of concentrating two nationally important pieces of energy infrastructure within such close proximity. It does not clearly demonstrate that alternative locations for the 400 kV substation have been fully evaluated to maximise separation from the existing gas transmission pipeline or explain why the proposed layout represents the optimum solution from a safety and infrastructure resilience perspective.

The proximity of the proposed substation to the gas transmission pipeline is of particular concern because Site 5 is located adjacent to established residential communities. There are more than **80 residential properties** in the surrounding area together with the **Jack in the Box Children's**

Nursery in close proximity to the proposed substation. These are sensitive receptors that should be explicitly considered within any assessment of the interaction between the proposed development and the existing high-pressure gas transmission pipeline. Whilst the Environmental Statement concludes that the development can be delivered safely, it provides limited evidence demonstrating how the potential consequences of an incident involving either the electrical infrastructure or the adjacent gas pipeline have informed the siting and design of the development.

Taken together, the Environmental Statement has not demonstrated that the proposed development can be constructed and operated without unacceptable uncertainty regarding its interaction with National Gas Transmission's strategic infrastructure. The absence of agreed protective provisions, the limited assessment of construction and operational interactions, the close proximity of the proposed infrastructure to the pipeline, and the continuing objection from National Gas Transmission indicate that further work is required before the Examining Authority can be satisfied that the effects on this nationally important utility have been adequately assessed. Development consent should therefore not be granted until these matters have been resolved and appropriate protective provisions have been secured within the Development Consent Order.



Fig 18.3 Photo of National Gas Transmission High Pressure Feeder No. 5 Marker pole within Site 5



Figure 18.4 Map overlaid with relative positions of Site 5, 400kV Substation and NGT High Pressure Main Feeder No.5

Omission of Private Foul Drainage Infrastructure

The Environmental Statement fails to identify and assess private septic tanks and package treatment plants serving properties surrounding Site 5 as environmental receptors. In this rural area, many properties are not connected to the public sewer network and instead rely on private foul drainage systems that are dependent on stable groundwater conditions, suitable soil permeability and effective drainage fields.

Construction activities, including piling, cable trenching, access tracks and drainage works, have the potential to alter groundwater movement, compact soils and change local drainage patterns. These changes may reduce the effectiveness of existing drainage fields, resulting in system failure, surface ponding, pollution of nearby ditches and watercourses, and significant costs to affected property owners.

Despite these potential impacts, there is no evidence that the Applicant has identified nearby private foul drainage systems, assessed their vulnerability, or proposed monitoring, mitigation or compensation should adverse effects occur. The Environmental Statement therefore fails to assess an important category of private infrastructure that could be materially affected by the Proposed Development.

This omission represents a significant deficiency in the Environmental Statement and undermines the conclusion that the likely significant environmental effects of the Proposed Development have been fully assessed.

18.2 Glint and Glare

Objection – Glint and Glare Assessment

The Environmental Statement (ES) does not provide sufficient site-specific evidence to demonstrate that glint and glare effects arising from Site 5, either alone or cumulatively with Sites 4A and 4B, have been robustly assessed or can be adequately mitigated throughout the lifetime of the Proposed Development.

The ES relies almost entirely upon desk-based geometric modelling undertaken using the Pager Power methodology and satellite imagery rather than detailed field verification. Whilst this modelling identifies the theoretical geometry of solar reflections, it does not adequately represent the complex topography, changing driver eye positions, local vegetation characteristics or real-world driving conditions experienced along the B1527 and at the A140/B1527 junction.

Over Reliance on Desktop Modelling

The Glint and Glare Assessment concludes that reflections are geometrically capable of affecting approximately 7.9 km of the B1527 and up to 482 residential properties within one kilometre of the Site 5 solar arrays. The Applicant subsequently dismisses the majority of these potential effects on the basis that existing vegetation, buildings and landform provide screening.

However, these conclusions are based upon interpretation of aerial photography and mapping rather than comprehensive site surveys.

The assessment provides no evidence that:

- vegetation screening has been verified on site;
- hedgerow heights and densities have been measured throughout the year;
- seasonal leaf loss has been assessed;
- future deterioration or removal of vegetation has been considered;
- newly proposed planting will achieve the assumed screening within the predicted timescales; or
- screening effectiveness will remain throughout the proposed operational life of up to 60 years.

The Environmental Statement therefore relies upon assumptions regarding screening effectiveness which remain uncertain and unverified.

Furthermore, there is no commitment to undertake post-construction monitoring to validate the predictions contained within the assessment or implement additional mitigation should actual glint and glare effects exceed those predicted.

Unclear Assessment Mapping and Inconsistent Panel Representation

The Glint and Glare Assessment diagrams are also unclear and difficult to interpret, making it challenging to understand precisely how impacts upon individual receptors have been assessed. In particular, there are apparent inconsistencies between different assessment figures, with the same areas of the Proposed Development being shown as containing either **single-axis tracker panels** or **fixed-tilt panels** in different receptor assessments. This inconsistency raises uncertainty as to which panel configuration has actually been assessed and whether the modelling accurately reflects the proposed development. Given that single-axis tracker panels present different glint and glare characteristics to fixed-tilt arrays due to their continuously changing orientation throughout the day, any ambiguity in the assessment diagrams undermines confidence in the conclusions reached.

The assessment also identifies locations where mitigation planting is proposed along the northern boundary of Site 5 adjacent to the B1527. However, several of these mitigation areas coincide with the proposed permanent access points for Abnormal Indivisible Loads (AILs) and Heavy Goods Vehicles (HGVs), including Accesses A23 and A24. Similarly, mitigation is shown along the northern boundary close to the crossroads of The Krons and The Street, Fritton, immediately adjacent to the proposed permanent HGV and AIL access (A26) and the existing crossroads junction.

In addition, the assessment fails to consider road users travelling along **The Street, Fritton**, despite this road forming an important approach to the proposed permanent HGV and AIL access (A26) and its junction with the B1527. Vehicles approaching or waiting at the crossroads are required to observe traffic from multiple directions while negotiating a complex rural junction. The Environmental Statement contains no assessment of whether glint and glare from Site 5 could affect drivers using The Street, either as they approach the crossroads or whilst waiting to enter or cross the B1527. This represents a significant omission, particularly given the proximity of the proposed solar arrays, mitigation planting and permanent site access arrangements. The assessment therefore underestimates the range of highway receptors that may be affected and fails to demonstrate that all potentially sensitive road users have been adequately considered.

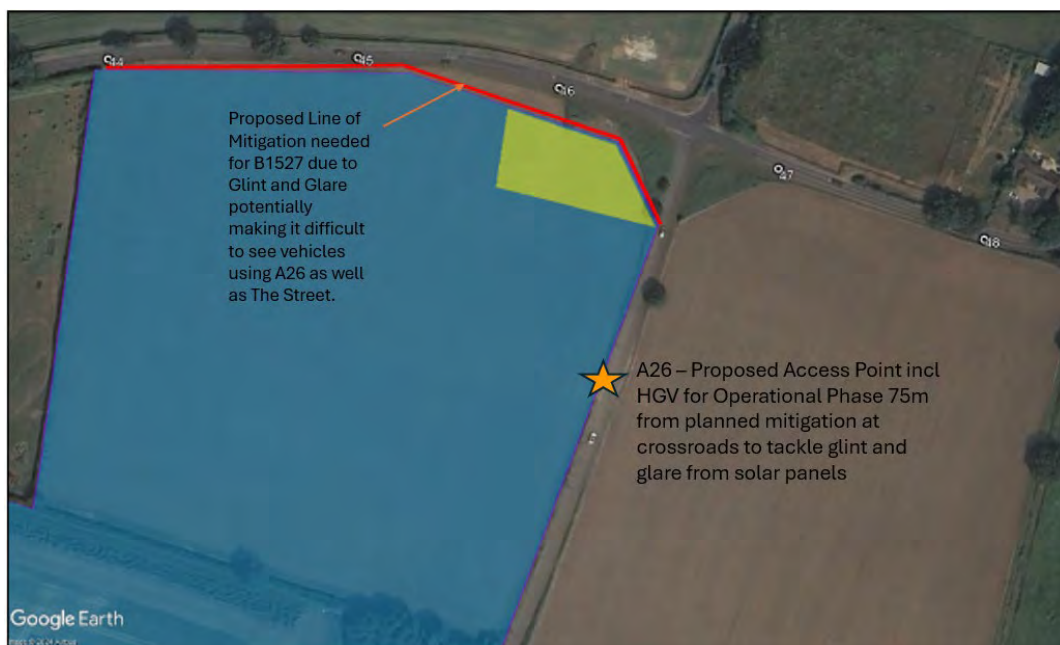


Figure 18.5 Taken from ES Vol3 Appendix 18.1 Glint and Glare Assessment Part 1, annotated to show proposed Mitigation position in relation to crossroads and proposed operational (and construction phase) vehicle access point A26 for Site 5 including HGVs

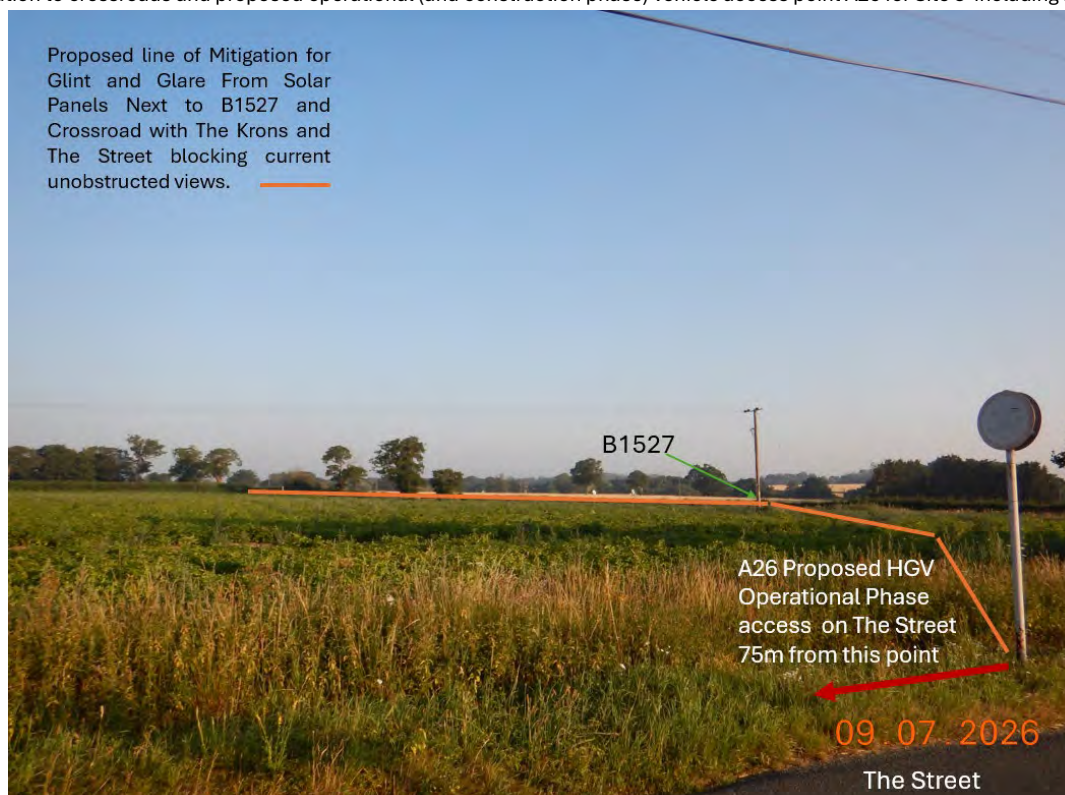


Figure 18.6 Photo showing current unobstructed visibility at crossroads (B1527, The Street, The Krons. Annotated to show approximate line of Mitigation as suggested by Applicants Glint and Glare assessment. Demonstrating visibility at this Junction will be severely reduced by it.

It is unclear how effective landscape screening can be maintained where regular vehicle movements require wide access openings and visibility splays to be kept clear. Furthermore, the Applicant identifies much of the existing northern boundary as an **Important Hedgerow**, yet there is no explanation within the Environmental Statement of how the proposed mitigation planting, access construction, visibility requirements and ongoing maintenance will be undertaken without adverse effects on this protected hedgerow. No clear methodology is provided demonstrating how the integrity, continuity and ecological value of the Important Hedgerow will be safeguarded whilst simultaneously creating and operating these permanent access points. This omission further undermines confidence that the proposed mitigation can be successfully delivered as assumed within the glint and glare assessment throughout the operational life of the development.



Screening for road receptors B33 to B38

Figure 18.7 Taken from ES Vol3 Appendix 18.1 Glint and Glare Assessment Part 1, annotated to show proposed Mitigation position in relation to crossroads and proposed operational (and construction phase) vehicle access point A23, and A24 for Site 5 including AILs & HGVs. Shows line of proposed mitigation runs along current ancient hedgeline that Applicant proposes to remove sections of to form access points into Site 5.

Failure to Assess Dynamic Driving Conditions

The Glint and Glare Assessment is fundamentally limited by its reliance on desk-based geometric modelling, which does not replicate the real-life experience of road users. The methodology models the sun's path, panel orientation and theoretical visibility from a **single assumed driver eye height of 1.5 metres**, using digital terrain models and aerial imagery, but does not include field surveys, in-vehicle trials or dynamic assessments capable of simulating how drivers would actually encounter glint or glare while travelling along the highway. The Environmental Statement acknowledges that no site-specific fieldwork has been undertaken to establish existing baseline glint and glare conditions.

Whilst an eye height of 1.5 metres may broadly represent the occupant of a typical private car, it does not reflect the full range of highway users on the B1527. The route accommodates Heavy Goods Vehicles (HGVs), agricultural machinery, buses and other high-sided vehicles, whose drivers are seated substantially higher above the carriageway. These elevated viewpoints can extend above hedgerows and roadside vegetation assumed within the modelling to provide screening, potentially exposing drivers to solar reflections that would not be visible from the lower eye height adopted in the assessment. The Environmental Statement provides no sensitivity analysis or alternative modelling to demonstrate whether these higher driver positions experience different glint and glare effects.

The assessment also assumes 100% sunlight during daylight hours and that all panels are visible to the receptor as a conservative modelling scenario, but it does not account for the transient nature of reflections experienced by moving vehicles, nor the influence of vehicle speed, driver reaction times, changing viewing angles or the presence of other light sources, including direct sunlight.

These limitations are particularly significant on the B1527, which is not a straight, level highway. Between the A140 roundabout and Hempnall the route is characterised by significant rises and falls in road level, undulating topography, horizontal bends, changing driver eye positions, varying approach angles, constrained forward visibility, numerous field entrances and private accesses, and sections where roadside vegetation changes rapidly. Drivers therefore experience continuously changing sightlines as vehicles crest hills, descend gradients and negotiate bends. The picture below was taken at Hall Farm Storage Unit, and shows the road bending away and dropping down with Site 5 visible at this point (Yellow field). Appendix 3 has further photographs taken from a Dashcam to demonstrate the experience of approaching Site 5 as a car driver. The shielding of Site 5 from the carriage way is mainly deciduous hedgerow that the farmers cut twice a year by varying heights and therefore cannot be relied on for mitigation going forward.



Figure 18.8 Photo of view from B1527 heading towards Hemphall of Site 5 in the distance demonstrating how visible Site 5 is and how in reality the curvature of the road affects the view. This is approximately 650m away from the treeline at the back part of the visible section of Site 5 on this photo.(access point A24)

Static geometric modelling cannot adequately replicate these dynamic conditions. Reflections that appear insignificant within a computer model may become visible for short periods as vehicles move across changing topography or around bends, particularly where driver eye position, vehicle height and panel orientation are continually changing. This is especially relevant for HGVs and agricultural vehicles, whose elevated driving positions may reduce the effectiveness of roadside screening relied upon by the Applicant. The Environmental Statement does not explain how these real-world conditions have been incorporated into the assessment, undermining confidence that the predicted effects accurately reflect the experience of all highway users rather than only occupants of typical passenger cars

Single-Axis Tracking Panels

The Proposed Development uses single-axis tracking solar panels across Sites 4A, 4B and 5.

Unlike fixed solar panels, tracker systems continuously rotate throughout the day to follow the sun. During the late afternoon and evening the panels progressively orientate towards the western horizon.

The B1527 between the A140 roundabout and Fritton follows a broadly east-west alignment.

Drivers travelling eastbound during the afternoon and evening are therefore already driving towards the setting sun.

At precisely the same time, the tracker panels within Sites 4A, 4B and 5 will increasingly be orientated towards the western sky.

This creates the potential for road users to experience:

- low-angle direct sunlight;
- reflections from rotating solar panels;
- changing reflection angles as tracker panels move;
- rapidly changing visibility due to road undulations; and
- additional visual distraction during periods when visibility is already reduced.

The Applicant acknowledges that tracker operation and backtracking functions form part of the proposed mitigation strategy.

This demonstrates that reflections from tracker panels are recognised by the Applicant as requiring operational management.

Cumulative Effects Along the B1527 Corridor

The assessment largely considers individual solar parcels in isolation.

Road users do not experience Sites 4A, 4B and 5 separately.

Instead, motorists experience a continuous sequence of solar development extending along the same transport corridor.

Drivers travelling eastwards may encounter views towards:

- Site 4A;
- Site 4B; and
- Site 5

during a single journey.

The Environmental Statement does not adequately assess the cumulative visual experience of multiple tracker arrays operating simultaneously during late afternoon and evening periods.

The cumulative interaction between multiple reflections, changing panel orientations and existing low-angle sunlight has not been robustly assessed.

A140/B1527 Roundabout

The A140/B1527 roundabout is a location requiring particularly high levels of driver concentration.

Drivers are required simultaneously to:

- judge vehicle speeds;
- identify safe gaps;
- monitor several traffic streams;
- negotiate turning movements; and
- respond to changing traffic conditions.

Immediately after leaving the roundabout eastbound, drivers continue towards Site 5 whilst potentially remaining exposed to views of Sites 4A and 4B.

The assessment fails to examine whether this creates a continuous corridor of potential glare exposure rather than isolated locations.

Existing Highway Characteristics

The assessment also underestimates the sensitivity of the B1527 itself.

In places the carriageway measures approximately 5.5 metres wide, leaving limited margin for driver error when opposing vehicles pass.

The road carries the national speed limit over much of its length whilst accommodating:

- agricultural machinery;
- heavy goods vehicles;
- cyclists;
- horse riders;
- pedestrians;
- local residential traffic; and
- vehicles entering and leaving numerous private accesses.

The Applicant's assessment does not fully consider how even temporary reductions in visibility or increased driver distraction could affect road safety under these conditions.

Accident History

The B1527 has a well-known history of collisions and is regarded locally as a road with an elevated accident risk.

This omission is particularly concerning given the accident history along this section of road. In the last ten years:

- eight recorded collisions have occurred along the stretch of the B1527 bordering Site 5;
- four of these incidents were classified as “serious”;
- two occurred at or near the entrance to Jack in the Box Nursery School.

The most recent collision occurred on 11 February 2026 and required emergency service attendance immediately outside the nursery access junction.

On 25th October 2025, an accident occurred less than 250m from this proposed access point that closed the road for several hours and required the attendance of the Air ambulance

A separate collision in 2003, approximately 400 metres east of the proposed access point, resulted in two fatalities.

Whilst glint and glare may not be identified as the cause of these incidents, the existing collision history demonstrates that this section of highway is already sensitive to conditions affecting driver concentration and visibility.

The Environmental Statement does not assess whether introducing large areas of rotating solar panels adjacent to this route could increase driver workload or contribute cumulatively to existing highway risks.

Existing and Proposed Accesses

The proposed Site 5 construction and operational accesses (A23 and A24) are located on this same section of highway.

These accesses are situated close to:

- existing residential properties;
- established businesses;
- Jack in the Box Nursery;
- existing highway junctions; and
- sections where visibility is already constrained by road geometry.

The interaction between turning vehicles, national speed limit traffic and potential solar reflections has not been specifically assessed.

Residential Receptors

The assessment identifies up to 482 residential properties within the assessment area but relies upon assumed screening to discount the majority.

There is no evidence that the assessment has systematically considered views from upper-storey windows.

Many rural dwellings overlook surrounding farmland from first-floor bedrooms, home offices and upper living accommodation.

These elevated viewpoints frequently extend above hedgerows that are assumed within the modelling to provide screening.

The Environmental Statement provides no site-specific verification that upper-storey receptors have been assessed separately, potentially underestimating residential exposure to glint and glare.

Long Term Uncertainty

The Applicant's conclusion that effects are not significant depends upon:

- existing vegetation remaining effective;
- proposed planting becoming established;
- long-term maintenance of screening vegetation;
- operational management of tracker panels;
- continued implementation of backtracking controls; and
- future maintenance throughout the operational life of the scheme.

The proposed Development may remain operational for up to 60 years.

The Environmental Statement provides no enforceable mechanism requiring periodic validation of mitigation effectiveness throughout this period or implementation of additional mitigation should conditions change.

For these reasons, the Planning Inspectorate should conclude that the Applicant has not demonstrated that glint and glare effects on highway users and nearby residents have been adequately assessed or mitigated.

18.3 Waste Management

The Applicant has not demonstrated, through robust and verifiable evidence, that waste arising from the construction, operation, maintenance and decommissioning of Site 5 can be managed without giving rise to significant environmental effects. Instead, the Waste Management assessment presented within Chapter 18 of the Environmental Statement is characterised by a reliance on assumptions, professional judgement and theoretical projections, rather than site-specific quantitative evidence. This approach introduces significant uncertainty into the assessment and does not provide the Examining Authority with sufficient confidence that the likely environmental effects have been fully identified or adequately assessed.

Site 5 is one of the most infrastructure-intensive elements of the Proposed Development. It will accommodate the principal 400 kV substation together with switching gear, transformers, inverter stations, extensive photovoltaic arrays, permanent access roads, temporary construction compounds, welfare facilities and associated civil engineering works. Collectively, these elements will generate substantial quantities of construction, operational and end-of-life waste, including excavated materials, vegetation, concrete, steel, aluminium, copper cabling, electrical equipment, packaging, polymers, hazardous materials and specialist electronic components.

Despite the scale of the proposed infrastructure, the Environmental Statement contains no comprehensive, site-specific waste inventory for Site 5. There is no transparent methodology demonstrating how anticipated waste quantities have been derived, no assessment of worst-case waste arisings, and no quantified analysis of waste streams associated with each principal component of the development. Instead, conclusions are repeatedly founded upon what is "anticipated", "expected", "likely" or "assumed", with mitigation measures deferred to future management plans rather than supported by evidence available at the time of the application.

This reliance upon assumption is explicitly demonstrated at paragraph 18.5.102 of the Environmental Statement, where the Applicant states:

"It is assumed that the local waste infrastructure has the capacity for this."

This statement is unsupported by any assessment of available waste management capacity. No evidence is presented identifying the facilities that would receive waste arising from Site 5, their permitted throughput, their available operational capacity, transport requirements or their ability to accommodate waste generated alongside that arising from other major infrastructure projects. The conclusion that adequate capacity exists is therefore not evidence-based but is instead dependent upon an unsupported assumption.

The Applicant similarly assumes that construction contractors will successfully minimise waste, maximise segregation and achieve high recycling rates through compliance with good practice. Whilst such objectives are entirely appropriate, they cannot substitute for a robust Environmental Impact Assessment. The likely environmental effects of waste generation should be assessed on the basis of demonstrable evidence rather than assumed future performance by contractors whose detailed construction methodologies remain unknown.

A further weakness arises in the treatment of recyclable and recoverable materials. Throughout Chapter 18, materials are frequently described as recyclable without distinguishing between technical recyclability and realistic commercial recovery at the scale proposed. Structural steel, aluminium and copper benefit from established recycling markets and there is little dispute regarding their recoverability. However, many other components associated with Site 5—including photovoltaic modules, encapsulant polymers, composite backsheet materials, inverter electronics, switching gear, transformers and other specialist electrical equipment—require specialist treatment processes and dedicated recycling infrastructure.

The Environmental Statement relies upon published recovery rates and information provided by commercial recycling operators to support the conclusion that these materials will be successfully recovered at the end of the Scheme's life. However, these figures represent theoretical or commercially reported recovery efficiencies under controlled processing conditions. They do not demonstrate that sufficient commercial-scale infrastructure exists, or will exist, to process the substantial quantities of waste that will arise from Site 5, nor do they establish that equivalent recovery rates will be achieved in practice.

The Applicant further assumes that recycling technologies, treatment infrastructure, commercial markets and legislative frameworks will continue to evolve favourably over the operational life of the Scheme, which may extend for several decades. These assumptions are inherently speculative. The Environmental Statement contains no sensitivity analysis examining the environmental consequences should anticipated recycling infrastructure fail to develop, should treatment capacity prove insufficient, or should changes in market conditions render recovery economically unviable.

Of particular concern is the Applicant's reliance upon comparisons with other Nationally Significant Infrastructure Projects and upon professional judgement to support conclusions regarding waste management performance. Whilst reference to other infrastructure projects may provide general context, there are currently no operational solar Nationally Significant Infrastructure Projects within England of a comparable scale from which empirical waste generation, waste recovery or decommissioning data can be derived. Consequently, the assumptions underpinning the Applicant's assessment remain theoretical rather than validated by operational evidence.

The same limitation applies to the professional opinions relied upon throughout the assessment. Professional judgement undoubtedly forms an important component of Environmental Impact Assessment; however, it cannot replace empirical evidence where such evidence does not yet exist. In this case, expert opinion has necessarily been formed in the absence of operational experience from comparable developments, meaning that conclusions regarding waste quantities, recycling rates, treatment capacity and decommissioning outcomes remain untested. This degree of uncertainty should have been acknowledged through a precautionary assessment rather than being presented as evidence that impacts will be negligible.

The concentration of infrastructure within Site 5 significantly amplifies this concern. The future replacement and eventual decommissioning of the 400 kV substation, transformers, switching gear, inverter stations, photovoltaic modules, underground cabling and associated electrical equipment will generate substantial volumes of specialist waste. Yet the Environmental Statement does not demonstrate that appropriate recovery or treatment infrastructure will be available when these materials reach the end of their operational life. Instead, it assumes that future technological advancement and market development will resolve these issues without presenting supporting evidence.

Taken as a whole, the Applicant's waste assessment is founded upon a sequence of interdependent assumptions: that waste quantities have been accurately estimated; that contractors will consistently achieve best practice; that sufficient waste management capacity will be available; that specialist recycling infrastructure will continue to expand; that future markets will remain commercially viable; and that legislative frameworks will continue to support high recovery rates. None of these assumptions is supported by robust, site-specific evidence for Site 5, and none has been tested through sensitivity analysis or alternative scenarios.

The Environment Agency similarly seeks substantially greater detail regarding environmental management, pollution prevention and operational controls before it can be satisfied that environmental risks have been adequately addressed. Whilst its representation focuses primarily on water quality and pollution prevention, it reinforces the wider concern that important environmental management measures should be supported by detailed evidence rather than deferred through assumptions or future management plans.

Accordingly, the Environmental Statement has not demonstrated, to the standard expected of an Environmental Impact Assessment, that waste-related environmental effects associated with Site 5 have been fully identified or appropriately assessed. The conclusions reached are dependent upon assumptions rather than evidence and therefore do not provide the Examining Authority with sufficient certainty to conclude that waste management impacts throughout the lifecycle of Site 5 will be insignificant.

18.4 Human Health

The Applicant's Environmental Statement concludes that human health effects are not likely to be significant because they are addressed through individual technical chapters and because mitigation is proposed. It also states that issues relating to mental wellbeing and equality are considered within the Equality Impact Assessment. While this approach may satisfy a broad strategic assessment, it fails to adequately assess the particular circumstances of Site 5 and the people living immediately adjacent to it.

The Applicant recognises that human health is affected through multiple pathways including landscape and visual impacts, transport, noise and vibration, air quality, socio-economic effects and cumulative impacts. It also acknowledges that large infrastructure projects can affect mental wellbeing through perceived environmental change, uncertainty, disruption and concern regarding potential risks. Within the Equality Impact Assessment, the Applicant further recognises that vulnerable groups, including older people, disabled people, those with existing physical or mental health conditions, carers and people living in rural isolation, may experience disproportionate impacts.

These acknowledgements are significant because they directly describe the circumstances that would arise around Site 5.

Unlike many areas of the Scheme, Site 5 places extensive industrial energy infrastructure immediately adjacent to established residential properties and rural communities. Residents would experience a permanent transformation of their living environment for the proposed 60 yr operational life of the Scheme. This is not a temporary construction impact but a long term, multi generational alteration to people's homes, outlook, recreation, sense of place and daily experience.

The Environmental Statement considers individual environmental effects separately but does not adequately assess their combined impact on human health at Site 5.

Residents would simultaneously experience:

- substantial changes to landscape character and visual amenity;
- loss of the historic rural community environment;
- loss of open rural outlook;
- construction traffic, noise, dust and disruption;
- operational infrastructure in close proximity to homes;
- changes to Public Rights of Way and recreational experience;
- anxiety associated with large scale infrastructure and electrical equipment, regardless of measured technical risk; and
- continuing uncertainty throughout construction, operation and eventual decommissioning.

These factors interact rather than occur independently. The Applicant recognises that cumulative impacts should be considered, yet the assessment remains largely qualitative and does not fully examine the cumulative burden placed upon those living and working closest to Site 5.

South Norfolk Council similarly concludes that the Scheme would introduce substantial changes to landscape character, heritage settings and residential amenity. These matters are not simply environmental effects in isolation but are also recognised pathways through which health and wellbeing may be affected, particularly where communities experience long term changes to their living environment.

This concern is reinforced by Norfolk County Council's Relevant Representation, which identifies impacts on Public Rights of Way, active travel and the experience of walkers, cyclists and equestrians arising from the Scheme. These are not solely transport or recreational matters; they also contribute directly to opportunities for physical activity, social interaction and mental wellbeing. The Human Health assessment does not adequately demonstrate how these interconnected effects have been taken into account when assessing the cumulative health impacts on communities surrounding Site 5.

The Equality Impact Assessment identifies that mental wellbeing can be adversely affected by environmental change and uncertainty. However, the assessment relies heavily upon generic mitigation such as landscaping, consultation and management plans. Such measures cannot mitigate the fundamental effect of replacing an open rural landscape immediately surrounding people's homes with industrial scale infrastructure for several decades, or the loss of the landscape known to many through generations of the same families living in the same area.

The Equality Impact Assessment also identifies protected and potentially vulnerable groups but does not provide sufficient site specific analysis for residents around Site 5. Rural communities often contain higher proportions of older residents, people living alone and those with limited transport options. These groups spend more time within their immediate home environment and may therefore experience greater effects from loss of landscape, increased isolation, stress and reduced opportunities for restorative outdoor recreation. The assessment does not adequately demonstrate how these differential impacts have influenced the design of Site 5.

The Equality Impact Assessment identifies that older people and other potentially vulnerable groups may require additional consideration to ensure they are not disproportionately disadvantaged by the Scheme or by engagement processes. However, the practical experience of residents during the pre application and pre examination stages raises significant concerns regarding whether this objective has been achieved.

Concerns regarding the accessibility of the consultation and examination process have been raised directly with both East Pye Solar and the Planning Inspectorate. The process has largely assumed that affected residents have reliable internet access, appropriate computer equipment and the technical skills necessary to locate, download and navigate hundreds of complex application documents submitted through the Planning Inspectorate's online portal. For many residents, particularly older people, this assumption does not reflect reality.

Although documents have been made available electronically, there has been no straightforward provision of free, comprehensive hard copies of the Environmental Statement and supporting technical documents within the local community. Residents wishing to understand the proposals have therefore been expected either to access substantial digital resources or incur significant personal expense in obtaining printed copies. This creates a practical barrier to effective participation.

The process also assumes that members of the public possess sufficient technical knowledge to understand the Development Consent Order regime, interpret complex environmental assessments and identify where impacts affecting them are assessed across numerous specialist documents. This is an unrealistic expectation for many members of the affected community and, according to local residents, has itself contributed to anxiety, stress and uncertainty surrounding the proposed development.

This issue is particularly relevant given the Applicant's own Equality Impact Assessment, which identifies that the local population contains a significant proportion of older residents. Older people are statistically more likely to experience digital exclusion, have reduced confidence in navigating extensive online documentation and require information in more accessible formats. Consequently, those residents most likely to experience the long term impacts of Site 5 may also have faced the greatest barriers to understanding the proposals and participating effectively in the examination process.

The resulting inequality of access is itself relevant to human health and wellbeing. Exclusion from meaningful participation in decisions affecting one's home and community can contribute to anxiety, frustration, uncertainty and reduced trust in the planning process. These are recognised determinants of mental wellbeing and should have been given greater weight within both the Human Health Assessment and the Equality Impact Assessment.

Furthermore, the Applicant relies upon the conclusion that no significant health effects arise because the underlying technical assessments generally conclude limited environmental effects after mitigation. This reasoning is only as robust as the underlying assessments on which it depends.

Elsewhere in this Written Representation, the Applicant's assessments of noise and vibration, traffic and transport, landscape and visual effects, socio-economic effects and cumulative impacts have all been challenged in detail. Those objections identify deficiencies in methodology, assumptions, baseline evidence and conclusions. If those individual assessments are found to underestimate adverse effects or overstate mitigation, the conclusions reached regarding human health are similarly undermined because they are derived directly from those assessments.

The cumulative impact on human health should therefore be reconsidered using the evidence presented throughout this Written Representation. The combination of increased traffic, prolonged construction activity, operational noise, visual intrusion, loss of rural character, diminished recreational amenity, reduced residential amenity and continuing uncertainty regarding long term environmental change is likely to result in greater adverse effects on health and wellbeing than those acknowledged by the Applicant.

The Planning Inspectorate should therefore attach limited weight to the Applicant's conclusion that human health effects would not be significant. Whilst the Environmental Statement recognises that mental wellbeing, cumulative environmental change and equality impacts are legitimate health considerations, it has not demonstrated that these issues have been robustly assessed for those living and working closest to Site 5.

When considered alongside the shortcomings identified elsewhere in this Written Representation, there remains significant uncertainty regarding the true effects on physical and mental wellbeing over the proposed 60 yr operational life of the Scheme. The Applicant has therefore failed to demonstrate that the likely significant effects on human health have been adequately assessed.

Conclusion

The Environmental Statement concludes that the remaining environmental topics associated with Site 5 would not give rise to significant adverse effects. However, these conclusions rely heavily on generic assumptions, outline management plans and earlier technical assessments, many of which are challenged elsewhere in this Written Representation. Consequently, there is insufficient confidence that the likely effects of the proposed development have been fully identified or adequately assessed.

Key concerns include:

- **The Applicant has not demonstrated that existing utility infrastructure can be adequately protected**, with Anglian Water, National Gas Transmission and other statutory undertakers identifying matters that remain unresolved before construction can safely proceed.
- **The assessment of glint and glare relies primarily on modelling and assumptions**, without sufficient site specific evidence, long term monitoring or robust assessment of cumulative effects on highway users and nearby receptors.
- **The waste assessment relies upon broad assumptions regarding future waste generation, recycling rates and available treatment capacity**, rather than demonstrating that waste can be managed throughout the construction, operational and decommissioning phases of the development.
- **The Human Health Assessment underestimates the cumulative effects experienced by nearby communities**, including changes to landscape, residential amenity, recreation, traffic, mental wellbeing and quality of life over the proposed 60 year operational life of the Scheme.
- **The Equality Impact Assessment does not adequately demonstrate how the needs of older residents and other vulnerable groups have influenced the assessment or design of Site 5**, nor does it fully address the barriers to meaningful public participation experienced during the consultation and examination process.
- **The conclusions presented in Chapter 18 depend upon earlier technical assessments**, many of which underestimate adverse effects or rely on outline mitigation and post consent controls. As a result, the conclusions reached for these remaining environmental topics are similarly undermined.

Taken together, these matters demonstrate that the Environmental Statement does not provide a sufficiently robust, transparent or site specific assessment of the remaining environmental effects associated with Site 5. The Secretary of State should therefore attach limited weight to the Applicant's conclusions and conclude that the likely impacts on local communities, existing infrastructure and the surrounding environment have not been adequately assessed.

Chapter 19: Cumulative and In-Combination Effects

Chapter 19.1: Infrastructure - Cumulative and In-Combination Effects

Regional Context and Wider Cumulative Effects

East England is already one of the UK's principal producers of renewable electricity, particularly from offshore wind and large-scale solar generation. East Pye Solar itself acknowledges that the region is already meeting and exceeding regional renewable energy targets. However, despite this level of renewable generation, the region continues to experience relatively high carbon intensity compared with much of the rest of Great Britain.

Data from the National Energy System Operator (NESO) demonstrates that East England frequently ranks amongst the highest carbon intensity regions in the country, often second only to South Wales. This appears counterintuitive given the scale of renewable generation located within the region.

The explanation is that regional carbon intensity is not determined solely by the proportion of renewable electricity generated within a region. Instead, it reflects the electricity actually being consumed at that time, including power imported across transmission boundaries and via interconnectors.

For example, on a sunny afternoon in June 2026, the NESO application showed that approximately 48% of electricity generation within East England came from solar power. At the same time, around 25% of the electricity being consumed in the region was imported. Those imports may originate from gas fired power stations elsewhere in Great Britain, electricity imported from continental Europe, or other regions with a higher fossil fuel contribution.

Consequently, despite producing substantial volumes of renewable electricity, East England can continue to record relatively high regional carbon intensity.

Transmission Constraints

East England also functions as a major transmission corridor, exporting electricity southwards towards London and the South East. It is therefore reasonable to conclude that a significant proportion of renewable electricity generated within the region does not remain within East England but is exported through the national transmission network.

NESO data illustrates this position. During periods of high solar output, regional carbon intensity often remains relatively high because the electricity consumed locally continues to include imported generation, while locally generated renewable electricity is exported elsewhere on the network.

Carbon intensity is heavily influenced by the marginal generating plant balancing the national electricity system. During many daylight hours this continues to be gas-fired generation. Consequently, even where local renewable generation is abundant, the regional carbon intensity can remain relatively high if gas generation is meeting incremental demand elsewhere on the system.

If renewable generation within East England continues to increase more rapidly than transmission capacity or local demand, there is an increasing likelihood that solar generation will be constrained or curtailed during periods of high output. In those circumstances, the carbon benefit delivered by each additional megawatt of installed solar capacity is reduced.

On 30 June 2026, for example when the sun was shining continuously in this region, much of southern England continued to rely significantly on gas generation despite strong solar output across the region due to it being exported to other regions instead of being utilised locally.

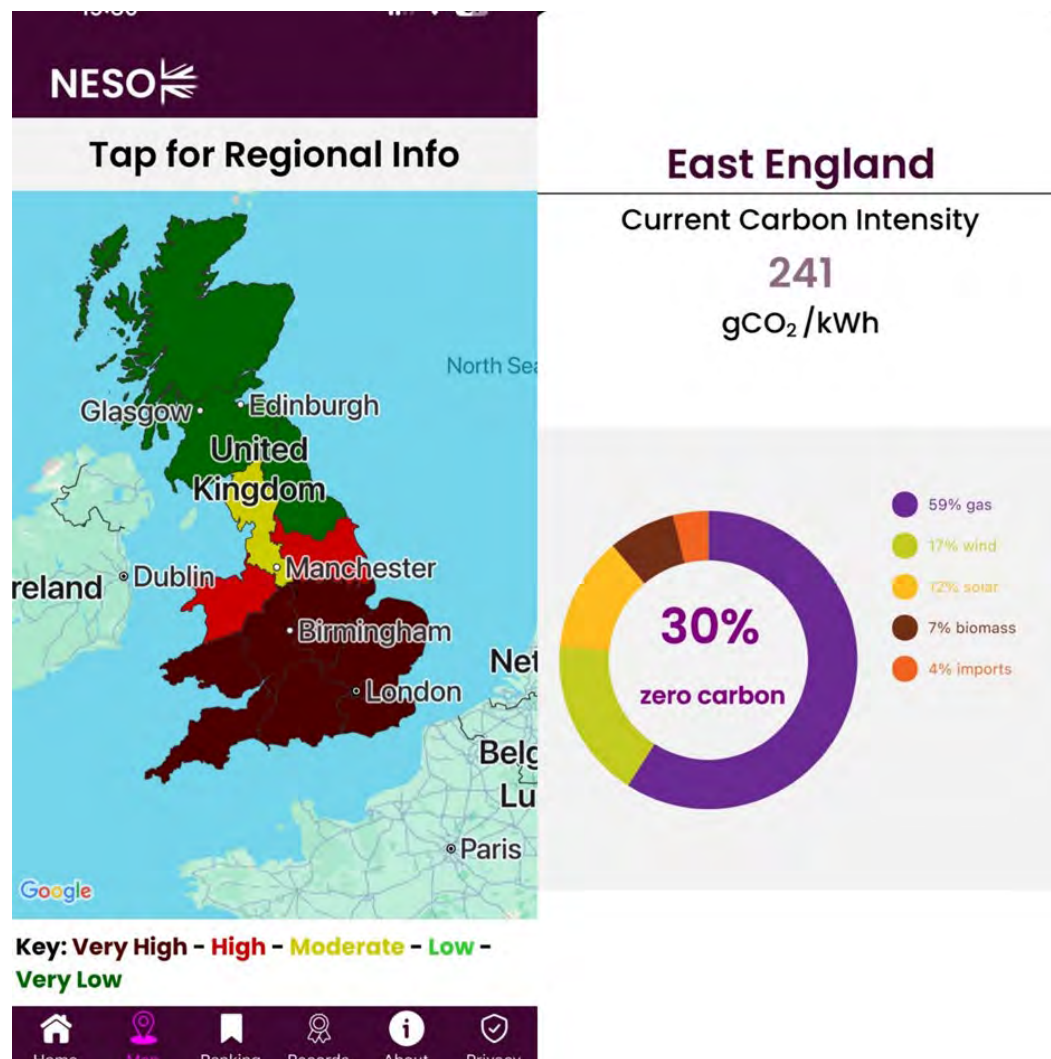


Figure 19.1 NESO map of East Anglian Energy 30th June

Implications for East Pye Solar

These observations raise an important cumulative planning issue.

East Anglia is already accommodating a significant concentration of nationally significant renewable energy infrastructure. East Pye Solar is one of a growing number of large scale solar developments proposed across Norfolk and Suffolk.

The cumulative effect of these developments is an increasing concentration of renewable generation within a region that already exports substantial quantities of electricity. Unless transmission reinforcement and local demand increase at a comparable rate, additional solar generation may experience increasing levels of constraint or curtailment. In such circumstances, the carbon benefit achieved by further solar development may be lower than anticipated while the environmental impacts continue to accumulate.

These examples do not undermine the importance of renewable energy, but they do demonstrate that the benefits claimed for East Pye Solar must be considered within the wider regional energy context. Where East Anglia is already accommodating substantial renewable generation, transmission reinforcement and multiple major energy projects, the cumulative environmental harm caused by further large scale infrastructure should be assessed with particular care.

Wider Cumulative Effects

The cumulative impacts extend beyond electricity generation alone. East Anglia is increasingly being transformed into a nationally significant energy generation hub through multiple Nationally Significant Infrastructure Projects (NSIPs). Collectively, these developments risk changing the character of a predominantly rural and agricultural landscape into one increasingly dominated by industrial energy infrastructure.

The Scheme would contribute to the permanent loss of rural character across an area renowned for its agricultural landscape, historic environment and wildlife.

Approximately 81% of the proposed development parcels comprise Best and Most Versatile agricultural land (Grades 1 to 3a). These productive soils have supported agriculture for generations and would continue to do so if not developed for solar infrastructure.

The area also contains numerous archaeological sites, listed buildings, historic churches, scheduled monuments and designated landscapes whose significance depends upon their rural setting. The cumulative introduction of extensive fencing, substations, battery storage facilities, inverter stations, security infrastructure and solar arrays would inevitably erode that setting.

Similarly, the cumulative ecological effects should not be underestimated. Fragmentation of farmland, construction activity, fencing and habitat disturbance would affect a wide range of species, including protected species whose habitats cannot simply be recreated elsewhere.

The proposed Cable Route Corridors would introduce further cumulative impacts through prolonged construction activity, disruption to farming businesses and disturbance to soil resources. Soil stored within construction bunds may require many years to recover its previous structure and productivity.

The Scheme is also unusually dispersed. Although the total cable network extends for approximately 24 kilometres, Cable Route Corridor 4 alone accounts for approximately 8 kilometres—around one-third of the entire cable length. This demonstrates the geographical disconnect between the northern generating sites and the southern infrastructure, including the Battery Energy Storage System, substations and National Grid connection at Great Moulton. The resulting extent of infrastructure and construction activity significantly increases the cumulative environmental footprint of the Scheme.

Chapter 19.2 In-Combination Effects

The Environmental Statement concludes that the in-combination effects of the East Pye Solar Scheme would not give rise to significant adverse effects following mitigation. However, in relation to Site 5 this conclusion is not supported by a sufficiently robust assessment of how multiple environmental effects would interact throughout the proposed 60 year operational life of the development.

Whilst the Environmental Statement considers landscape, heritage, ecology, transport, noise, socio economic effects and human health within separate technical chapters, people do not experience these effects independently. Residents, visitors and users of the surrounding countryside experience them simultaneously. The cumulative burden created by multiple environmental changes occurring at the same place and over the same period is therefore likely to be substantially greater than the individual effects identified within each topic specific assessment.

This concern is reinforced by the methodology adopted throughout the Environmental Statement. The cumulative assessment relies directly upon the conclusions of the preceding technical chapters, many of which are challenged elsewhere in this Written Representation. Where those individual assessments underestimate adverse effects, rely upon outline mitigation or defer important matters until after development consent, the cumulative assessment is necessarily undermined because it simply combines those earlier conclusions rather than undertaking an independent evaluation of the combined effects.

Site 5 is one of the most environmentally sensitive locations within the East Pye Solar Scheme. Unlike many other land parcels, it combines extensive solar arrays with a 400 kV Project Substation, construction compound, permanent maintenance facilities, internal access roads, underground cable infrastructure and associated electrical equipment immediately adjoining Fritton Conservation Area, the Grade I listed Church of St Catherine, nearby residential properties, Public Rights of Way, productive Grade 2 Best and Most Versatile agricultural land and an established network of ecological corridors.

The interaction between these environmental receptors is fundamental to understanding the significance of the proposed development. Changes to landscape character influence the setting of heritage assets. Loss of agricultural land affects both food production and the historic rural landscape. Construction traffic affects residential amenity, recreational use of Public Rights of Way and the tranquillity of the Conservation Area. Ecological impacts are influenced by changes to drainage, habitat connectivity and landscape fragmentation. These effects are interconnected and should not be viewed in isolation.

South Norfolk Council similarly concludes that the cumulative landscape, visual and heritage effects of the Scheme have been underestimated and that the proposed mitigation does not remove the substantial change that would be introduced into the rural character of the area. The Council considers that these cumulative harms should be afforded significant weight in the overall planning balance.

Historic England likewise recognises that the significance of heritage assets derives not only from individual buildings but also from their wider landscape setting. Its Relevant Representation highlights the importance of considering cumulative effects across the Scheme, reinforcing concerns that the combined impact of large scale infrastructure on the historic environment should not be assessed through individual assets in isolation.

Norfolk County Council also identifies cumulative impacts on Public Rights of Way, active travel routes, highway safety and the experience of walkers, cyclists and equestrians. These effects extend beyond transport considerations alone and contribute directly to residential amenity, recreation and the overall quality of the rural environment experienced by local communities.

The cumulative assessment should therefore consider the combined experience of those living, working and travelling through Site 5 rather than simply aggregating the conclusions of separate technical disciplines. Over approximately 60 yrs, residents would experience the permanent loss of open countryside, substantial changes to landscape character, harm to the setting of nationally important heritage assets, increased traffic and construction activity, changes to recreational routes, the introduction of major electricity transmission infrastructure and the continuing presence of industrial development within a historic rural landscape. The Environmental Statement does not adequately assess these combined effects from the perspective of those most directly affected.

Accordingly, the Environmental Statement has not demonstrated that the in combination effects of the proposed development at Site 5 have been fully identified or robustly assessed. The cumulative impact upon the landscape, historic environment, residential amenity, recreation, ecology and overall quality of life is likely to be materially greater than the Applicant's assessment suggests.

19.3 Other Existing, Consented and Proposed Developments

The Environmental Statement identifies a number of existing, consented and proposed developments that may contribute to cumulative effects. However, the assessment largely considers these developments individually and gives limited consideration to how they interact with East Pye Solar over time or how they would be experienced by communities surrounding Site 5.

The cumulative assessment should recognise that local residents do not experience individual developments in isolation. Instead, they experience the combined effects of multiple infrastructure projects occurring within the same landscape, often over overlapping construction and operational periods. For Site 5, these cumulative effects extend beyond the East Pye Solar Order Limits and include other nationally significant infrastructure projects proposed across South Norfolk and the wider East Anglia region.

Norwich to Tilbury

One of the most significant cumulative developments is National Grid's proposed Norwich to Tilbury Electricity Transmission Project. Like East Pye Solar, this nationally significant infrastructure project would introduce substantial electricity infrastructure into the rural landscape of South Norfolk.

Although promoted as a separate project, Norwich to Tilbury would contribute to the continuing industrialisation of the countryside through the introduction of major transmission infrastructure, construction compounds, access routes and associated engineering works. Residents would experience these changes cumulatively rather than as isolated developments.

National Grid Electricity Transmission's Relevant Representation confirms that discussions regarding transmission infrastructure, protective provisions and the interaction between projects remain ongoing. This demonstrates that the wider electricity network within East Anglia continues to undergo substantial reinforcement in response to the concentration of major energy developments, reinforcing the need for a comprehensive cumulative assessment.

Other Renewable Energy Projects

The Environmental Statement also identifies numerous existing, consented and proposed renewable energy developments across the surrounding area. Individually, each scheme may appear capable of being accommodated within the landscape. Collectively, however, they contribute to an increasing concentration of solar generation, battery storage, electricity substations and transmission infrastructure across predominantly rural parts of East Anglia.

Mid Suffolk District Council similarly concludes that wider regional cumulative effects require more robust assessment and that the interaction between multiple Nationally Significant Infrastructure Projects has not been adequately evaluated.

Combined Experience

The significance of cumulative development is not simply the number of projects proposed, but the way in which their effects combine over time. Construction programmes may overlap, traffic may use the same highway network, landscape character may be altered by successive developments, and communities may experience repeated disruption extending over many years.

For residents surrounding Site 5, the cumulative experience is therefore one of continuing environmental change rather than a single isolated development. The Environmental Statement does not adequately demonstrate that these long term cumulative effects have been assessed from the perspective of those living and working within the affected communities

19.4 Cumulative Landscape, Heritage and Ecology

The Environmental Statement assesses landscape and visual effects, cultural heritage and ecology within separate technical chapters before combining their conclusions within the cumulative assessment. However, this approach does not reflect the way these environmental receptors function within the landscape surrounding Site 5.

The significance of Site 5 lies in the relationship between its historic rural landscape, designated heritage assets and established ecological network. Open agricultural land provides the setting for the Grade I listed Church of St Catherine and Fritton Conservation Area, whilst mature hedgerows, veteran trees, historic field boundaries, watercourses and Public Rights of Way collectively define both the landscape character and the ecological connectivity of the area. These features have evolved together over many centuries and should not be assessed as independent environmental receptors.

The proposed development would introduce extensive industrial infrastructure into this landscape, including a 400 kV Project Substation, solar arrays, construction compounds, internal access roads, security fencing, CCTV, lighting and associated electrical infrastructure. Whilst the Environmental Statement considers the effects of these elements individually, it does not adequately assess their combined influence on the character of the landscape or the way in which they alter the relationship between the historic village, its surrounding countryside and the wider ecological network.

South Norfolk Council similarly concludes that the cumulative landscape, visual and heritage effects of the Scheme have been underestimated and that the proposed mitigation does not remove the substantial change that would be introduced into the rural character of the area. The Council considers that these cumulative harms should be afforded significant weight within the overall planning balance.

Historic England likewise recognises that the significance of designated heritage assets derives not only from the buildings themselves but also from their wider landscape setting. Its Relevant Representation highlights the importance of considering cumulative effects across the Scheme and demonstrates that the combined impact on the historic environment should not be assessed through individual assets in isolation.

The ecological assessment also underestimates the cumulative consequences of incremental habitat loss and fragmentation. Site 5 currently forms part of an interconnected network of hedgerows, mature trees, field margins, watercourses and agricultural land supporting wildlife movement across the wider countryside. The introduction of extensive infrastructure, security fencing, construction activity and engineered access routes would alter this connectivity over a prolonged period, even where individual habitat features are retained.

The Environment Agency similarly identifies the need for further assessment of floodplain storage, groundwater protection, pollution prevention and long term environmental monitoring. These matters reinforce concerns that cumulative changes affecting hydrology, water quality and ecological function have not been fully understood throughout the proposed operational life of the Scheme.

The cumulative effects on landscape, heritage and ecology should therefore be assessed collectively rather than as separate environmental topics. For residents, visitors and users of the surrounding countryside, the significance of Site 5 lies in the combined loss of open rural character, harm to the setting of nationally important heritage assets and gradual erosion of the historic landscape and ecological network that together define the special character of Fritton and the surrounding area.

Accordingly, the Environmental Statement has not demonstrated that the cumulative effects on landscape character, the historic environment and ecological connectivity have been adequately assessed. The combined impact of these changes is likely to be materially greater than the individual effects identified within the separate technical chapters.

19.5 Cumulative Transport, Recreation and Residential Amenity

The Environmental Statement assesses transport, Public Rights of Way, residential amenity and human health through separate technical chapters. Whilst this approach follows the structure of the Environmental Impact Assessment Regulations, it does not adequately reflect how these effects would be experienced by communities surrounding Site 5.

For local residents, walkers, cyclists, horse riders and other users of the surrounding countryside, the proposed development would result in the combined effects of increased construction traffic, changes to Public Rights of Way, loss of tranquillity, visual intrusion, construction noise, altered recreational routes and the long term presence of major electricity infrastructure within a previously undeveloped rural landscape. These effects are interconnected and should not be considered in isolation.

Construction activity associated with East Pye Solar would take place over an extended period and would coincide with other major infrastructure projects proposed across the region. The cumulative use of local roads by Heavy Goods Vehicles, abnormal indivisible loads and construction traffic would increase pressure on the local highway network whilst also affecting those using the surrounding Public Rights of Way and rural lanes for recreation and everyday travel.

Norfolk County Council's Relevant Representation identifies cumulative impacts on Public Rights of Way, active travel routes, highway safety and construction traffic management. The Council recognises that the effects of the Scheme extend beyond vehicle movements alone and include the experience of walkers, cyclists, equestrians and other vulnerable road users. These impacts contribute directly to opportunities for recreation, physical activity and overall wellbeing.

National Highways likewise concludes that further assessment is required to understand the cumulative impacts of construction traffic on the Strategic Road Network. This reinforces concerns that the cumulative transport effects of East Pye Solar have not yet been fully understood and remain subject to uncertainty.

For residents living closest to Site 5, transport related effects cannot be separated from wider environmental changes. Increased traffic would occur alongside substantial alterations to landscape character, the introduction of industrial infrastructure, changes to the setting of heritage assets and the loss of rural tranquillity. Collectively, these changes would alter both the physical environment and the way in which local communities experience their homes and surrounding countryside.

The cumulative effect on Public Rights of Way is particularly important. The network surrounding Site 5 is not simply a means of travelling from one location to another. These historic routes are valued recreational assets that allow people to experience the quiet rural landscape, appreciate expansive views across open countryside, enjoy the setting of nationally important heritage assets and connect with a landscape that has remained little changed for centuries. Their value lies as much in the quality of the experience as in their function as public highways.

Walkers, cyclists and horse riders are encouraged to pause, enjoy the views, observe wildlife and experience the tranquillity and historic character of the countryside. The introduction of a 400 kV Project Substation, extensive solar arrays, security fencing, CCTV, lighting, access roads and associated infrastructure would fundamentally alter that experience. Whilst the routes themselves may remain physically accessible, the surrounding environment would change from one of open agricultural countryside to one dominated by industrial energy infrastructure. The Environmental Statement places considerable emphasis on retaining access but gives insufficient weight to the loss of the landscape experience that those routes currently provide.

The Environmental Statement also underestimates the interaction between transport, recreation and residential amenity over the proposed 60 year operational life of the Scheme. Residents would experience not simply increased traffic or changes to individual routes, but the cumulative

effect of long term environmental change resulting from the introduction of extensive energy infrastructure into the immediate setting of their homes.

Accordingly, the Environmental Statement has not demonstrated that the cumulative effects on transport, recreation and residential amenity have been adequately assessed. The combined impact on local communities is likely to be materially greater than that identified within the individual technical chapters.

19.6 Cumulative Effects on Agricultural Land, Soils, Water and Climate Resilience

The Environmental Statement considers agricultural land, soils, groundwater, flood risk, climate change and ground conditions as separate environmental topics. However, these receptors are intrinsically linked and collectively support the long term environmental resilience of Site 5. The cumulative assessment does not adequately consider how changes to one element may influence the others throughout the proposed 60 yr operational life of the Scheme.

Site 5 comprises predominantly Grade 2 Best and Most Versatile agricultural land that has remained in productive agricultural use for generations and is currently managed under active Countryside Stewardship agreements. Its value extends beyond agricultural productivity alone. The land contributes to food security, carbon storage, natural drainage, groundwater recharge, habitat connectivity and the historic rural character of the surrounding landscape.

The proposed development would permanently alter these functions through the introduction of extensive solar arrays, a 400 kV Project Substation, construction compounds, engineered access roads, underground cable corridors and associated electrical infrastructure. Whilst each element is assessed individually within the Environmental Statement, insufficient consideration is given to their combined effect on soil structure, drainage patterns, groundwater, carbon storage and the long term resilience of the landscape.

Construction activities would inevitably involve extensive earthworks, soil handling, trenching, compaction and engineering operations across a substantial area of agricultural land. These changes would interact with alterations to surface water drainage, groundwater pathways and existing field drainage systems, creating cumulative effects that extend beyond the individual topics considered within Chapters 6, 9, 15 and 16 of the Environmental Statement.

The Environment Agency's Relevant Representation reinforces these concerns by identifying the need for further assessment of groundwater protection, floodplain storage, pollution prevention and long term environmental monitoring before it can conclude that environmental risks have been adequately addressed. This demonstrates that important aspects of the interaction between soils, groundwater and water quality remain unresolved.

The cumulative implications also extend to climate resilience. Mature hedgerows, veteran trees, established soils and functioning agricultural landscapes currently provide long term carbon

storage, natural flood management and ecological connectivity. The Environmental Statement considers these functions separately but does not adequately assess the cumulative consequences of their alteration when combined with the extensive infrastructure proposed for Site 5.

The proposed mitigation relies heavily upon replacement planting, drainage measures and future management plans. Whilst these measures may provide some environmental benefit over time, they cannot immediately replace the environmental functions currently performed by mature landscape features and undisturbed agricultural soils. Nor has the Applicant demonstrated that these replacement measures will fully restore the existing environmental value of Site 5 following approximately 60 years of industrial use.

The cumulative effect is therefore not simply the loss of agricultural land or changes to drainage in isolation, but the long term alteration of an interconnected environmental system that currently supports agricultural production, biodiversity, climate resilience, water management and the historic rural landscape.

Accordingly, the Environmental Statement has not demonstrated that the cumulative effects on agricultural land, soils, groundwater, water resources and climate resilience have been adequately assessed. When these interrelated impacts are considered together, the environmental consequences for Site 5 are likely to be materially greater than those identified within the individual technical chapters.

19.7 Cumulative Socio-Economic Effects and Overall Assessment

The Environmental Statement places considerable weight on the socio-economic benefits associated with East Pye Solar, primarily through the employment generated during the approximately two-year construction phase. However, the Applicant's own assessment demonstrates that these headline employment figures should not be interpreted as representing jobs for the communities surrounding Site 5.

The proposed construction workforce is expected to peak at approximately **720 workers**, with an average daily workforce of around **278 workers** during the construction period. However, the Applicant's own assessment recognises that delivery of the Scheme relies upon a specialist workforce. Suffolk County Council notes that the Environmental Statement indicates **only a very small proportion of employment would be realised locally**, with the majority of employment supported outside the host and neighbouring areas. This reflects a reliance on specialist labour drawn from a much wider geographical area rather than the creation of meaningful employment opportunities for local residents.

Suffolk County Council further concludes that the Environmental Statement does not adequately demonstrate how the claimed employment opportunities would translate into meaningful benefits for the local workforce. It considers that the magnitude and significance attributed to the claimed beneficial socio-economic effects have therefore been overstated and that limited weight should be afforded to the Applicant's conclusions.

Once construction has been completed, the operational workforce required to manage the Scheme would be minimal. Consequently, the long-term employment benefits experienced by the communities surrounding Site 5 would be negligible.

By contrast, the adverse effects arising from Site 5 would be experienced entirely within the local area. Local residents, businesses and landowners would bear the permanent loss of productive agricultural land, the industrialisation of the historic rural landscape, reduced recreational amenity, impacts upon established rural businesses, changes to the setting of heritage assets and the wider environmental effects identified throughout this Written Representation over the proposed 60-year operational life of the Scheme.

The Environmental Statement also gives insufficient consideration to the wider rural economy. The removal of agricultural land from conventional production would affect not only farming businesses but also agricultural contractors, machinery operators, agronomists, suppliers, hauliers and other enterprises that depend upon an active farming economy. These effects would be experienced locally and persist throughout the operational life of the Scheme.

Similarly, insufficient weight is given to the contribution that the area's landscape, heritage, tranquillity and extensive Public Rights of Way network make to recreation, tourism, home-based businesses and the attractiveness of the area as a place to live and work. These are established components of the existing local economy that would be adversely affected by the concentration of industrial-scale energy infrastructure at Site 5.

The cumulative planning balance should therefore distinguish between **where the benefits of the Scheme accrue and where its impacts are borne**. Whilst the strategic benefits of renewable electricity generation are realised nationally, the environmental, social and economic consequences of Site 5 fall upon the host communities of Morningthorpe, Fritton and the surrounding rural area. The Environmental Statement has not demonstrated that those communities would receive any meaningful or enduring socio-economic benefit commensurate with the substantial adverse effects they would experience.

Finally, the cumulative socio-economic assessment is dependent upon the conclusions reached elsewhere within the Environmental Statement. As demonstrated throughout this Written Representation, significant concerns remain regarding the robustness of the Applicant's assessments of landscape, heritage, ecology, transport, agricultural land, human health and residential amenity. If those assessments underestimate adverse effects, the cumulative socio-economic conclusions derived from them are similarly undermined.

Accordingly, the Environmental Statement has not demonstrated that the cumulative socio-economic effects of East Pye Solar have been robustly assessed. The claimed benefits are predominantly temporary, are largely realised outside the host communities, and have been afforded greater weight than is justified by the available evidence, whilst the enduring adverse effects of Site 5 would be borne by the local community for approximately 60 yrs.

Conclusion

East Pye Solar should not be considered in isolation. The Environmental Statement does not provide a sufficiently robust assessment of the cumulative and in-combination effects arising from the Scheme, either in the context of the wider concentration of nationally significant energy infrastructure across East Anglia or at the local level experienced by communities surrounding Site 5.

Key concerns include:

- The cumulative assessment relies upon the conclusions of individual technical chapters, many of which are challenged elsewhere in this Written Representation, undermining confidence in the overall conclusions.
- The interaction between East Pye Solar and other existing, consented and proposed major infrastructure projects has not been adequately assessed, resulting in an incomplete understanding of cumulative regional impacts.
- The combined effects on landscape, heritage, ecology, agricultural land and the historic rural environment have been underestimated, despite these receptors functioning as an interconnected landscape rather than as isolated topics.
- The cumulative effects experienced by local communities have not been properly assessed, particularly the combined impacts of traffic, noise, visual intrusion, Public Rights of Way, recreation, residential amenity and long-term changes to health and wellbeing.
- The Environmental Statement fails to recognise that Public Rights of Way are valued for the experience they provide, allowing people to enjoy the tranquillity, views and historic character of the countryside. Retaining physical access does not preserve the quality of that experience once the surrounding landscape has been industrialised.
- The cumulative effects on agricultural land, soils, drainage, groundwater and climate resilience remain subject to significant uncertainty, with important matters deferred to post-consent investigation and management plans.
- The socio-economic assessment places undue weight on temporary construction employment and strategic national benefits, whilst the Applicant has not demonstrated that the host communities surrounding Site 5 would receive any meaningful or enduring socio-economic benefit. The long-term environmental, social and economic burdens would instead fall upon those communities for approximately 60 years.

Taken together, these matters demonstrate that the Environmental Statement materially underestimates the cumulative effects of the proposed development. The Secretary of State should therefore attach limited weight to the Applicant's cumulative assessment and conclude that the combined adverse impacts of East Pye Solar, particularly in relation to Site 5, weigh significantly against the grant of development consent.

Chapter 20: Overall Planning Balance and Case for Refusal

The preceding chapters of this Written Representation have examined the Applicant's Environmental Statement on a topic-by-topic basis and identified significant shortcomings in the assessment of Site 5. This chapter draws those conclusions together and considers the overall planning balance, having regard to the evidence presented, the relevant National Policy Statements and the concerns raised by statutory consultees.

20.1 Site 5 is an Unsuitable Location

The analysis presented throughout Chapters 1–19 demonstrates that Site 5 is one of the most environmentally sensitive parts of the East Pye Solar Scheme. It combines nationally important heritage assets, predominantly Grade 2 Best and Most Versatile agricultural land, an established ecological network, valued Public Rights of Way and a settled rural community within a relatively small area.

The proposed development would introduce a 400 kV Project Substation, extensive solar arrays, inverter stations, security infrastructure, permanent access roads, construction compounds and associated electrical infrastructure into this landscape for an operational period of approximately 60 years.

As demonstrated throughout this Written Representation, these receptors do not exist in isolation. The significance of Site 5 derives from the relationship between its productive agricultural land, historic landscape, designated heritage assets, mature habitats and rural community. The cumulative effect of introducing industrial-scale electricity infrastructure into this location is materially greater than the Environmental Statement acknowledges.

For the reasons set out in the preceding chapters, the Applicant has not demonstrated that Site 5 represents the least environmentally harmful location for this infrastructure or that the identified harm can be satisfactorily avoided or reduced through mitigation.

20.2 The Environmental Statement Underestimates the Planning Harm

The conclusions reached within the Environmental Statement depend upon the individual technical assessments that have been examined throughout this Written Representation. In numerous instances those assessments rely upon optimistic assumptions, outline mitigation, future management plans or matters deferred until after development consent.

Consequently, the conclusions reached by the Applicant should be afforded limited weight.

The evidence presented throughout this Written Representation demonstrates that the Environmental Statement materially underestimates the planning significance of several key impacts.

- **Landscape and Visual Effects** – Chapter 10 demonstrates that the proposed development would introduce industrial infrastructure into a highly sensitive historic rural landscape, resulting in permanent changes to landscape character and visual amenity that are substantially greater than acknowledged within the Environmental Statement. These effects should attract substantial weight in the planning balance.
- **Historic Environment** – Chapter 11 concludes that the Applicant has underestimated the effect on the significance and setting of the Grade I listed Church of St Catherine, Fritton Conservation Area and numerous listed buildings. National policy requires great weight to be given to the conservation of designated heritage assets, and this harm should therefore be afforded considerable importance within the planning balance.
- **Ecology and Biodiversity** – Chapter 12 demonstrates that Site 5 supports an established ecological network comprising Priority habitats together with protected, Priority and Red List species. These species rely upon mature hedgerows, trees, ditches, ponds, field margins and agricultural land for nesting, breeding, foraging, shelter and movement. The Environmental Statement places considerable reliance upon future habitat creation and enhancement but does not demonstrate that these mature ecological relationships can be recreated or replaced within a reasonable timescale. The ecological effects therefore attract substantially greater weight than identified by the Applicant.
- **Agricultural Land** – Chapters 6 and 15 demonstrate that predominantly Grade 2 Best and Most Versatile agricultural land would be removed from productive agricultural use for approximately 60 years. The Applicant has not demonstrated that the agricultural capability, soil structure and wider environmental functions of this land can be fully restored following such an extended period of industrial use. This should be afforded significant weight in the planning balance.
- **Public Rights of Way, Recreation and Residential Amenity** – Chapters 10 and 18 demonstrate that the effects on local communities extend beyond the physical retention of Public Rights of Way. These routes are valued because they allow people to experience the tranquillity, wildlife, heritage and open character of the countryside. The Environmental Statement gives insufficient weight to the permanent change in that experience and the cumulative effect upon health, wellbeing and residential amenity.
- **Cumulative Effects** – Chapter 19 demonstrates that the Applicant's cumulative assessment relies directly upon earlier technical conclusions which themselves underestimate environmental effects. Consequently, the cumulative assessment is similarly flawed and should be afforded limited weight.

Taken together, the evidence demonstrates that the Environmental Statement consistently understates the scale, duration and planning significance of the effects arising from Site 5.

20.3 The Claimed Benefits Have Been Given Excessive Weight

The Applicant places considerable reliance upon the strategic benefits of renewable electricity generation together with employment and economic investment.

However, Chapter 19 demonstrates that these benefits are principally realised at a national or regional level rather than within the communities surrounding Site 5.

The Applicant's own evidence confirms that construction relies predominantly upon a specialist workforce drawn from outside the immediate area and that only a very small proportion of employment would be realised locally. Suffolk County Council similarly concludes that the magnitude of the claimed socio-economic benefits has been overstated.

Once construction is complete, the operational workforce required to manage the Scheme would be minimal.

By contrast, the adverse effects of Site 5 would be experienced almost entirely by the host communities throughout the proposed operational life of approximately 60 years. Those communities would bear the permanent loss of productive agricultural land, harm to the historic landscape, ecological impacts, changes to residential amenity and the loss of the recreational experience currently provided by the surrounding countryside.

The Applicant has therefore not demonstrated that the communities required to accommodate these significant long-term effects would receive any meaningful or enduring socio-economic benefit commensurate with the harm identified throughout this Written Representation.

20.4 Failure to Demonstrate Good Design in Accordance with National Policy Statement EN-5

National Policy Statement EN-5 requires electricity substations to be carefully sited and designed so as to minimise adverse effects upon landscape character, visual amenity, heritage assets, residential amenity and the wider environment. These principles are consistent with the long-established Horlock Rules for substation siting.

The evidence presented throughout Chapters 5, 10 and 11 demonstrates that the proposed 400 kV Project Substation does not satisfy these principles.

Rather than selecting a location that minimises environmental effects, the Applicant proposes to locate one of the largest and most visually intrusive components of the Scheme:

- on elevated land;
- within the setting of the Grade I listed Church of St Catherine;
- adjacent to Fritton Conservation Area;
- on predominantly Grade 2 Best and Most Versatile agricultural land;
- within an established ecological network supporting protected, Priority and Red List species;
- adjacent to residential properties and valued Public Rights of Way.

The Environmental Statement relies principally upon future landscape planting to reduce these impacts. However, EN-5 requires adverse effects to be minimised through appropriate siting and design wherever reasonably possible. Mitigation should not be relied upon to justify a location that gives rise to avoidable environmental harm.

Furthermore, following the change in the grid connection strategy, the Applicant has not demonstrated that the siting of the Project Substation was comprehensively reassessed to determine whether a less environmentally damaging solution was available.

Accordingly, the Applicant has not demonstrated compliance with the good design principles established by National Policy Statement EN-5.

20.5 Overall Planning Balance

The Environmental Statement concludes that the benefits of the Scheme outweigh its adverse effects.

The evidence presented throughout this Written Representation leads to a different conclusion.

The Applicant has not demonstrated that Site 5 represents the least environmentally harmful location for the proposed infrastructure, nor that the significant adverse effects identified throughout this Written Representation can be adequately avoided, reduced or mitigated.

The resulting harm extends beyond individual environmental topics. It affects the character of a historic rural landscape, the setting of nationally important heritage assets, productive agricultural land, established ecological networks, valued recreational routes and the wellbeing of the communities that live and work within the area.

Throughout this Written Representation a consistent theme has emerged. The Applicant has not demonstrated that adverse environmental effects have been avoided wherever reasonably practicable through site selection and design before reliance is placed upon mitigation. Instead, the Environmental Statement frequently depends upon future management plans, monitoring,

landscape establishment and other post-consent measures to demonstrate acceptable effects. Consequently, the Applicant has not shown that Site 5 represents the least environmentally harmful location for the proposed infrastructure.

The planning balance must also distinguish between where the benefits are realised and where the impacts are experienced. Whilst the principal benefits accrue at a national level through renewable electricity generation, the significant environmental, social and economic consequences of Site 5 fall almost entirely upon the host communities.

When considered collectively, the evidence demonstrates that the adverse effects identified throughout this Written Representation attract substantial weight within the planning balance. The Applicant has not demonstrated that these effects are clearly outweighed by the benefits of retaining Site 5 within the Scheme.

Overall Conclusion

The evidence presented throughout this Written Representation demonstrates that the Applicant has not justified the inclusion of Site 5 within the East Pye Solar Scheme.

The principal conclusions are:

- **Site 5 is not the least environmentally harmful location** for the concentration of industrial-scale energy infrastructure proposed.
- **The proposed siting of the 400 kV Project Substation has not been demonstrated to accord with the good design principles of National Policy Statement EN-5**, which require adverse effects to be minimised through careful siting and design.
- **The Environmental Statement consistently underestimates the planning significance of the likely effects**, particularly in relation to landscape, heritage, ecology, agricultural land, residential amenity and cumulative impacts.
- **The proposal would result in significant and enduring harm to the historic rural landscape**, fundamentally changing its character and the experience of those who live in, work within and visit the area.
- **The proposal would cause significant harm to designated heritage assets and their settings**, to which national policy requires great weight to be given.
- **Site 5 supports a mature and interconnected ecological network**, providing essential habitat for protected, Priority and Red List species. The Applicant has not demonstrated

that these ecological functions can be adequately retained or replaced, and the resulting ecological harm should attract substantial weight in the planning balance.

- **Predominantly Grade 2 Best and Most Versatile agricultural land would be lost to productive agriculture for approximately 60 years**, with no convincing evidence that its agricultural capability and wider environmental functions can be fully restored.
- **The cumulative effects on local communities, Public Rights of Way, recreation, health and wellbeing have been materially underestimated.**
- **The Applicant has not demonstrated that the communities surrounding Site 5 would receive any meaningful or enduring socio-economic benefit**, whereas the significant environmental, social and economic consequences would fall almost entirely upon those communities.
- **Outstanding concerns raised by statutory consultees further reduce confidence in the Applicant's assessment and reinforce the need for significant weight to be attached to the unresolved environmental issues.**

Taken together, these matters demonstrate that the Applicant has not shown that the significant and enduring harm arising from the inclusion of Site 5 is unavoidable or clearly outweighed by the benefits of the Scheme. The planning balance therefore weighs against development consent for Site 5, and the Secretary of State is respectfully invited to refuse development consent insofar as it relates to this part of the proposed development

Appendix 1:Footpath Journey Through and around Site 5

Footpaths directly affected by Site 5 (wider effects to footpath network not examined here)

As mentioned before, the parishes of Morningthorpe and Fritton are combined for parish council purposes but the village boundaries are still separate. Properties on the South side of the B1527 at this stretch of the road have a Fritton postal address, whilst properties on the North of the B1527 and the west of Boylandhall Lane have a Morningthorpe postal address. This ties back to the days when these locations linked with the respected churches, some coming under St John the Baptist at Morningthorpe, the others under St Catherine's at Fritton. These differences are reflected in the PRoW that link the locations.

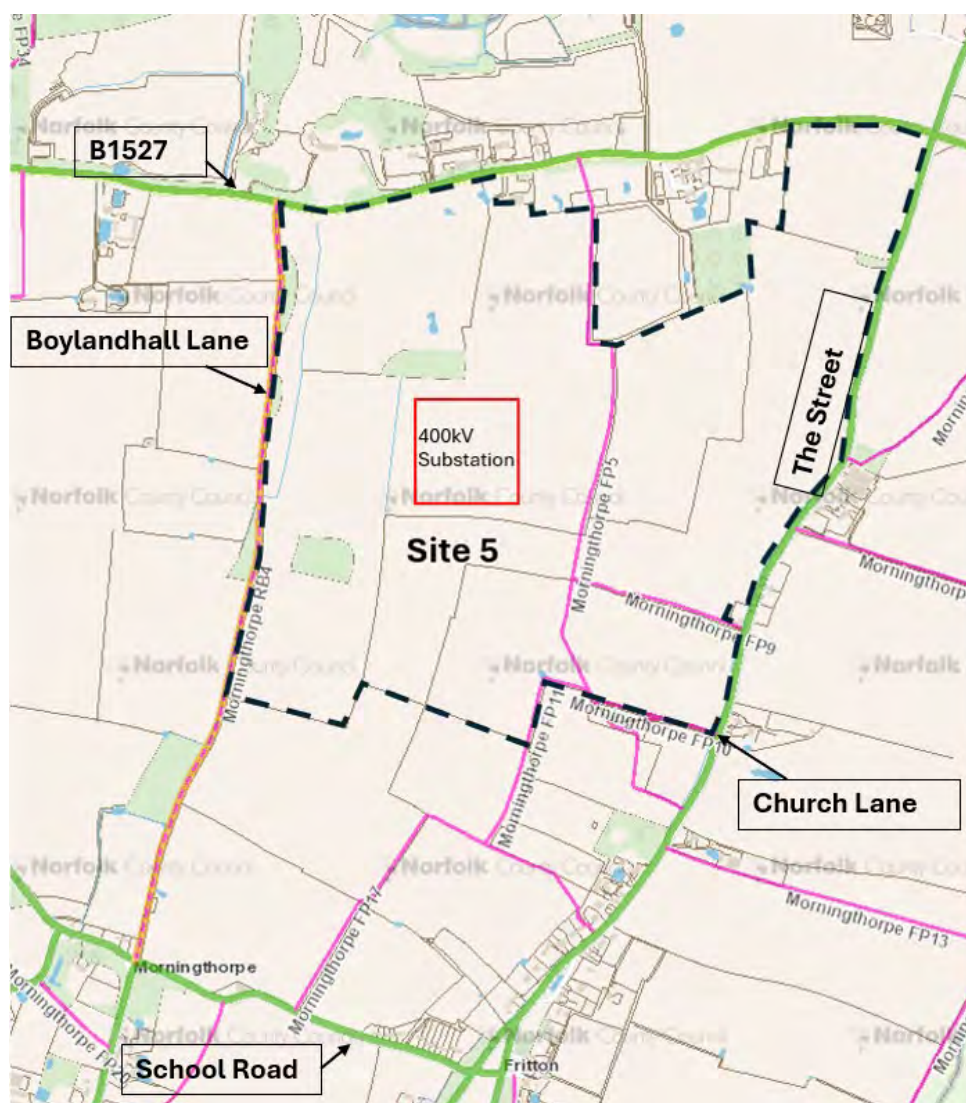


Figure I – Map indicating, Site 5, 400kv Substation in relation to affected PRoW

Morningthorpe-FP5

Morningthorpe Footpath 5 joins St Catherine's Church with the residential properties in the northern reaches of the village of Fritton. It is characterised by small sections of hedged rural path that then moves through to wide open countryside views. The route travels through the historic field systems that can still be seen with the numerous long established hedgerows and ditches that would have typified the farming style pre-enclosure act. The fields can still be seen to be managed in an individual approach even though they come under control of just two different farming businesses. This has preserved the feelings and experiences of the historical routes used over many centuries. Travelling through here on just this one walk, there is predominately the sound of birds calling, identified as Priority Protected red list Eurasian Skylarks, Yellow Hammer and Amber list Dunnock, Common Redstart, as well as Blue Tits, Great Tits and Jackdaws.

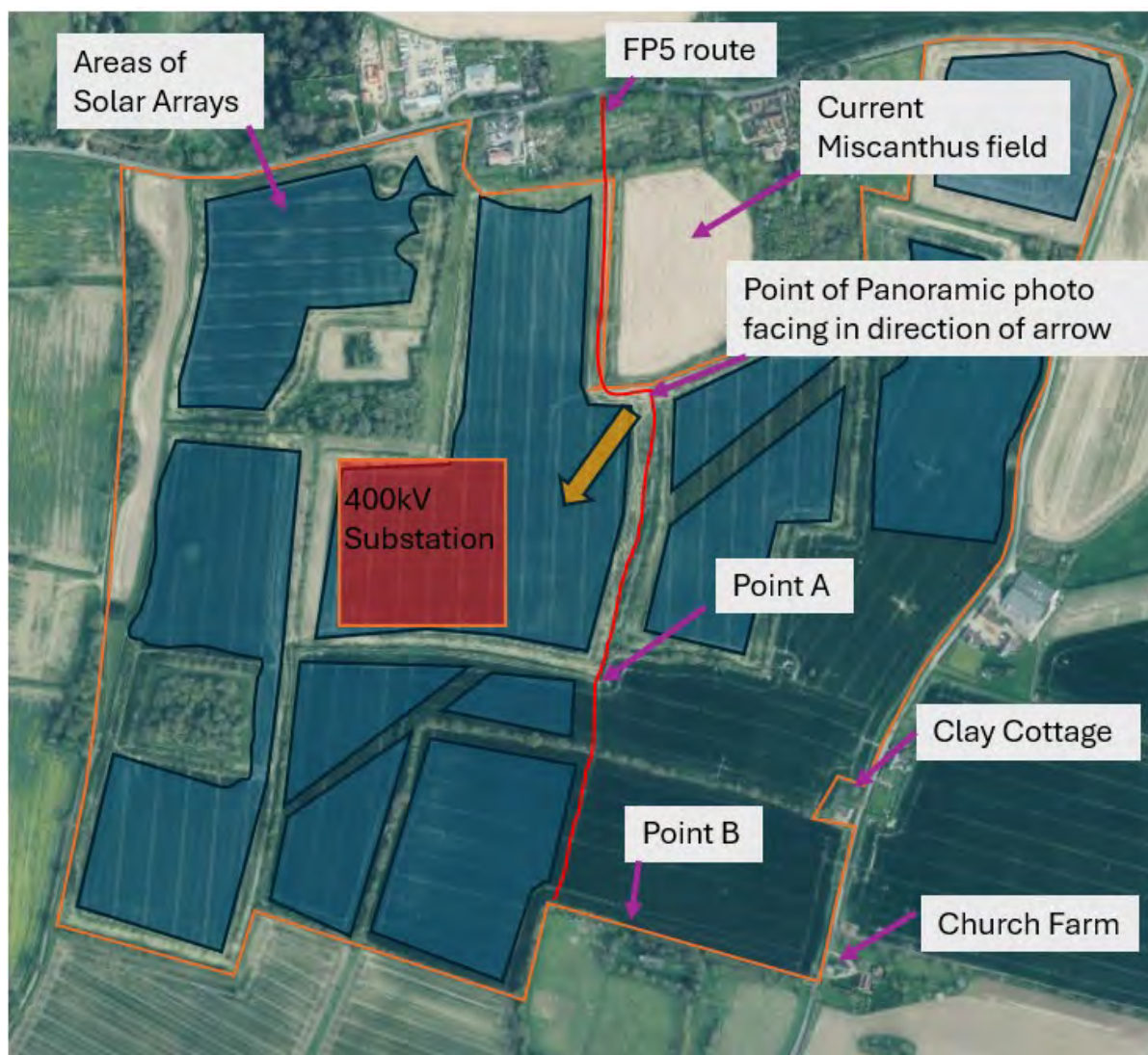


Figure II – Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including FP5.

Starting at the B1527 and having walked across the land not included in Site 5, travelling in a Southerly direction towards St Catherine's Church. — (All pictures in this section taken facing in a mainly Southerly direction to recreate the walking experience unless otherwise stated.)

You emerge on the wide grassed footpath



But the path bends to the East a little and travels a short distance with sporadic mainly deciduous hedging on the West and an area currently growing Miscanthus Grass (not in Site 5 Order Limits) on the East.



As you travel along this stretch, views to the West open up due to the sporadic nature of the hedgerow along here.



Towards the end of this 240m you pass into a tunnel-like feeling stretch



Then you start to emerge and getting glimpse of what's to come (this is looking directly over Site 5, forward views would be over the proposed 400kv Substation, with Solar Arrays and fencing in the foreground)



As you turn East then almost immediately back South the view is overwhelmingly of openness directly over to the proposed 400Kv Substation with the Solar Arrays , fencing, CCTV, and lighting first. (Panoramic photo taken from the footpath where is bends round the corner of the field)



Stopping to admire the views, looking West over Site 5 – Copse known as Long plantation in view. Direct line of site through to proposed 400kv Substation and Solar Arrays in foreground



Continuing Southwards along towards St Catherine's Church, Ancient hedgerow (with gaps) to the East, Open field to West (proposed Solar Arrays, deer fencing, CCTV, Security Lighting),



Coming to the end of a run of Hedgerow, views starting to open up again ahead



At this same point as above the view to West, looking down a line of Ancient Hedgerow Proposed Substation to the right of the photo, solar arrays to the left, both with areas fenced, lit and CCTV— (Point A on Fig. II Satellite overview)



Just a few feet further than the last picture the field opens up to the West



Turning to the left to start continuing on along the path



Turning fully to the left you can see the view opening up over the field and down over The Street (Clay Cottage is visible) to Morningthorpe-FP29 and beyond.



Heading South with open views of field to both left and right, ahead you can see the path passing through the next section of ancient field hedgerow joining FP9 before continuing on into the distance towards St Catherine's Church.



Continuing on straight through the gap in the hedgerow, clear open views over fields and beyond to the East (left). With Church Farm House in the middle of the photo, the distance of the view afforded the walker are seen spreading out to Morningthorpe-FP29 and on to Hempnall Green



Views to the South West whilst walking along this stretch are down towards School road and on to Morningthorpe.



Nearing the end of FP5, the views afforded straight ahead are of the deciduous tree line around St Catherine's Church, views continuing down Morningthorpe-FP11 and over towards Morningthorpe.



Looking back along FP5 as we head towards the Church (Point B) Proposed Substation position in middle-right behind hedge line.



View looking back along FP5 from top of Church Lane



Morningthorpe-FP9

Morningthorpe Footpath 9 is a relatively short stretch (approx. 315m long) It starts at the highway – The Street and progresses in a Westerly direction, joining up with Morningthorpe FP5. Comprising mainly of field margin, one side is edged with ancient mainly deciduous hedgerow and mature trees, the other is afforded wide open views. This gives the walker a feeling of openness, whilst sheltered from the southern edge.



Figure III Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including FP9

Starting at the road (The Street) end and walking in a westerly direction views over the proposed mitigation section will be to Solar Arrays - straight ahead, 400kV Substation - to the right



Turning to face northwards, clear views are afforded over long distances, broken only by the sporadic ancient hedgerows and mature trees.



Carrying along on the path, the hedgerow to the south provides glimpses through to the fields beyond whilst straight on still enjoys the openness and feelings of space.



Turning to look over your shoulder views back toward Coomb Barn and beyond over towards The Krons and Hempnall, the road (The Street) is dropping away from view.



Morningthorpe-FP10

Walked in an Easterly direction. Actual route walked marked in solid red to avoid damaging growing crops. (direction of actual end of PRow shown in dotted red line)

This footpath is approximately 330m long and shares the majority of the same route as the unmetalled Church Lane before using the pedestrian route round a drive gate.



Figure IV Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including FP10

Starting at the junction with The Street, FP10 heads off up Church Lane (Fritton). The track is unmetalled.



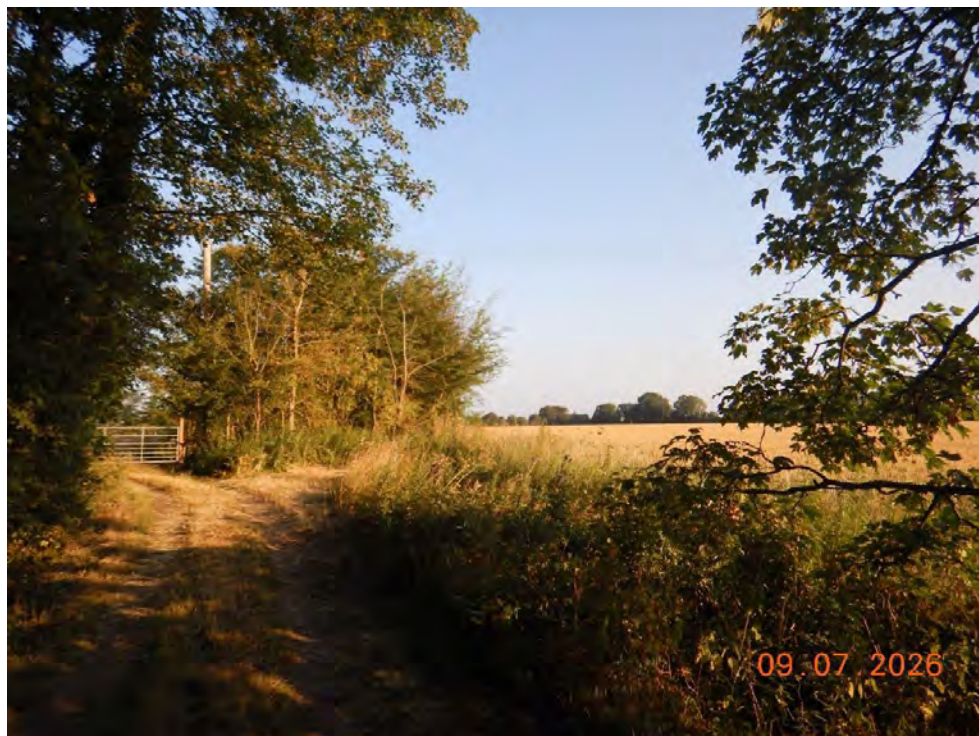
It initially passes through a section with views to the left over grazing land.



Before entering a section with deciduous mature trees on either side offering dappled shade in the summertime and adding to the feeling of tranquillity.



As you near the end of the tree canopy, the path bends very slightly to take you onto the field margin



Where you then walk along with the Ancient hedgerow and mature tree line to your left, and open views to the front, right and back behind you.



View northwards from the footpath seeing over to the treelined edge of Mon-FP9 for over 1km



Turning back to look behind, views open up to the East over towards Silver Green over 2km away.



At the end of FP10 you join FP9 to the right and FP11 to the left with open views to the front.



Morningthorpe-FP11 – Walking in a Southerly direction towards School Road

This rural footpath is approximately 340m long running almost parallel to the highway – The Street. For much of its length it has the ancient deciduous hedgerow and mature trees running along the eastern side with open views to the west.



Figure V Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including FP11

Views straight ahead over the fields to School Road



Views South Westerly towards Boylandhall Lane and Morningthorpe, across open fields interspersed with historic hedgerows still displaying the historic field layouts.



Walking further down FP11 you reach a gentle bend in the path. Mature trees and ancient hedgerows continue on the Eastern side, as you pass by the end of the ancient hedge line to the West.



With this short break in the view, it opens up again to provide the feeling of sweeping openness.



At the end, FP11 joins FP17 which runs East to West.



At the junction of the two footpaths, looking to the South, St John the Baptist's Church is coming into view, linking the two communities together.



Morningthorpe FP17 – Red section Walked (pink section not included in this experience)

Starting at School Road and heading in a North-Easterly direction to get the experience of walking the path in reverse (i.e. from St John the Baptist's to St Catherine's Church).

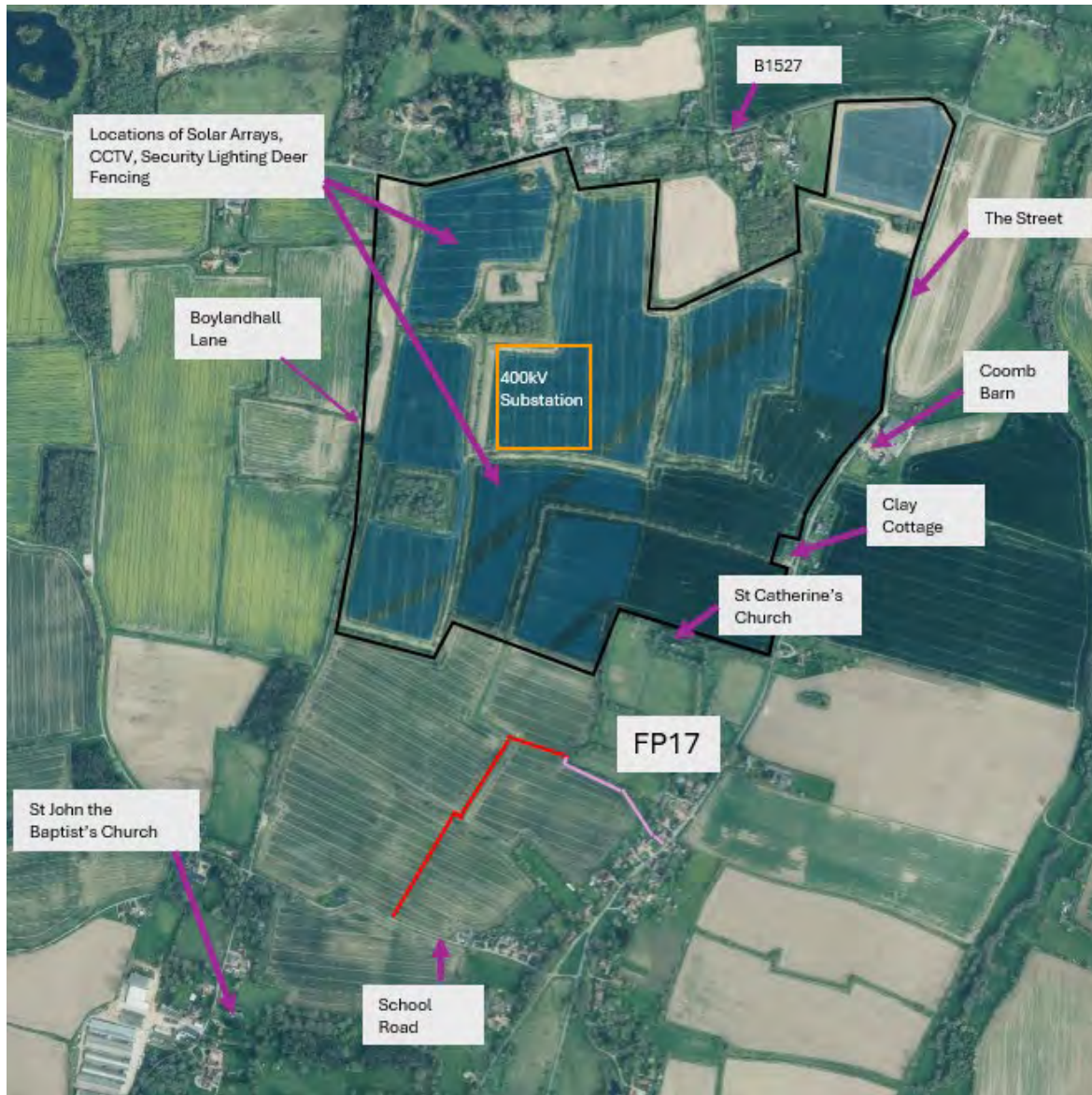


Figure VI Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including FP17

Looking along School Road towards Morningthorpe, the road is quiet and tranquil.



At the start of the footpath the roadside hedging gives way immediately to open views across the fields and hedgerows in the distance.



As the footpath proceeds Northwards the views to the left (west) are over to the historical Boylandhall lane and the forward view is over the proposed Solar Arrays, deer fencing, CCTV, Lighting and on over the 400kvV Substation location



Reaching the minor dog leg in the path, views forward are to the Solar Arrays and associated infrastructure. To the left of the picture, highlighted in this photo are clearly visible in person, the Redwood trees of Boyland Hall (see Figure 7.9 in main document) some 1.3km away in a straight line. Clearly demonstrating the views afforded this location are far reaching.



The path follows the line of ancient hedgerow which has sporadic gaps allowing wide open views.



Clear views over to the groups of trees recorded on maps as Streetsend Plantation and Long Plantation. The 400kV Substation is proposed to be sighted between these two plantations.



Reaching the end of the northward section of FB17 the path turns East to join up with FP11. Again wide open views are afforded the walker as the path passes through the open fields.



If you turn to face north at this point, again clear views over the area of the proposed 400Kv Substation and Solar arrays etc will replace the open expanses dotted with hedgerows and veteran/ancient trees.



Turning back on yourself slightly at this point (replicating the views coming in the other direction) clear open views spanning across to Boylandhall Lane and beyond. Redwood Trees at Boyland Hall are again visible on the right side in the photo.



At the point where it joins with FB11 and turning back to face west to replicate the reverse journey



Morningthorpe RB4 – Known as Boylandhall Lane

Morningthorpe-RB4 is better known as Boylandhall Lane. It is a historic unmetalled restricted byway that has served the community and the historic estate of Boyland for many centuries (as it is found on historic maps see Figure VIII)

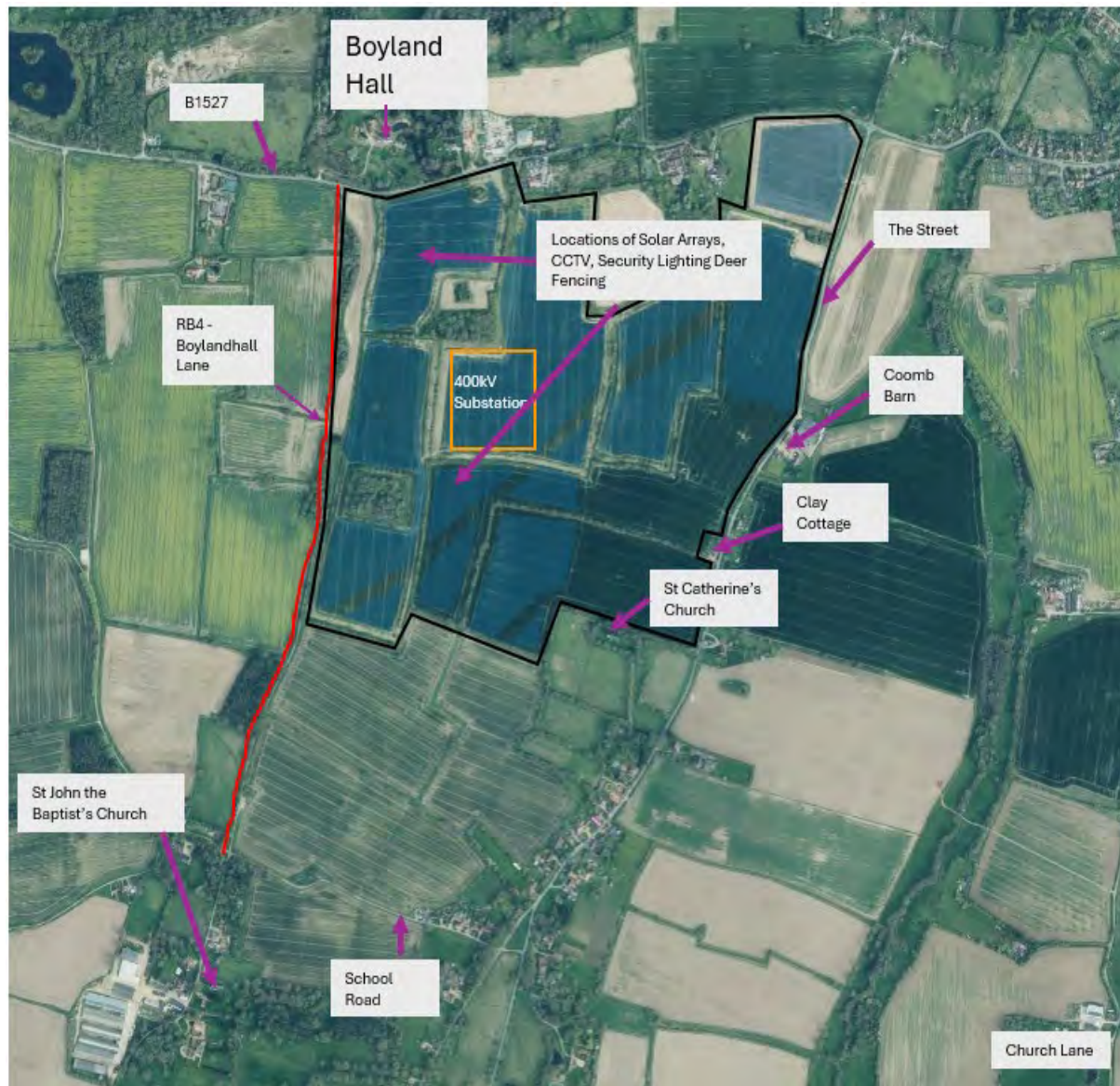


Figure VII Satellite Image of fields with Site 5 boundary, 400 kV substation location, and waypoints marked including RB4



Figure VIII Historic Map dating between 1805-1845 (accessed from Archiuk.com) Showing Boylandhall Lane as well as FP5

Boylandhall Lane has acted to link the residents north of the B1527 (Now known under the postal address of Boyland Hall Gardens) with the village of Morningthorpe and St John the Baptist's Church. In living memory, the lane was used for children to access the school in Morningthorpe. For the length of the lane, it has a loose and stoney but solid under foot surface and the path is characterised with clumps of trees to one side or the other, ancient deciduous hedgerows that seem to take turns to edge the path either on the west or the east with gaps opening up to provide expansive views. These together couple up to give a feeling of escapism. The walking experience due to the intermittent hedgerows is quite different depending upon which direction you go.

Heading Northwards, away from St John the Baptist's Church in Morningthorpe the path starts at the crossroad with School Road to your right and left, Church Lane (Morningthorpe) behind and Boylandhall Lane ahead.



You shortly come to an opening in the hedgerow to the east with views across open fields to the boundary of Site 5 in the distance.



The hedge returns for a short stretch before providing open views to the east again



The promised view across to proposed solar array site and substation position (left side)



As you continue the journey is typified by sections of growth which allow glimpses beyond that then open up to reveal the promised views before hiding them again, only to open up again further along.





Sections are afforded a “tunnel” like feel where the Veteran trees meet



Before once again opening up to the East (with a wooded copse on the West). This view is to the ancient hedge line which forms the southern boundary of Site 5, looking over to the positions of Solar Arrays and 400kV Substation.



Past this hedge the views open up for both sides.



Turning to gaze, the group of trees within Site 5 known as Streetend Plantation is clearly in view. Solar arrays are proposed in front of these and the 400kv Substation to the back and far side, so clearly visible from this point



Hedges return



Before yet again opening up to offer the views across towards Fritton. Streetends Plantation is middle left. This view would be taken up with Solar Arrays.



Further along, the view opens up again, this time Long Plantation is clearly visible rising up. The ground can be seen falling away down to the watercourse.



Nearing the end views open up and then in the distance can be seen to be closing again.



Turning to the east, the solitary ancient oak can be clearly seen standing majestically, framed by open fields.



Passing the wooded copse in the Western edge of Site 5 that has a TPO over its entirety, the feelings of stillness are heightened as you pass under the old cedar tree.



Before you reach journey's end, marked by the Veteran tree standing guard at the junction with the road.



When turning back as though to retrace your steps, the views appear differently opening up in different places. Just at the very start it can be seen the views across Site 5, highlighting the clear visibility lines as well as the height at which Long Plantation, and the proposed 400kv Substation that sits behind it will be.



On the return journey, the solitary ancient oak is still clearly visible but framed with a different open backdrop



With clear views over to the historic Streetends Plantation (see OS maps dated 1805-1845)



Appendix 2: Archaeological Details for Site 5

NHER1120 - Early Saxon Cemetery - less than 140m from Site 5

Record Details

NHER Number: 1120
Type of record: Monument
Name: Morningthorpe Early Saxon cemetery and multi-period finds

Summary

An excavation following the chance discovery of two Early Saxon pots in a gravel pit in 1974 revealed an important Early Saxon cemetery with about 365 inhumations and nine cremations. Bone preservation was poor due to the acidity of the soil, but the many grave goods recovered included beads, finger rings, iron spearheads, shield bosses, knives, buckles, bucket fragments and the possible remains of a lyre.

Although this work recovered evidence for intermittent prehistoric activity on the site, a Bronze Age cremation burial was the only feature of this date to be identified. Unstratified and residual prehistoric finds included Palaeolithic, Mesolithic, Mesolithic/Early Neolithic and Neolithic/Bronze Age worked flints and sherds of Early Neolithic and Early iron Age pottery.

Images



Location

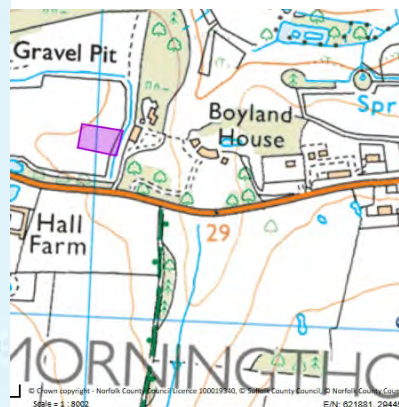
Grid Reference: TM 2200 9434
Map Sheet: TM29SW
Parish: MORNINGTHORPE, SOUTH NORFOLK, NORFOLK

Full description

October 1974. Stray Find.

Presence of Early Saxon cremation cemetery revealed by discovery of two Early Saxon pots by quarry worker in gravel pit to north. See location map in (S1).

P. Watkins (HES), 19 February 2014.



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF1120-Morningthorpe-Early-Saxon-cemetery-and-multi-period-finds&Index=2&RecordCount=1&SessionID=dc7b9d35-2521-4e39-b4e6-6b897cf1d5d3>

Full Description

October 1974. Stray Find. Presence of Early Saxon cremation cemetery revealed by discovery of two Early Saxon pots by quarry worker in gravel pit to north. See location map in (S1).
 P. Watkins (HES), 19 February 2014.

1974-1975. Excavation. Cemetery excavated over two seasons by members of the Norfolk Museums Service, Norfolk Research Committee and Norfolk Archaeological Rescue Group. This work revealed evidence for c. 365 Early Saxon inhumations (the majority aligned east-to-west) and 9 cremations. The (unmarked) southern and western limits of the cemetery were identified, with its eastern extent lying beyond the area excavated. The northern part of the cemetery had been destroyed by the earlier quarrying. It is possible that the cemetery had been centred on a ring-ditch that lay to the north (NHER 10179, also lost to quarrying) which had been identified as a cropmark on old aerial photographs. The cemetery had an orderly layout, although some of the graves did intersect. In addition to the graves a number of other

funerary features were identified, including two small ring-ditches, a penannular ditch, probable pennular ditch and a number of post-holes that had possibly supported grave markers.

Bone preservation was poor due to the acid nature of the soil and as a result only a few of the burials could be tentatively sexed on the basis of the surviving bones. The burials were accompanied by a wide range of grave goods including pottery, brooches, shield bosses, spearheads, a sword, knives, finger rings, girdle hangers, fragments of buckets (one with bronze mountings) and a lugged copper alloy cauldron. Pieces of metal and wood scattered around one of the graves were interpreted as the remains of a lyre. Textile evidence was also preserved in a number of the graves, in most cases the fibres having been replaced by metal oxides. The majority of the of the datable grave-goods are from the 6th century. The graves also produced a small number of Roman finds, including 11 brooches (the majority penannular), 2 gem stones and several coins pierced for suspension.

Although this work also produced evidence for intermittent prehistoric activity on the site, a Bronze Age cremation burial (contained within a Bucket Urn) was the only feature that could be conclusively identified as prehistoric. A total of 108 worked flints were also recovered, the major of which were either residual in later features or recovered from unstratified contexts. This multi-period assemblage included rolled blades and a flake of probable Palaeolithic date; a Mesolithic obliquely-blunted microlith; over fifty Mesolithic/Early Neolithic blades and a blade core; a Neolithic chisel and a broken scale-flaked knife or unfinished arrowhead of probable Neolithic/Early Bronze Age date. A small number of prehistoric pottery sherds were also recovered. Although the majority of these sherds were not closely datable, two were identified as being from Early Neolithic and Early Iron Age bowls.

The excavation also identified a small number of features that, whilst undated, appeared to be later than at least part of the cemetery. These included a square slot that may have been the foundation trench of a timber building and part of a curving ditch. Traces of brickfields were also revealed, these apparently associated with nearby Boyland Hall.

See published report (S1) for full details (two volumes). Brief summaries of the two excavation seasons appeared in (S2) and (S3) and the results of the work were also noted in (S4) and (S5). The Bronze Age cremation was published separately in (S6). Finds from this site were also considered in (S7) and (S8) and the cemetery was subsequently included in a wider synthesis of Anglo-Saxon inhumation burial in East Anglia (S9). See also press cuttings (S10) and (S12), photographs (S13) and (S14) and drawings (S15) and (S16) held by HES. The potentially Palaeolithic flints are noted on (S17). The finds from the excavation are now held by the Norwich Castle Museum (NWHCM : L1976.3) Amended by P. Watkins (HES), 19 February 2014.

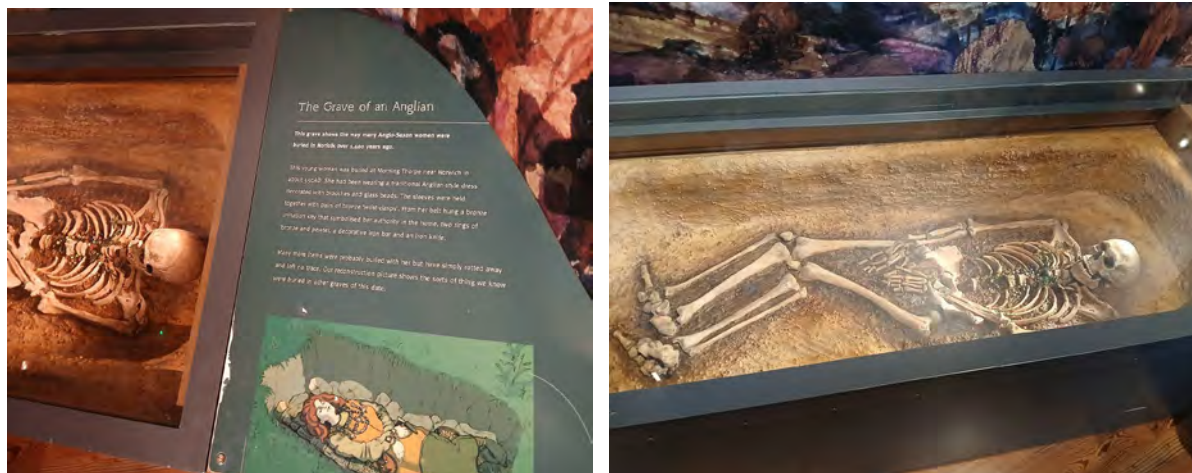
September 1978. Stray Find. Found within the excavation area: 1 flint core. Unstratified. Information from (S18). A. Rogerson (NAU). Amended by P. Watkins (HES), 19 February 2013.

- **Monument Types**

- · BEAM SLOT? (Unknown date)
- · FINDSPOT (Palaeolithic - 500000 BC? to 10001 BC?)
- · FINDSPOT (Prehistoric - 500000 BC to 42 AD)
- · FINDSPOT (Early Mesolithic to Early Neolithic - 10000 BC to 3001 BC)
- · FINDSPOT (Mesolithic - 10000 BC to 4001 BC)
- · FINDSPOT (Early Neolithic - 4000 BC to 3001 BC)
- · FINDSPOT (Early Neolithic to Early Bronze Age - 4000 BC to 1501 BC)
- · FINDSPOT (Neolithic - 4000 BC to 2351 BC)
- · FINDSPOT (Bronze Age - 2350 BC to 701 BC)
- · FINDSPOT (Early Iron Age - 800 BC to 401 BC)
- · FINDSPOT (Roman - 43 AD to 409 AD)
- · CEMETERY (Early Saxon - 411 AD to 650 AD)

- • CREMATION (Early Saxon - 411 AD to 650 AD)
- • CURVILINEAR ENCLOSURE (Early Saxon - 411 AD to 650 AD)
- • ENCLOSURE (Early Saxon - 411 AD to 650 AD)
- • FINDSPOT (Early Saxon - 411 AD to 650 AD)
- • INHUMATION (Early Saxon - 411 AD to 650 AD)
- • POST HOLE (Early Saxon - 411 AD to 650 AD)
- • RING DITCH (Early Saxon - 411 AD to 650 AD)
- • BRICK KILN (Post Medieval - 1540 AD to 1900 AD)
- **Associated Finds**
- • BLADE (Palaeolithic - 500000 BC? to 10001 BC?)
- • BORER (Prehistoric - 500000 BC to 42 AD)
- • CORE (Prehistoric - 500000 BC to 42 AD)
- • FLAKE (Palaeolithic - 500000 BC? to 10001 BC?)
- • FLAKE (Prehistoric - 500000 BC to 42 AD)
- • POT BOILER (Prehistoric - 500000 BC to 42 AD)
- • RETOUCED FLAKE (Prehistoric - 500000 BC to 42 AD)
- • BLADE (Early Mesolithic to Early Neolithic - 10000 BC to 3001 BC)
- • BLADE CORE (Early Mesolithic to Early Neolithic - 10000 BC to 3001 BC)
- • MICROLITH (Mesolithic - 10000 BC to 4001 BC)
- • ARROWHEAD? (Early Neolithic to Early Bronze Age - 4000 BC to 1501 BC)
- • CHISEL (Neolithic - 4000 BC to 2351 BC)
- • POT (Early Neolithic - 4000 BC? to 3001 BC?)
- • POT (Late Prehistoric - 4000 BC to 42 AD)
- • POT (Bronze Age - 2350 BC to 701 BC)
- • POT (Early Iron Age - 800 BC to 401 BC)
- • BROOCH (Roman - 43 AD to 409 AD)
- • BROOCH (Roman - 43 AD to 409 AD)
- • COIN (Roman - 43 AD to 409 AD)
- • FINGER RING (Roman - 43 AD to 409 AD)
- • HARNESS FITTING (Roman - 43 AD to 409 AD)
- • ARROWHEAD (Early Saxon - 411 AD to 650 AD)
- • AWL (Early Saxon - 411 AD to 650 AD)
- • AXEHEAD (Early Saxon - 411 AD to 650 AD)
- • BEAD (Early Saxon - 411 AD to 650 AD)
- • BEAD (Early Saxon - 411 AD to 650 AD)
- • BEAKER (Early Saxon - 411 AD to 650 AD)
- • BRACTEATE (Early Saxon - 411 AD to 650 AD)
- • BROOCH (Early Saxon - 411 AD to 650 AD)
- • BROOCH (Early Saxon - 411 AD to 650 AD)
- • BUCKET (Early Saxon - 411 AD to 650 AD)
- • BUCKLE (Early Saxon - 411 AD to 650 AD)
- • BUCKLE (Early Saxon - 411 AD to 650 AD)
- • FERRULE (Early Saxon - 411 AD to 650 AD)
- • FILE (Early Saxon - 411 AD to 650 AD)
- • FINGER RING (Early Saxon - 411 AD to 650 AD)
- • FINGER RING (Early Saxon - 411 AD to 650 AD)

- • FINGER RING (Early Saxon - 411 AD to 650 AD)
- • FINGER RING (Early Saxon - 411 AD to 650 AD)
- • FINGER RING (Early Saxon - 411 AD to 650 AD)
- • FINGER RING (Early Saxon - 411 AD to 650 AD)
- • FURNITURE FITTING (Early Saxon - 411 AD to 650 AD)
- • FURNITURE FITTING (Early Saxon - 411 AD to 650 AD)
- • GIRDLE HANGER (Early Saxon - 411 AD to 650 AD)
- • GOLD LEAF (Early Saxon - 411 AD to 650 AD)
- • KEY (LOCKING) (Early Saxon - 411 AD to 650 AD)
- • KNIFE (Early Saxon - 411 AD to 650 AD)
- • LACE TAG (Early Saxon - 411 AD to 650 AD)
- • LYRE? (Early Saxon - 411 AD to 650 AD)
- • MUSICAL INSTRUMENT? (Early Saxon - 411 AD to 650 AD)
- • PENDANT (Early Saxon - 411 AD to 650 AD)
- • PENDANT (Early Saxon - 411 AD to 650 AD)
- • PIN (Early Saxon - 411 AD to 650 AD)
- • PIN (Early Saxon - 411 AD to 650 AD)
- • POT (Early Saxon - 411 AD to 650 AD)
- • POT (Early Saxon - 411 AD to 650 AD)
- • PURSE (Early Saxon - 411 AD to 650 AD)
- • RING (Early Saxon - 411 AD to 650 AD)
- • RING (Early Saxon - 411 AD to 650 AD)
- • RING (Early Saxon - 411 AD to 650 AD)
- • RING (Early Saxon - 411 AD to 650 AD)
- • SHIELD (Early Saxon - 411 AD to 650 AD)
- • SLEEVE CLASP (Early Saxon - 411 AD to 650 AD)
- • SPANGLE (Early Saxon - 411 AD to 650 AD)
- • SPEAR (Early Saxon - 411 AD to 650 AD)
- • SPINDLE WHORL (Early Saxon - 411 AD to 650 AD)
- • STAPLE (Early Saxon - 411 AD to 650 AD)
- • STRAP END (Early Saxon - 411 AD to 650 AD)
- • STRAP FITTING (Early Saxon - 411 AD to 650 AD)
- • STRIKE A LIGHT (Early Saxon - 411 AD to 650 AD)
- • SWORD (Early Saxon - 411 AD to 650 AD)
- • TWEEZERS (Early Saxon - 411 AD to 650 AD)
- • TWEEZERS (Early Saxon - 411 AD to 650 AD)
- • VESSEL (Early Saxon - 411 AD to 650 AD)
- • VESSEL (Early Saxon - 411 AD to 650 AD)



Photos taken in January 2026 of the display of some of the finds from NHER1120 in Norwich Castle Museum.

Significant Finds within Map Sheet Ref: TM29SW – Exact Locations Withheld from Public Due to Significance of Finds:

NHER14864 Multi Period Finds Now with Norwich Castle

Record Details

NHER Number: 14864
Type of record: Find Spot
Name: Multi-period finds

Summary

[Fieldwalking](#) at this location in 1979 and subsequent metal-detecting between 2017 and 2022 recovered several prehistoric [worked flints](#), including a [Neolithic flake core](#), a [Neolithic/Early Bronze Age scraper](#) and a [Neolithic/Bronze Age](#) possible [arrowhead](#) roughout; [Roman](#), ?Late [Saxon](#), [medieval](#), [medieval](#)/post-medieval and [post medieval](#) pottery [sherds](#); post-medieval [clay pipe](#) stems; undated [copper alloy](#) casting waste; [Roman](#), [medieval](#) and post-medieval coins; a post-medieval [jetton](#); a post-medieval [token](#) and a range of other, Late [Bronze Age](#) to post-medieval metal objects. These metal finds include a Late [Bronze Age socketed axehead](#) fragment; a [Roman](#) brooch fragment; a Middle [Saxon](#) brooch; a Middle/Late [Saxon hooked tag](#); two similar Late [Saxon disc brooches](#) (found in close proximity and perhaps worn as a pair) and an unidentified cast [copper alloy](#) object; [medieval](#) to post-medieval dress accessories; [medieval](#) harness mounts, horse-harness pendant, pendant (possibly not from harness), thimble, end cap from whittle-tang knife, binding strip from furniture, [copper alloy pilgrim badge](#) and lead [seal matrix](#); [medieval](#)/post-medieval [copper alloy](#) vessel fragments and a sword [scabbard](#) chape and post-medieval harness mounts and a [crotal bell](#) fragment.

Images



Location

Grid Reference: Not displayed
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK

Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14864-Multi-period-finds&Index=24&RecordCount=90&SessionID=137f03c4-49c6-4892-b650-202ccc52f0be>

Full description

1979. Fieldwalking.

Found on surface, north of church by Hempnall Road [1]:

2 ?Late Saxon pottery sherds (?Thetford Ware).

4 medieval pottery sherds.

3 medieval/post-medieval stoneware sherds.

11 post-medieval pottery sherds.

Details from Norwich Castle Museum (NCM), 8 May 1979.

Finds donated to Norwich Castle Museum (NWHCM : 1979.301).

Information from record card (S1).

P. Watkins (HES), 28 August 2022.

April-May 2017. Metal-detecting. [2].

Late Bronze Age socketed axehead fragment (S2).

Middle/Late Saxon hooked tag.

Late Saxon unidentified cast copper alloy polyhedral, socketed object.

1 medieval coin, harness mounts, a buckle and a copper alloy pilgrim badge with scalloped edges and an engraving of St. Nicholas (S3).

1 medieval/post-medieval pottery sherd and a hinged strap plate.

3 post-medieval coins, 1 token and a crotal bell fragment.

Site extended to the whole field. Previous extent recorded as Context 1.

A. Beckham (HES), 24 May 2017. Amended E. McDonald (HES), 6 June 2017 and P. Watkins (HES), 8 January 2024 and 17 February 2024.

July-September 2017. Metal-detecting. [3].

1 Roman coin.

Medieval horse harness pendant.

Information from PAS import.

P. Watkins (HES), 24 June 2021 and 17 February 2025.

October-November 2017. Metal-detecting. [4].

1 Neolithic flint flake core.

1 Neolithic/Early Bronze Age flint possible arrowhead roughout.

Late Saxon pair of disc brooches with moulded Borre-style decoration (found in close proximity and perhaps worn together).

Medieval buckle and whittle-tang knife end-cap.

2 post-medieval coins.

Information from PAS import.

E. McDonald, 1 January 2018. Amended by P. Watkins (HES), 20 May 2021.

November 2017-February 2018. Metal-detecting. [5].

3 medieval coins, a buckle, zoomorphic binding strip from piece of furniture and lead seal matrix.

Information from PAS import.

The following objects are not recorded on the PAS database:

Medieval/post-medieval copper alloy vessel fragment.

Post-medieval buckles and a harness mount.

E. McDonald (HES), 2 May 2018

February-April 2018, Metal-detecting. [6].

1 Roman coin and a plate brooch.

2 medieval coins and a pendant (possibly not from harness).

Information from PAS import.

E. McDonald (HES), 2 July 2018 and P. Watkins (HES), 1 March 2021.

November 2018-March 2019. Metal-detecting. [7].

Undated copper alloy casting waste.

Neolithic/Early Bronze Age flint scraper.

1 Roman pottery sherd.

2 medieval coins, 1 pottery sherd, buckles, a belt mount and thimble.

2 medieval/post-medieval pottery sherds and a sword scabbard chape.

3 post-medieval coins, buttons and buckles.

Information from PAS import.

E. McDonald (HES), 1 May 2019.

February-April 2019. Metal-detecting. [8].

1 Roman coin.

1 medieval coin and buckles.

2 medieval/post-medieval pottery sherds and copper alloy vessel fragments.

1 post-medieval coin, 1 jetton, buckles and a harness mount.

Information from PAS import.

E. McDonald (HES), 1 June 2019.

May-June 2022. Metal-detecting. [9].

Middle Saxon ansate brooch.

1 medieval pottery sherd and unusual 'D'-shaped buckle.

Information from PAS import.

P. Watkins (HES), 12 December 2023 and 18 December 2023.

(S3) - PAS details to follow.

E. McDonald (HES), 18 August 2020.

Monument Types

- FINDSPOT (Early Neolithic to Early Bronze Age - 4000 BC to 1501 BC)
- FINDSPOT (Neolithic - 4000 BC to 2351 BC)
- FINDSPOT (Late Bronze Age - 1000 BC to 701 BC)
- FINDSPOT (Roman - 43 AD to 409 AD)
- FINDSPOT (Middle Saxon - 651 AD to 850 AD)
- FINDSPOT (Middle Saxon to Late Saxon - 651 AD to 1065 AD)
- FINDSPOT (Late Saxon - 851 AD to 1065 AD)
- FINDSPOT (Late Saxon to 19th Century - 851 AD to 1900 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- CASTING WASTE (Unknown date)
- ARROWHEAD (Early Neolithic to Early Bronze Age - 4000 BC to 1501 BC)
- CORE (Neolithic - 4000 BC to 2351 BC)
- SCRAPER (TOOL) (Early Neolithic to Early Bronze Age - 4000 BC to 1501 BC)
- SOCKETED AXEHEAD (Late Bronze Age - 1000 BC to 701 BC)
- POT (Roman - 43 AD to 409 AD)
- COIN (Roman - 50 AD to 260 AD)
- COIN (Roman - 80 AD to 120 AD)
- BROOCH (Roman - 100 AD to 200 AD)
- COIN (Roman - 117 AD to 260 AD)
- BROOCH (Middle Saxon - 720 AD to 850 AD)
- HOOKED TAG (Middle Saxon to Late Saxon - 800 AD to 900 AD)
- POT (Late Saxon - 851 AD? to 1065 AD?)
- BROOCH (Late Saxon - 900 AD to 1000 AD)
- BROOCH (Late Saxon - 900 AD to 1000 AD)
- UNIDENTIFIED OBJECT (Late Saxon to Medieval - 900 AD to 1100 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Medieval to 19th Century - 1066 AD to 1900 AD)
- FURNITURE FITTING (Medieval - 1100 AD to 1300 AD)
- PENDANT (Medieval - 1100 AD to 1200 AD)
- HARNESS PENDANT (Medieval - 1150 AD to 1250 AD)
- COIN (Medieval - 1158 AD to 1180 AD)
- BUCKLE (Medieval - 1200 AD to 1300 AD)
- HARNESS MOUNT (Medieval - 1200 AD to 1400 AD)
- HARNESS MOUNT (Medieval - 1200 AD to 1400 AD)
- POT (Medieval - 1200 AD to 1400 AD)
- POT (Medieval - 1200 AD to 1400 AD)

- SEAL MATRIX (Medieval - 1200 AD to 1300 AD)
- COIN (Medieval - 1205 AD to 1230 AD)
- COIN (Medieval - 1272 AD to 1335 AD)
- COIN (Medieval - 1280 AD to 1350 AD)
- BUCKLE (Medieval - 1300 AD to 1400 AD)
- COIN (Medieval - 1300 AD to 1300 AD)
- STRAP FITTING (Medieval - 1300 AD to 1450 AD)
- THIMBLE (Medieval - 1300 AD to 1400 AD)
- VESSEL (Medieval to 17th Century - 1300 AD to 1700 AD)
- VESSEL (Medieval to 17th Century - 1300 AD to 1700 AD)
- COIN (Medieval - 1303 AD to 1305 AD)
- COIN (Medieval - 1310 AD to 1314 AD)
- BUCKLE (Medieval - 1350 AD to 1450 AD)
- BUCKLE (Medieval - 1350 AD to 1500 AD)
- BUCKLE (Medieval - 1350 AD to 1500 AD)
- BUCKLE (Medieval - 1350 AD to 1500 AD)
- STRAP FITTING (Medieval to 16th Century - 1350 AD to 1550 AD)
- BUCKLE (Medieval - 1400 AD to 1500 AD)
- BUCKLE (Medieval to 16th Century - 1400 AD to 1550 AD)
- KNIFE (Medieval - 1400 AD to 1500 AD)
- COIN (Medieval - 1422 AD to 1427 AD)
- POT (Medieval to 16th Century - 1450 AD to 1600 AD)
- POT (Medieval to 16th Century - 1450 AD to 1600 AD)
- POT (Medieval to 16th Century - 1450 AD to 1600 AD)
- COIN (Medieval - 1461 AD to 1500 AD)
- SCABBARD (Medieval to 16th Century - 1485 AD to 1600 AD)
- BUCKLE (Medieval to 16th Century - 1500 AD to 1600 AD)
- BUCKLE (Medieval to 16th Century - 1500 AD to 1600 AD)
- BUTTON (Medieval to 16th Century - 1500 AD to 1600 AD)
- BUTTON (Medieval to 17th Century - 1500 AD to 1700 AD)
- PILGRIM BADGE (Medieval to 16th Century - 1500 AD to 1539 AD)
- CLAY PIPE (SMOKING) (Post Medieval - 1540 AD to 1900 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)
- BUCKLE (16th Century to 17th Century - 1550 AD to 1650 AD)
- COIN (16th Century - 1566 AD to 1566 AD)
- COIN (16th Century - 1569 AD to 1569 AD)
- BUCKLE (16th Century to 17th Century - 1570 AD to 1700 AD)
- BUCKLE (16th Century to 17th Century - 1570 AD to 1700 AD)
- BUCKLE (16th Century to 17th Century - 1575 AD to 1700 AD)
- JETTON (16th Century to 17th Century - 1586 AD to 1651 AD)
- COIN (16th Century - 1591 AD to 1594 AD)
- BUCKLE (16th Century to 18th Century - 1600 AD to 1720 AD)
- HARNESS MOUNT (16th Century to 17th Century - 1600 AD to 1700 AD)
- HARNESS MOUNT (16th Century to 17th Century - 1600 AD to 1700 AD)
- COIN (17th Century - 1603 AD to 1649 AD)
- COIN (17th Century - 1604 AD to 1604 AD)
- COIN (17th Century - 1625 AD to 1649 AD)
- COIN (17th Century - 1625 AD to 1649 AD)
- COIN (17th Century - 1639 AD to 1649 AD)
- COIN (17th Century - 1645 AD to 1646 AD)
- BUCKLE (17th Century to 18th Century - 1650 AD to 1720 AD)

- CROTAL (17th Century to 18th Century - 1650 AD to 1800 AD)
- TOKEN (17th Century - 1650 AD to 1670 AD)

NHER59782 Treasure Find Morningthorpe Parish

Record Details

NHER Number: 59782
Type of record: Find Spot
Name: Early Saxon Frankish brooch

Summary

Metal-detecting in 2014 recovered an Early [Saxon](#) Frankish [radiate](#) brooch.

Images



Location

Grid Reference: Not displayed
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK

Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF66250-Early-Saxon-Frankish-brooch&Index=84&RecordCount=90&SessionID=7f45ab92-7cb5-40ce-8feb-b37a67048434>

Full description

March-April 2014. Metal-detecting. [1].

Early Saxon Frankish gilded silver radiate headed brooch.

Information from PAS import.

A. Beckham (HES), 3 July 2014. Amended by E. McDonald (HES), 1 February 2018.

3 September 2014.

The Early Saxon Frankish silver brooch which was found in May 2014 and reported as treasure case 2014 T434, was declared Treasure at inquest .

E. Darch (HES), 18 September 2014.

(S1) - PAS details to follow.

J. Richards (HES), 27 August 2015.

4 September 2015.

The Early Saxon silver brooch which was found in May 2014 and reported as treasure case 2014 T434, was acquired by Norfolk Museums Service Norwich Castle Museum.

E. Darch (HES), 4 September 2015.

Monument Types

- FINDSPOT (Early Saxon - 410 AD to 650 AD)

Associated Finds

- BROOCH (Early Saxon - 500 AD to 570 AD)

NHER10179 -Bronze Age Ring Ditch - less than 140m from Site 5

Record Details

NHER Number: 10179
Type of record: Monument
Name: Bronze Age ring ditch

Summary

1973 aerial photographs show the [cropmark](#) of a [ring ditch](#) to the north of the Early [Saxon](#) cemetery (NHER 1120). The feature was destroyed by quarrying soon afterwards.

Images - none

Location

Grid Reference: TM 2203 9442
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK

Full description

1973. [Ring ditch cropmark](#).

To north of Early [Saxon](#) cemetery (NHER 1120); quarried away before the excavation of the cemetery in 1974.
 A. Gregory ([NAU](#)) 1974.

Monument Types

- RING DITCH (Unknown date)
- SITE (Unknown date)
- RING DITCH (Bronze Age - 2350 BC to 701 BC)
- SITE (Bronze Age - 2350 BC to 701 BC)



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF10179-Bronze-Age-ring-ditch&Index=12&RecordCount=90&SessionID=f6966f49-19fa-4647-b4a2-7ccea59b110a>

Full description

1973. Ring ditch cropmark.

To north of Early [Saxon](#) cemetery (NHER 1120); quarried away before the excavation of the cemetery in 1974.

A. Gregory ([NAU](#)) 1974.

Monument Types

- RING DITCH (Unknown date)
- SITE (Unknown date)
- RING DITCH (Bronze Age - 2350 BC to 701 BC)
- SITE (Bronze Age - 2350 BC to 701 BC)

NHER10178 - Roman Occupation Site and Field System

Record Details

NHER Number: 10178
Type of record: Monument
Name: Roman occupation site and field systems

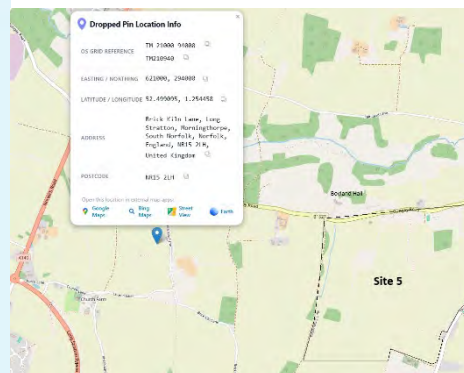
Summary

Finds of [Roman coins](#), brooches, building material and other objects indicate the former presence of a [Roman](#) settlement. Aerial photography in 1996 showed the [cropmarks](#) of old field boundaries that probably related to the settlement. Part of the site has now been quarried away.

Images - none

Location

Grid Reference: TM 21 94
Map Sheet: TM29SW
Parish: [MORNINGTHORPE, SOUTH NORFOLK, NORFOLK](#)



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF10178-Roman-occupation-site-and-field-systems&Index=2&RecordCount=1&SessionID=94db913f-a9fe-41e0-824a-2a5466f88808>

Full description

1977. Cropmarks noted. Roman sherds found.

1979. Roman sherds and tile found.

1982. Excavation of Roman building material.

1983. Roman coins and brooch found with metal detector.

1986. Late Saxon sherd found.

1987. Found with metal detector. Roman, medieval and post medieval metalwork.

See full details in file.

E. Rose (NLA), 8 March 1991.

2 July 1996. NLA air photography.

Cropmarks visible of rectilinear enclosures to the west of site of Roman buildings.

It is likely that these are fields relating to that occupation.

The small rectangular enclosure identified within these features may be a further building site.

See (S1).

S. Massey (NLA), 26 July 2001.

February 2009. Systematic Fieldwalking and Metal-detecting Survey.

Details to come.

The associated archive has been deposited with the Norwich Castle Museum (NWHCM : 2017.430).

A. Cattermole (NLA), 10 February 2009. Amended by P. Watkins (HES), 20 July 2019.

November 2012.

Aerial photographs show that the field which produced the majority of material was quarried away by 1986 and is now water-filled. Only the field to the west survives. This is the field in which cropmarks were noted; records also suggest a small number of finds came from this field.

K. Powell (HES), 5 November 2012.

Monument Types

LINEAR FEATURE (Unknown date)

RECTILINEAR ENCLOSURE (Unknown date)

SITE (Unknown date)

BUILDING (Roman - 43 AD to 409 AD)

DITCH (Roman - 43 AD to 409 AD)

FIELD SYSTEM (Roman - 43 AD to 409 AD)

FLOOR (Roman - 43 AD to 409 AD)

RECTILINEAR ENCLOSURE (Roman - 43 AD to 409 AD)

SETTLEMENT (Roman - 43 AD to 409 AD)

Associated Finds

POT (Undated)

LITHIC IMPLEMENT (Lower Palaeolithic to Late Iron Age - 500000 BC to 42 AD)

ARCHITECTURAL FRAGMENT (Roman - 43 AD to 409 AD)

BRICK (Roman - 43 AD to 409 AD)

BROOCH (Roman - 43 AD to 409 AD)

COIN (Roman - 43 AD to 409 AD)

FLUE TILE (Roman - 43 AD to 409 AD)

FURNITURE FITTING (Roman - 43 AD to 409 AD)

METAL WORKING DEBRIS (Roman - 43 AD to 409 AD)

METAL WORKING DEBRIS (Roman - 43 AD to 409 AD)

NAIL (Roman - 43 AD to 409 AD)

PALETTE (COSMETIC) (Roman - 43 AD to 409 AD)

POT (Roman - 43 AD to 409 AD)

ROOF TILE (Roman - 43 AD to 409 AD)

ROOF TILE (Roman - 43 AD to 409 AD)

TILE (Roman - 43 AD to 409 AD)

UNIDENTIFIED OBJECT (Roman - 43 AD to 409 AD)

UNIDENTIFIED OBJECT (Roman - 43 AD to 409 AD)

POT (Late Saxon - 851 AD to 1065 AD)

BUCKLE (Medieval - 1066 AD to 1539 AD)

BUTTON (Post Medieval - 1540 AD to 1900 AD)

NHER10168 - Boyland Deserted Medieval Village and Hall - Extends into Site 5 North

Record Details

NHER Number: 10168
Type of record: Monument
Name: Boyland deserted medieval village and Hall

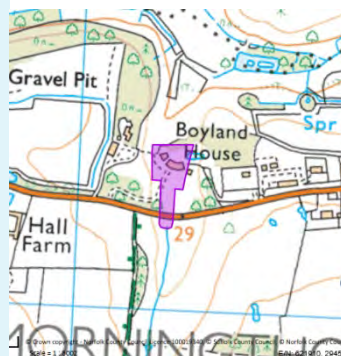
Summary

The site of Boyland [medieval](#) village and successive Boyland Halls, the last of which was built in 1571 and remodelled in the Gothic Revival style in 1804. After the death of the last owner in 1930, the hall stood empty until it was demolished in 1947. A 16th century brick culvert still carries a stream under the site. Planning permission was granted in 2003 for a large new house to be built.

Images - none

Location

Grid Reference: TM 2221 9427
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF10168-Boyland-deserted-medieval-village-and-Hall&Index=2&RecordCount=1&SessionID=f9868199-f58f-4e14-b0fb-24ae1deb0446>

Full description

Site of Boyland village and Boyland Halls (medieval and 1571, and 1804) demolished in 1947.

Brick culvert of 16th century still carries stream under site.

For full details see file.

Newspaper articles (S1) to (S3) in file.

Monument Types

- CHAPEL (Medieval - 1066 AD to 1539 AD)
- DESERTED SETTLEMENT (Medieval - 1066 AD to 1539 AD)
- GREAT HOUSE (Medieval - 1066 AD to 1539 AD)
- MOAT (Medieval - 1066 AD to 1539 AD)
- GARDEN WALL (Post Medieval - 1540 AD to 1900 AD)
- GREAT HOUSE (Post Medieval - 1540 AD to 1900 AD)
- TUNNEL (Post Medieval - 1540 AD to 1900 AD)
- WATERCOURSE (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- STAINED GLASS (WINDOW) (Post Medieval - 1540 AD to 1900 AD)



Present Day Pictures of 16th Century Culvert in record no. NHER10168

NHER23168 Monument – Post-medieval Ice House associated with Historic Boyland Hall less than 250m from Site 5 Boundary

NHER Number: 23168
Type of record: Monument
Name: Post-medieval ice house

Summary

A well-preserved probably mid 19th century brick chambered [ice house](#) that served Boyland Hall.

Images - none

Location

Grid Reference: TM 2213 9445
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF23168-Post-medieval-ice-house&Index=44&RecordCount=90&SessionID=89bf8018-13a8-4f2a-816c-b71f6e02d42c>

Full description

8 December 1986. Visit. Ice-house.
 Marked on 1926 25 inch Ordnance Survey (not named) as at the end of winding path in Stable Plantation; wood now felled with attempt at replanting. Icehouse in what may be side of old pit or natural abrupt slope to river. Very large; egg-shaped chamber of red brick. Straight and short tunnel entrance pointing north, walls of tunnel of gault brick with many graffiti, vault of red brick. Marks of inner and outer doors. Probably mid 19th century. Served Boyland Hall; see transcript in file of letter in Eastern Daily Press of 18 January 1969 (S1) relating to ice being brought from Fritton Common, and not from river to north as might have been expected; also interesting detail of how tunnel was filled with straw.
 Excellent condition, recommended for spot-Listing.
 E. Rose (NAU), 8 December 1986

Monument Types

- ICEHOUSE (Post Medieval - 1540 AD to 1900 AD)

NHER10176 - Undated Enclosure and Roman Finds - Less than 50m from CRC4 and less than 170m from Site 5

Record Details

NHER Number: 10176
 Type of record: Monument
 Name: Undated enclosure and Roman pottery finds

Summary

Aerial photographs show the [cropmarks](#) of an undated rectangular enclosure. A possible ditch was noted in 1978 at the west end of this feature, containing fragments of [Roman](#) pottery.

Images - none

Location

Grid Reference: TM 2188 9433
 Map Sheet: TM29SW
 Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF10176-Undated-enclosure-and-Roman-pottery-finds&Index=2&RecordCount=1&SessionID=bd9dbc02-1f93-4221-8e03-1a81b98dec2c>

Full description

Cropmark seen on Ordnance Survey aerial photograph and drawn out by A. Gregory (NAU) as a rectangular annexe to a line running east to west and curving to north at west end. 13 September 1978. A. Rogerson (NAU) found, where extreme west end of this cropmark should be, a possible ditch, running northeast to southwest, 50cm deep below natural (topsoil removed); natural is yellow and sandy clays.

Fill of feature yellowish grey sandy clay with mottled reddish brown and light grey streaks. In this were amphora sherds, Roman greyware and oxydised ware.

Monument Types

- DITCH (Unknown date)
- RECTANGULAR ENCLOSURE (Unknown date)
- SITE (Unknown date)

Associated Finds

- POT (Roman - 43 AD to 409 AD)

NHER14316 - Prehistoric flint and pottery finds - Within Site 5 boundary.

Record Details

NHER Number: 14316
Type of record: Find Spot
Name: Prehistoric flint and medieval pottery finds

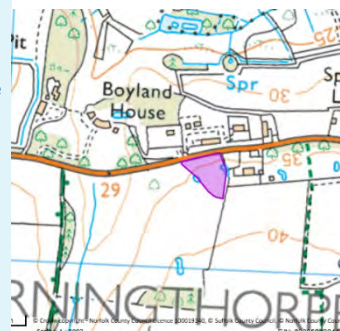
Summary

Prehistoric flint [flakes](#) and a [blade](#), together with fragments of [medieval](#) and [post medieval](#) pottery were found on the surface of a field in 1978.

Images - none

Location

Grid Reference: TM 2246 9421
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14316-Prehistoric-flint-and-medieval-pottery-finds&Index=2&RecordCount=1&SessionID=87e2e79f-c09b-4b89-bcf8-ab56caf800fc>

Full description

Autumn 1978. On surface of north side field.

Medieval sherds, thirteen rims, one handle; one sherd decorated with applied thumb strip and one sherd Grimston green glaze, 12th/15th century.

Also late medieval/Transitional 15th/16th century wares, 18th/19th century sherds and tile.

Also three flint struck flakes and a backed blade.

Monument Types

- FINDSPOT (Prehistoric - 1000000 BC to 42 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- LITHIC IMPLEMENT (Prehistoric - 1000000 BC to 42 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER14318 - Possible Site of Medieval building - Within Site 5

Record Details

NHER Number: 14318
Type of record: Find Spot
Name: Possible site of medieval building

Summary

The discovery in 1978 of [medieval](#) brick and tile fragments may indicate the former presence of a building.

Images - none

Location

Grid Reference: TM 2234 9415
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14318-Possible-site-of-medieval-building&Index=2&RecordCount=1&SessionID=97106277-9e1e-48df-96b3-8e70afc36f3c>

Full description

Autumn 1978.

In hollow; broken bricks and tiles.

Bricks seen by E.Rose (NAU) at NCM.

They seem late medieval, and possibly, but doubtfully from Boyland Hall, as this is supposed to be of 1571, though older portions may have been incorporated.

Monument Types

- BUILDING (Medieval - 1066 AD to 1539 AD)

Associated Finds

- BRICK (Medieval - 1066 AD to 1539 AD)
- TILE (Medieval - 1066 AD to 1539 AD)

NHER15472 Medieval Pottery Finds in area adjacent to Site 5

Record Details

NHER Number: 15472
Type of record: Find Spot
Name: Medieval pottery finds

Summary

Fragments of [medieval](#) pottery were found on the surface of a ploughed field in 1979.

Images - none

Location

Grid Reference: TM 2265 9425
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF15472-Medieval-pottery-finds&Index=30&RecordCount=90&SessionID=bb60c933-bbb2-456d-97ba-c11e050d5565>

Full description

October 1979. On ploughed surface near a pond.

Eleven sherds worn medieval pottery.

A. K. Lawson (NCM), September 1979.

Monument Types

- FINDSPOT (Medieval - 1066 AD to 1539 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)

NHER15471 Medieval and Post Medieval Pottery Finds Adjacent to Site 5

Record Details

NHER Number: 15471
Type of record: Find Spot
Name: Medieval and post medieval pottery finds

Summary

Fragments of [medieval](#) and [post medieval](#) pottery were found on the surface of a ploughed field in 1979.

Images - none

Location

Grid Reference: TM 2275 9428
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF15471-Medieval-and-post-medieval-pottery-finds&Index=29&RecordCount=90&SessionID=2c8f17bf-f14c-4b0a-ab96-b158db962b84>

Full description

October 1979. Field west of Fritton Grange. Surface of ploughed field.
Three rims early medieval ware, six medieval sherds, three post medieval sherds.
A. K. Lawson (NCM) 1979.

Monument Types

- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER14650 - Multiple Period Finds - Large area just North of Site 5(Within 20m of Site 5) Spanning to the Edge of CRC7

Record Details

NHER Number: 14650
Type of record: Find Spot
Name: Multi-period finds

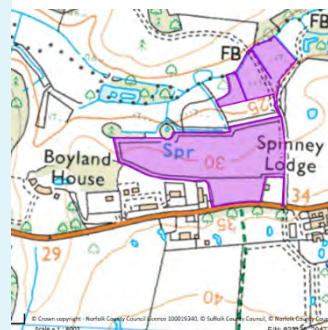
Summary

[Fieldwalking](#) in 1979 recovered a prehistoric flint [flake](#), together with [Roman](#), [medieval](#) and [post medieval](#) pottery fragments.

Images - none

Location

Grid Reference: TM 2259 9451
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14650-Multi-period-finds&Index=2&RecordCount=1&SessionID=e8daec4d-0094-4654-9c96-fa2ea75a982a>

Full description

12 March 1979. Field other side of boundary from 13955 walked by A. Rogerson (NAU) and Mrs. Addington (NARG) (two fields on Ordnance Survey, now one). Scatter of sherds all over with no concentrations.

One Roman? Greyware bodysherd, one medieval rim, one medieval sagging base angle, seven medieval? Sherds, nine post medieval sherds, one flint flake.

Much recent flowerpot etc. Along south boundary with Boyland Hall grounds.

Early 1979 (given April 1979).

Three medieval and three post medieval sherds found by Mrs. Addington (NARG).
Also three sherds late medieval/Transitional.

Monument Types

- FINDSPOT (Prehistoric - 1000000 BC to 42 AD)
- FINDSPOT (Roman - 43 AD to 409 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- LITHIC IMPLEMENT (Prehistoric - 1000000 BC to 42 AD)
- POT (Roman - 43 AD to 409 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER10165 - Unprovenanced Palaeolithic or Neolithic - between Boyland Hall and Hempnall

Record Details

NHER Number: 10165
Type of record: Find Spot
Name: Palaeolithic or Neolithic worked flint implement, Fritton (Morningthorpe, poorly located)

Summary

[Worked flint](#) implement of unspecified type was found somewhere in the northernmost part of what was previously Fritton parish during the late 19th century. This was tentatively identified as [Neolithic](#), although it was noted at the time that it may have been the butt end of a [Palaeolithic](#) implement.

Images - none

Location

Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK

Full description



Following description of find taken from Norfolk Heritage Explorer Website [https://www.heritage.norfolk.gov.uk/record-details?MNF10165-Palaeolithic-or-Neolithic-worked-flint-implement-Fritton-\(Morningthorpe-poorly-located\)&Index=2&RecordCount=1&SessionID=ade861d5-0678-4dc3-9f77-131eeb2708c1](https://www.heritage.norfolk.gov.uk/record-details?MNF10165-Palaeolithic-or-Neolithic-worked-flint-implement-Fritton-(Morningthorpe-poorly-located)&Index=2&RecordCount=1&SessionID=ade861d5-0678-4dc3-9f77-131eeb2708c1)

Full description

Before 1880. Stray Find.

Worked flint object found by H. B. Woodward in the late 19th century. It is recorded in (S1) that it had been picked up "in a field between Boyland Hall and Hempnall, about 3/4 mile west of Hempnall Church, and in the parish of Fritton..." (now part of Morningthorpe parish). This object had previously been exhibited at a meeting of the Norwich Geological Society in December 1879 (S2). This object is almost certainly the reason that "Fritton" is listed in (S3) as a location that had produced Palaeolithic material prior to 1907; (S1) being given as a reference. It is recorded by (S4) that W. G. Clarke's notes suggest he subsequently came to regard this as an error. It is also clearly stated in (S1) that the object had been identified by Dr. J. Evans as being probably Neolithic rather than Palaeolithic, although it is noted that it could have been "...the butt end of a Palaeolithic object".

According to (S3) this implement was (at this time at least), held by the London Geological Museum. It is therefore likely to be the implement from "Boyland" now held by the British Museum (1989,0301.1203), this having previously been part of the Geological Museum's collections. Interestingly this object is recorded in the museum's records as a Palaeolithic handaxe.

The find described above is almost certainly the same object as a "?Palaeo" from "Boyland" that is recorded by (S5) as

being from Hempnall (previously NHER 10169) - the references given to (S1) and (S2) being identical to those on (S4). It is described as having been 1 1/4 inches [3.2cm] thick, abraded and with a recent fracture at one end. It is noted that R. R. Clarke (NCM) regarded this as most likely the end of a Neolithic flint axehead. According to (S5) W. G. Clarke's records contain a letter from (or to) the curator of the Geological Museum regarding this object (with a sketch of the implement).

The locational information given by Woodward for this find suggest that it was found somewhere in the field to the north of Fritton Grange (approximately TM 228 944).

Amended by P. Watkins (HES), 20 February 2014.

Monument Types

- FINDSPOT (Palaeolithic - 1000000 BC? to 10001 BC?)
- FINDSPOT (Neolithic - 4000 BC? to 2351 BC?)

Associated Finds

- LITHIC IMPLEMENT (Palaeolithic - 1000000 BC? to 10001 BC?)
- FLAKED AXEHEAD (Neolithic - 4000 BC? to 2351 BC?)

NHER17858 Medieval and Post Medieval Pottery Finds less than 350m from Site 5 Boundary

Record Details

NHER Number: 17858
Type of record: Find Spot
Name: Medieval and post medieval pottery finds

Summary

[Fieldwalking](#) in 1981 recovered [medieval](#) and [post medieval](#) pottery fragments.

Images - none

Location

Grid Reference: TM 2281 9453
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF17858-Medieval-and-post-medieval-pottery-finds&Index=38&RecordCount=90&SessionID=836f4b6f-30d7-4437-aae7-b83b521260e9>

Full description

1981. Fieldwalking.

Two medieval sherds, one late medieval/Transitional.

Two lead glazed earthenware sherds.

Identified by W. Milligan (NCM), 4 December 1981.

Monument Types

- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)

- POT (Post Medieval - 1540 AD to 1900 AD)

NHER13955 - Multi period pottery finds - less than 180m from Site 5

Record Details

NHER Number: 13955
Type of record: Find Spot
Name: Multi-period pottery finds

Summary

Fragments of [Roman](#), [Saxon](#), [medieval](#) and [post medieval](#) pottery were found on the surface of a field in 1978.

Images - none

Location

Grid Reference: TM 2229 9444
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF13955-Multi-period-pottery-finds&Index=2&RecordCount=1&SessionID=29eed58b-3653-4445-9eca-a76abc567d68>

Full description

13 to 14 September 1978.

On surface of east part of field drilled for grass to be permanent pasture. Nineteen flint flakes, two Roman greyware rims, three hand made body sherds, probably Early Saxon. Two other very small possibly same, one rim probably Thetford type ware. Fifty abraded medieval to Post medieval coarse and glazed sherds, some of which could be Roman. Location of Early Saxon sherds was exactly at grid reference given and is accurately plotted on 25 inch map in file.

A. Rogerson (NAU) and Mrs. S. Addington.

Monument Types

- FINDSPOT (Lower Palaeolithic to 19th Century - 1000000 BC to 1900 AD)

Associated Finds

- LITHIC IMPLEMENT (Lower Palaeolithic to Late Iron Age - 500000 BC to 42 AD)
- POT (Roman - 43 AD to 409 AD)
- POT (Early Saxon - 411 AD to 650 AD)
- POT (Late Saxon - 851 AD to 1065 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER10177 - Undated Cropmark - Sited in CRC4 and less than 240m from Site 5

Record Details

NHER Number: 10177
Type of record: Monument
Name: Undated cropmark

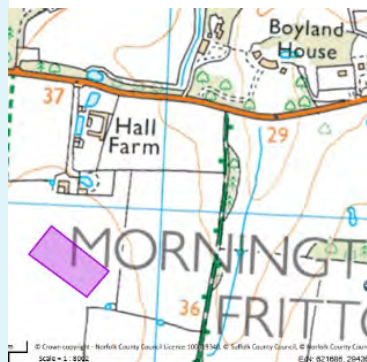
Summary

1973 aerial photographs show the [cropmark](#) of an unspecified feature.

Images - none

Location

Grid Reference: TM 218 938
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF10177-Undated-cropmark&Index=2&RecordCount=1&SessionID=a3336e9e-e4ca-45a8-bdc6-d05cfcefc224>

Full description

1973. Ordnance Survey air photograph.
 Cropmark of unknown site visible on (S1).
 A. Gregory (NAU).

Monument Types

- SITE (Unknown date)

NHER15555 Monument record of Site of Post Medieval Brick Kiln Adjacent to Site 5 North West Boundary and CRC4

Record Details

NHER Number: 15555
Type of record: Monument
Name: Site of post medieval brick kiln

Summary

The site of a [brick kiln](#), marked on a late 18th century map.

Images - none

Location

Grid Reference: TM 2210 9418
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF15555-Site-of-post-medieval-brick-kiln&Index=2&RecordCount=1&SessionID=9de6ec24-d41a-414d-8e12-fe1cf026609c>

Full description

Southwest of Boyland Hall. Brick kiln marked on (S1).

E. Rose (NAU), 19 December 1979.

Monument Types

- BRICK KILN (Post Medieval - 1540 AD to 1900 AD)

NHER20573 Neolithic Flint Find Boylandhall Lane

Record Details

NHER Number: 20573
Type of record: Find Spot
Name: Neolithic flint find

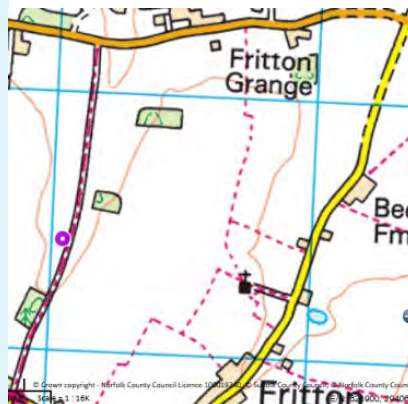
Summary

Part of a [Neolithic](#) polished flint [axehead](#) was found in 1983.

Images - none

Location

Grid Reference: TM 2204 9343
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF20573-Neolithic-flint-find&Index=43&RecordCount=90&SessionID=c833d2b1-e8f3-4888-8796-a8493f02b9ca>

Full description

1983. Found in Boyland Lane; perhaps secondary deposit from filling of post holes. Butt end of all-over polished axe of heavily iron stained flint, with hinge fracture break. Some patination and other later chipping; flat sides. Sketch (S1) NCM. Identified by E. B. Green (NCM), August 1984

Monument Types

- FINDSPOT (Neolithic - 4000 BC to 2351 BC)

Associated Finds

- POLISHED AXEHEAD (Neolithic - 4000 BC to 2351 BC)

NHER16611 Prehistoric and Late Saxon to Post Medieval Finds in Field Adjacent to Site 5

Record Details

NHER Number: 16611
Type of record: Find Spot
Name: Prehistoric and Late Saxon to post-medieval finds

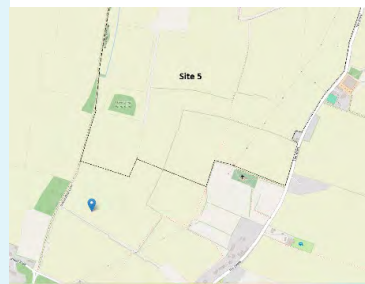
Summary

Fieldwalking in 1980 recovered prehistoric flint [flakes](#), [Saxon](#), [medieval](#) and [post medieval](#) pottery fragments and a possible [kiln](#) brick fragment. Metal-detecting in 2017 and 2018 recovered a [medieval](#) lead [seal matrix](#) and a post-medieval clapper bell fragment.

Images - none

Location

Grid Reference: TM 22 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF16611-Prehistoric-and-Late-Saxon-to-post-medieval-finds&Index=35&RecordCount=90&SessionID=385f34ad-e3bd-4398-8069-bbc14e6ca9f9>

Full description

1980. Fieldwalking. Southeast of Fritton church. [1].

Field was divided into three north to south strips numbered A. to C. From east to west.

A. Three flint flakes.

Much medieval pottery including one rim.

Late medieval/Transitional including one rim.

Lead glazed earthenware and German stoneware.

Tiny glazed kiln? brick fragment.

B. Flint flake.

Five Thetford type rims and base.

Two medieval rims and other sherds.

Late medieval/Transitional.

Lead glazed earthenware.

Westerwald and Derbyshire stoneware.

C. Two flint flakes.

Four Thetford type rims.

Medieval and late medieval/Transitional and post medieval sherds.

Identified by W. Milligan (NCM), September 1980.

February-March 2017. Metal-detecting. [2].

Post-medieval clapper bell fragment.

Information from PAS import.

E. McDonald (HES), 4 May 2017.

July-September 2018. Metal-detecting. [3].

Medieval lead seal matrix.

P. Watkins (HES), 28 March 2024.

Monument Types

- FINDSPOT (Unknown date)
- FINDSPOT (Prehistoric - 1000000 BC to 42 AD)
- FINDSPOT (Late Saxon - 851 AD to 1065 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (16th Century to 18th Century - 1501 AD to 1800 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- KILN FURNITURE (Undated)
- FLAKE (Prehistoric - 1000000 BC to 42 AD)
- POT (Late Saxon - 851 AD to 1065 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- SEAL MATRIX (Medieval - 1200 AD to 1300 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)
- BELL (16th Century to 18th Century - 1550 AD to 1800 AD)

NHER64490 Saxon/Medieval finds in Field Adjacent to Site 5

Record Details

NHER Number: 64490
Type of record: Find Spot
Name: Late Saxon/medieval and post-medieval finds

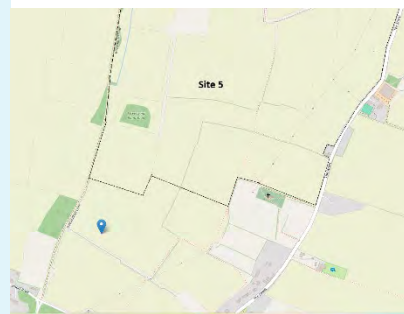
Summary

Metal-detecting in 2019 recovered a Late [Saxon/medieval stirrup mount](#), and a post-medieval [cloth seal](#).

Images - none

Location

Grid Reference: TM 22 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF73099-Late-Saxon-medieval-and-post-medieval-finds&Index=90&RecordCount=90&SessionID=7fcbcb8-284c-468a-8f6a-1bb61d44b170>

Full description

February 2019. Metal-detecting. [1].

Late Saxon/medieval stirrup mount.

Post-medieval cloth seal.

Information from PAS import.

E. McDonald (HES), 1 July 2019.

Monument Types

- FINDSPOT (Late Saxon to Medieval - 851 AD to 1539 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- STIRRUP (Late Saxon to Medieval - 1000 AD to 1100 AD)
- SEAL MATRIX (Medieval - 1250 AD to 1450 AD)

NHER14863 Early Saxon and Medieval to Post Medieval Finds adjacent to Site 5

Record Details

NHER Number: 14863
Type of record: Find Spot
Name: Early Saxon and medieval to post-medieval finds

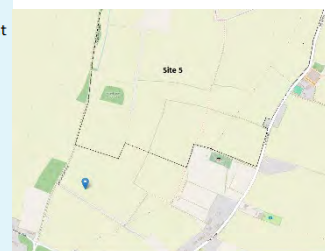
Summary

[Medieval](#) and post-medieval pottery was recovered at this location in 1979. Subsequent metal-detecting in 2017 and 2021 recovered [medieval](#) and post-medieval coins and [jettons](#) and a number of other metal objects, including an Early Saxon die stamp or [patrix](#) for the production of decoration on sheet metal; [medieval strap ends](#), a buckle and horse-harness pendant; a [medieval](#)/post-medieval lead weight and post-medieval buttons, a buckle, [crotal bell](#), bell fragment and [spur](#).

Images - none

Location

Grid Reference: TM 22 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14863-Early-Saxon-and-medieval-to-post-medieval-finds&Index=2&RecordCount=1&SessionID=24b4a6d2-7003-438c-95e1-182a221139c4>

Full description

1979. Stray Find. Fritton, west of church. [1].

Two medieval sherds; base, rim and two handles of 18th century stoneware.

Information NCM, 8 May 1979.

February-March 2017. Metal-detecting. Site extended to the whole field. [2].

Early Saxon copper alloy die stamp or [patrix](#) for the production of decoration on sheet metal, depicting interlinked serpentine animals (S1).

1 medieval coin and 1 [jetton](#).

Medieval/post-medieval lead weight.

2 post-medieval coins, 1 [jetton](#), 2 buttons and a spur fragment.

A. Beckham (HES), 3 April 2017. Amended by E. McDonald (HES), 29 November 2019 and P. Watkins (HES), 23 May 2024.

April-May 2017. Metal-detecting. [3].

1 medieval coin, strap ends, a buckle and horse-harness pendant.

Post-medieval buckle and a crotal bell.

Information from PAS import.

E. McDonald (HES), 6 June 2017 and P. Watkins (HES), 8 January 2024.

August 2021. Metal-detecting. [4].

1 post-medieval coin.

Information from PAS import.

P. Watkins (HES), 18 November 2023.

Monument Types

- FINDSPOT (Early Saxon - 410 AD to 650 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- DIE STAMP (Early Saxon - 575 AD to 650 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- BUCKLE (Medieval - 1100 AD to 1300 AD)
- WEIGHT (Medieval to 17th Century - 1200 AD to 1700 AD)
- COIN (Medieval - 1272 AD to 1377 AD)
- COIN (Medieval - 1280 AD to 1281 AD)
- HARNESS PENDANT (Medieval - 1300 AD to 1400 AD)
- STRAP END (Medieval - 1350 AD to 1450 AD)
- STRAP END (Medieval - 1375 AD to 1425 AD)
- JETTON (Medieval - 1415 AD to 1497 AD)
- BUTTON (Medieval to 16th Century - 1500 AD to 1600 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)
- BELL (16th Century to 18th Century - 1550 AD to 1800 AD)
- BUCKLE (16th Century to 17th Century - 1575 AD to 1700 AD)
- JETTON (16th Century to 17th Century - 1586 AD to 1635 AD)
- COIN (16th Century - 1591 AD to 1594 AD)
- COIN (16th Century - 1595 AD to 1598 AD)
- BUTTON (16th Century to 17th Century - 1600 AD to 1700 AD)
- COIN (16th Century to 17th Century - 1600 AD to 1602 AD)
- CROTAL (16th Century to 18th Century - 1600 AD to 1800 AD)
- SPUR (16th Century to 17th Century - 1600 AD to 1650 AD)

NHER65160 Early Saxon Great Square-Headed brooch found in Site 5

Record Details

NHER Number: 65160
Type of record: Find Spot
Name: Early Saxon Great Square-Headed brooch

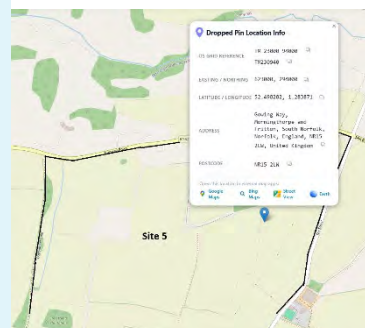
Summary

Metal-detecting in 2017 recovered an Early [Saxon](#) Great Square-Headed brooch.

Images - none

Location

Grid Reference: TM 23 94
Map Sheet: TM29SW
Parish: [HEMPNALL](#), SOUTH NORFOLK, NORFOLK
[MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF72151-Early-Saxon-Great-Square-Headed-brooch&Index=89&RecordCount=90&SessionID=1dec0352-4d87-432b-9bf5-9b0ae3585323>

Full description

May 2017. Metal-detecting. [1].
 Early Saxon Great Square-Headed brooch.
 Information from PAS import.
 E. McDonald (HES), 1 November 2017.

Monument Types

- FINDSPOT (Early Saxon - 410 AD to 650 AD)

Associated Finds

- BROOCH (Early Saxon - 480 AD to 500 AD)

NHER15473 Multi-Period Finds directly opposite Site 5

Record Details

NHER Number: 15473
Type of record: Monument
Name: Multi-period finds

Summary

Prehistoric flint [flakes](#), [Saxon](#), [medieval](#) and [post medieval](#) pottery fragments, together with [post medieval clay pipe](#) stems and a fragment of undated [daub](#), were found on the supposed site of a [manor](#) house in 1979.

Images - none

Location

Grid Reference: TM 2303 9325
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF15473-Multi-period-finds&Index=31&RecordCount=90&SessionID=08aedb9f-c67f-4247-a596-a904dd88213a>

Full description

October 1979. Around Maltoffice Cottages.
 Two small dark grey flint flakes. One rim Thetford ware and daub fragment with wattle marks (date?).
 Identified by W. Milligan (NCM).
 Twenty one sherds medieval, four sherds late medieval/Transitional.
 Five post medieval sherds, three stoneware, two clay pipe stems, heel iron. Also large quantity recent sherds.
 This is said by informant [1] to be the site of a manor house.
 A. K. Lawson (NCM) 1979.

Monument Types

- MANOR? (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- ARCHITECTURAL FRAGMENT (Undated)
- LITHIC IMPLEMENT (Lower Palaeolithic to Late Iron Age - 500000 BC to 42 AD)
- POT (Late Saxon - 851 AD to 1065 AD)
- POT (Medieval - 1066 AD to 1539 AD)

- CLAY PIPE (SMOKING) (Post Medieval - 1540 AD to 1900 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)
- SHOE (Post Medieval - 1540 AD to 1900 AD)

NHER14862 Medieval and Post Medieval Pottery Finds Next to St Catherine's Church

Record Details

NHER Number: 14862
Type of record: Find Spot
Name: Medieval and post medieval pottery finds

Summary

Fragments of [medieval](#) and [post medieval](#) pottery were found on the surface in 1979.

Images - none

Location

Grid Reference: TM 2275 9323
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14862-Medieval-and-post-medieval-pottery-finds&Index=22&RecordCount=90&SessionID=67d9bf33-3a0f-4dfd-a9c2-a6d62b5da571>

Full description

1979. Fritton, south of church. On surface.

Nine medieval sherds and seven late medieval/Transitional sherds.

Post medieval rim, handle and body sherd; stoneware fragment; glass fragment.

Information from NCM, 8 May 1979.

Monument Types

- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER60398 Roman, Medieval and Post-Medieval Finds within 250m of Site 5 Boundary

Record Details

NHER Number: 60398
Type of record: Find Spot
Name: Roman, medieval and post-medieval finds

Summary

Systematic [fieldwalking](#) between 1992 and 1993 recovered no archaeological finds but metal-detecting in 2015 recovered [Roman](#), [medieval](#) and post-medieval coins and metal objects and a post-medieval [jetton](#). The metal finds include a [Roman](#) brooch; a [medieval](#) buckle and [strap fitting](#) and a post-medieval harness [mount](#) and [pipe tamper](#).

Images - none

Location

Grid Reference: TM 23 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE, SOUTH NORFOLK, NORFOLK](#)



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF67378-Roman-medieval-and-post-medieval-finds&Index=85&RecordCount=90&SessionID=956a7be3-25df-444a-9573-8a7ae16ec39b>

Full description

November 1992-January 1993. Systematic Fieldwalking Survey.

Evaluation on proposed route of Hardwick Landfill site access road (Field 10):

Negative results.

See report (S1) for further details.

An archive associated with this work has been deposited with Norwich Castle Museum (NWHCM : 2022.164).

P. Watkins (HES), 31 March 2015. Amended 5 December 2022.

February-March 2015. Metal-detecting. [1].

1 Roman coin and a brooch.

1 medieval coin, a buckle and strap fitting.

1 post-medieval coin, 1 jetton, a harness mount and a pipe tamper.

Information from PAS import.

A. Beckham (HES), 7 April 2014.

Monument Types

- FINDSPOT (Roman - 43 AD to 409 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- BROOCH (Roman - 43 AD to 75 AD)
- COIN (Roman - 138 AD to 192 AD)
- BUCKLE (Medieval - 1300 AD to 1400 AD)
- STRAP FITTING (Medieval - 1300 AD to 1400 AD)
- COIN (Medieval - 1461 AD to 1483 AD)
- COIN (16th Century - 1561 AD to 1561 AD)
- JETTON (16th Century to 17th Century - 1586 AD to 1635 AD)
- HARNESS MOUNT (16th Century to 17th Century - 1600 AD to 1700 AD)
- PIPE TAMPER (18th Century to 19th Century - 1800 AD to 1900 AD)

NHER60007 Early Saxon and Medieval Finds within 250m of Site 5 Boundary

Record Details

NHER Number: 60007
Type of record: Find Spot
Name: Early Saxon and medieval to post-medieval finds

Summary

Metal-detecting between 2013 and 2018 recovered [medieval](#) and post-medieval coins; aswell as Early [Saxon](#) and [medieval](#) to post-medieval metal objects. The metal finds include Early [Saxon](#) brooch fragments, a [medieval annular brooch](#); and [medieval](#)/post-medieval dress hooks.

Images - none

Location

Grid Reference: TM 23 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF66074-Early-Saxon-and-medieval-to-post-medieval-finds&Index=83&RecordCount=90&SessionID=27e534f5-503b-4c34-951c-bbc4de2d075f>

Full description

November 2013. Metal-detecting.

Early [Saxon](#) brooch fragments.

Information from PAS import.

A. Beckham (HES), 7 January 2014.

December 2017-May 2018. Metal-detecting. [1].

1 medieval coin, and an annular brooch.

Medieval/post-medieval copper alloy dress hooks.

2 post-medieval coins.

Information from PAS import.

E. McDonald (HES), 4 September 2018.

Monument Types

- FINDSPOT (Early Saxon - 410 AD to 650 AD)
- FINDSPOT (Medieval - 1066 AD to 1539 AD)
- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)
- FINDSPOT (Post Medieval - 1540 AD to 1900 AD)

Associated Finds

- BROOCH (Early Saxon - 500 AD to 600 AD)
- BROOCH (Early Saxon - 500 AD to 600 AD)
- COIN (Medieval - 1215 AD to 1216 AD)
- BROOCH (Medieval - 1250 AD to 1450 AD)
- DRESS HOOK (Medieval to 16th Century - 1500 AD to 1600 AD)
- DRESS HOOK (Medieval to 17th Century - 1500 AD to 1700 AD)

- COIN (16th Century - 1578 AD to 1578 AD)
- COIN (16th Century - 1594 AD to 1596 AD)

NHER20432 Multi-period Finds within 250m of Site 5 Boundary

Record Details

NHER Number: 20432
Type of record: Find Spot
Name: Multi-period finds

Summary

[Fieldwalking](#) in 1979 recovered [Roman](#), [Saxon](#) and [post medieval](#) pottery fragments, together with fragments of undated [whetstone](#) and glass. Metal-detecting in 2017 recovered a [medieval](#) coin.

Images - none

Location

Grid Reference: TM 23 93
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF20432-Multi-period-finds&Index=42&RecordCount=90&SessionID=649d98ed-0ad0-468d-82d5-d4ef70f83026>

Full description

1979. Fieldwalking. [1].

2 Roman pottery sherds.

3 Late Saxon pottery sherds (rims).

Large quantity of medieval pottery sherds (including green-glazed Grimston).

6 medieval/post-medieval pottery sherds.

Post-medieval pottery sherds (including lead-glazed earthenware), glass and hone fragments. (Information from NCM accessions book; no card received by NAU to May 1984).

E. Rose (NAU), 31 May 1984.

April-May 2017. Metal-detecting. Site extended to the whole field. [2].

1 medieval coin.

Information from PAS export.

A. Beckham (HES), 24 May 2017. Amended E. McDonald (HES), 6 June 2017.

Monument Types

- FINDSPOT (Roman to 19th Century - 43 AD to 1900 AD)

NHER16775 Multi-Period Finds Less than 400m From Site 5 Boundary

Record Details

NHER Number: 16775
Type of record: Find Spot
Name: Multi-period finds

Summary

Prehistoric flint [flakes](#), together with [medieval](#) and [post medieval](#) pottery fragments were found on the surface in 1979.

Images - none

Location

Grid Reference: TM 2256 9287
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF16775-Multi-period-finds&Index=37&RecordCount=90&SessionID=9be485de-e581-4a60-a9fb-5ef6f8d18687>

Full description

1979. Surface finds.
 Flint flakes.
 Seventeen sherds medieval pottery.
 Rim sherds of late medieval/Transitional ware.
 Post medieval sherds, including five of 18th century stoneware.
 Mrs. A. Lawson (NCM) 1979.

Monument Types

- FINDSPOT (Prehistoric - 1000000 BC to 42 AD)
- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)

Associated Finds

- LITHIC IMPLEMENT (Lower Palaeolithic to Late Iron Age - 500000 BC to 42 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER16774 Multi-period Finds Less than 400m from Site 5 Boundary

Record Details

NHER Number: 16774
Type of record: Find Spot
Name: Multi-period finds

Summary

Part of a prehistoric flint blade, together with large quantities of medieval and post medieval pottery fragments were found on the surface in 1979.

Images - none

Location

Grid Reference: TM 224 928
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF16774-Multi-period-finds&Index=36&RecordCount=90&SessionID=9e894bd5-3ae9-4afc-a822-50159289331a>

Full description

1979. Surface finds.

Large quantity 12th to 15th century sherds.

Nine sherds stoneware (one 16th century, one 16th to 17th century, others later). Large numbers of late medieval/Transitional and post medieval sherds.

Broken flint blade.

Mrs. A. Lawson (NCM) 1980.

Monument Types

- FINDSPOT (Lower Palaeolithic to 19th Century - 1000000 BC to 1900 AD)

Associated Finds

- BLADE (Lower Palaeolithic to Late Iron Age - 500000 BC to 42 AD)
- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER14865 Large Quantity Medieval Pottery Found 600m from Site 5

Record Details

NHER Number: 14865
Type of record: Find Spot
Name: Medieval and post medieval pottery finds

Summary

Fragments of [medieval](#) and [post medieval](#) pottery were found on the surface in 1979.

Images - none

Location

Grid Reference: TM 2262 9271
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF14865-Medieval-and-post-medieval-pottery-finds&Index=25&RecordCount=90&SessionID=1776c04b-349f-4dc2-9853-3ade43d987b4>

Full description

1979. Fritton, north of Hall. On surface.

Large quantity of 13th to 15th century sherds, Eleven sherds late medieval/Transitional and one rim sherd; four sherds and two rims post medieval, all glazed.

Information from NCM, 8 May 1979.

Monument Types

- FINDSPOT (Medieval to 19th Century - 1066 AD to 1900 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)
- POT (Post Medieval - 1540 AD to 1900 AD)

NHER15039 Medieval Pottery Find

Record Details

NHER Number: 15039
Type of record: Find Spot
Name: Medieval pottery find

Summary

A fragment of [medieval](#) pottery was found in 1979.

Images - none

Location

Grid Reference: TM 228 926
Map Sheet: TM29SW
Parish: [MORNINGTHORPE](#), SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website

<https://www.heritage.norfolk.gov.uk/record-details?MNF15039-Medieval-pottery-find&Index=2&RecordCount=1&SessionID=6b48f888-b023-4a68-9b01-0a9a896c238c>

Full description

Spring 1979. 'Hilly Pasture' (east of Fritton Hall).
 One small medieval sherd.

Monument Types

- FINDSPOT (Medieval - 1066 AD to 1539 AD)

Associated Finds

- POT (Medieval - 1066 AD to 1539 AD)

Houses/Dwellings listed on the Norfolk Heritage Record

There are many houses shown on the introduction map that are listed on the Norfolk Heritage Register. The majority of these are also Listed properties, but the one below (Spinney Lodge) has not been although it was originally part of the old Boyland Hall estate.

Record Details

NHER Number: 44713
 Type of record: Building
 Name: Spinney Lodge, Hempnall Road

Summary

Small post medieval house of brick, shown on map of 1840 and said locally to date from 1820 and to have been either the gamekeeper's or gardener's house for the Boyland Hall estate.

Images - none

Location

Grid Reference: TM 22756 94356
 Map Sheet: TM29SW
 Parish: FRITTON, SOUTH NORFOLK, NORFOLK
MORNINGTHORPE, SOUTH NORFOLK, NORFOLK



Following description of find taken from Norfolk Heritage Explorer Website <https://www.heritage.norfolk.gov.uk/record-details?MNF50482-Spinney-Lodge-Hempnall-Road&Index=78&RecordCount=90&SessionID=82a0e7f9-bf84-4294-9c3c-bb6860f3f8c9>

Full description

Small house of brick. Two storeys, gabled east to west. Three bays to south; central bay has door behind later porch, blank above. Single storey bay windows each side are of around 1900. Internal stacks of paired square shafts, and similar stack at rear serving kitchen fireplace in rear pentise. Original plan was therefore central straight staircase in line with door, principal room to each side, kitchen and larder in pentise. Moulded arched recesses each side of east gable stack. Building shown on (S1) and said locally to date from 1820 and to have been either gamekeeper's or gardener's house for Boyland Hall estate. Large rear wing added in mid 20th century. (S2) in file.

E. Rose (NLA), 1 July 2006.

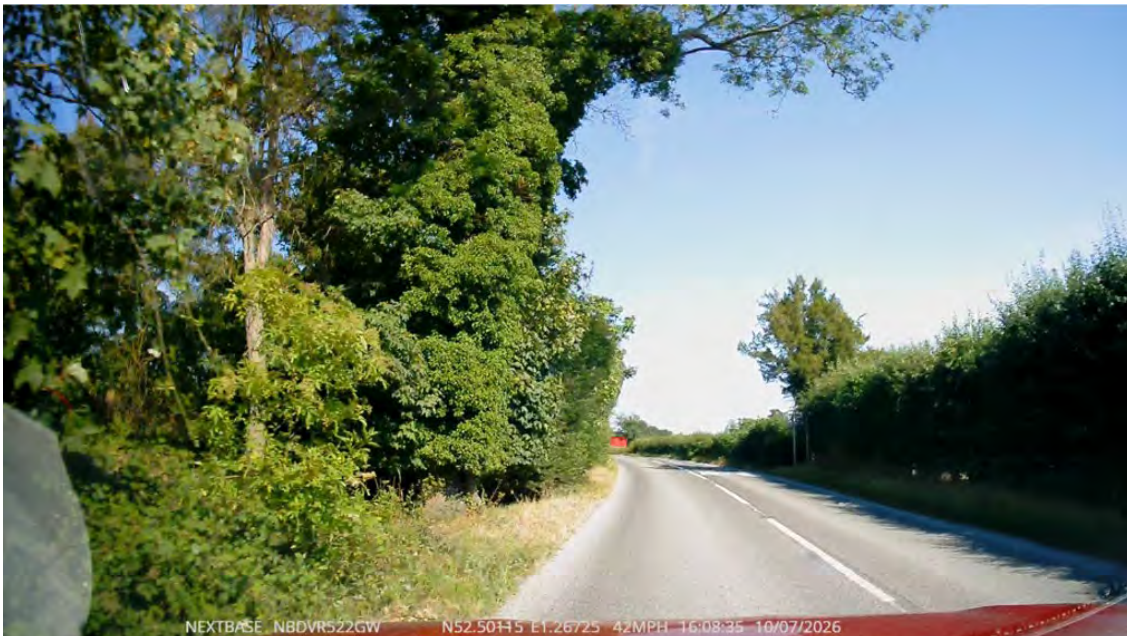
Monument Types

- HOUSE (Post Medieval to 21st Century - 1540 AD to 2100 AD)

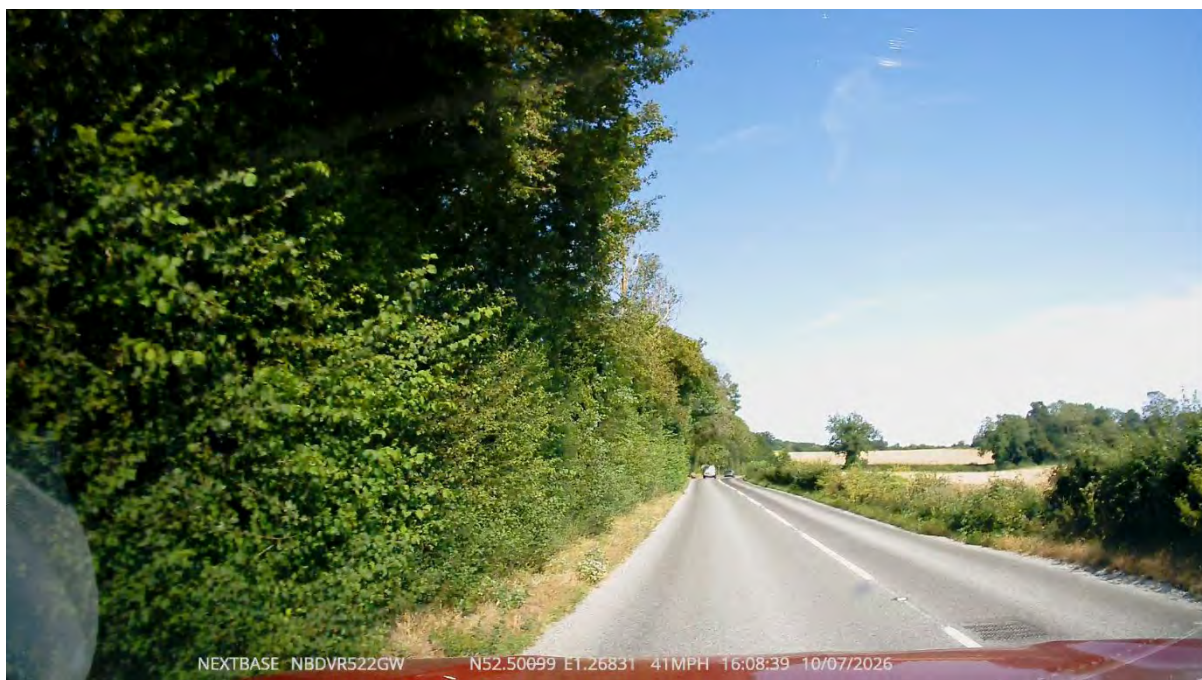
Appendix 3 – Driven experience. Views of Site 5

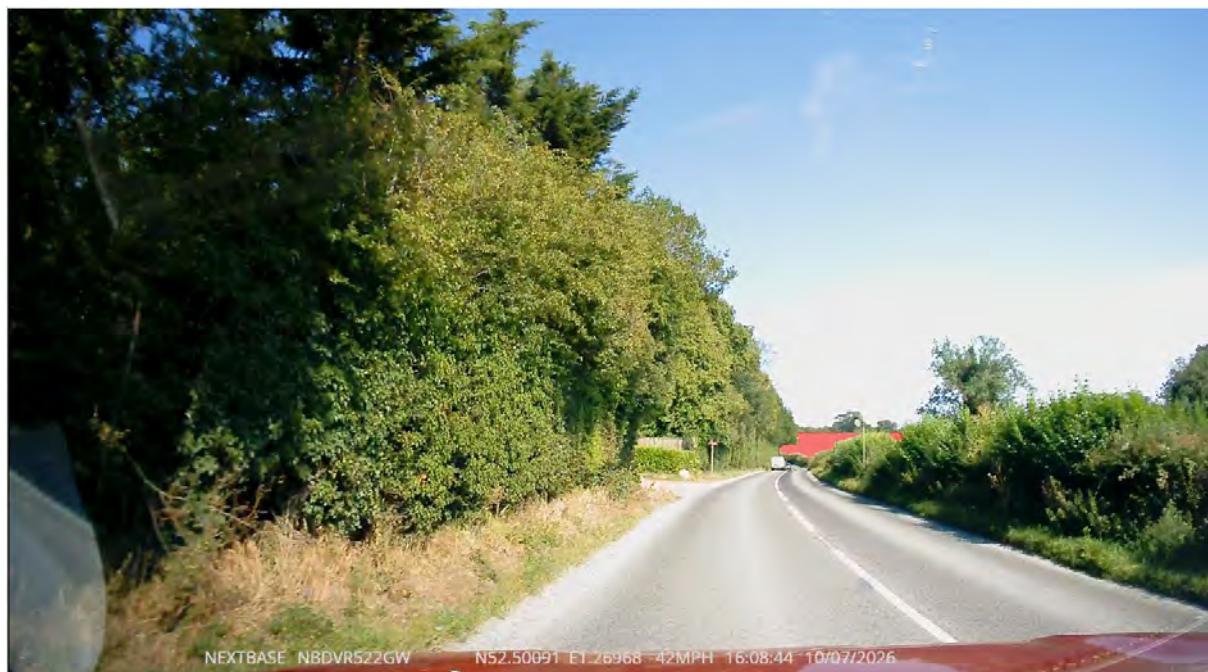
This section contains stills from dash cam footage along with annotated version to highlight the position of Site 5 (Highlighted on second photo in red). It aims to demonstrate that the undulation and bends in the road result with Site 5 becoming visible early and that the view disappears and reappears increasing the impacts from any industrialised structures on this site.

Heading from A140 towards Hempnall, just past Hall Farm the first sightings of Site 5









Views of Site 5 go as far as the line of the proposed access point A24, making the entire front northern section of Site 5a clearly visible from the road.

From the following photos, by tracking the progress of one individual vehicle, the rise and fall of the B1527 at this point can be seen. The field with ripe wheat is Site 5.

