West Wratting Parish Council

Response to the request for comments on the Scoping Environmental Impact Assessment (EIA) Report for Kingsway Solar

West Wratting Parish Council has reviewed Kingsway Solar's scoping Environmental Impact Analysis (EIA) report and listened to the views of concerned members of the community we represent. In the comments presented here we highlight matters that we believe the applicant has wrongly proposed to scope out of the EIA, matters that they have inadequately scoped in, and some matters they have omitted entirely. Where necessary we also point out factual errors in the scoping EIA report.

The following bullet points summarize our key concerns, but other very important points are not listed here so our entire document should be read in detail.

- The scoping report has been put forward too early with too little information about the
 design of the scheme. The design should have been taken to a more mature stage
 before the scoping EIA report was presented to the planning inspectorate and to the
 statutory consultees for comment.
- The scoping report has clearly been rushed, particularly with regard to the late addition of area C, which requires much more rigorous justification for its inclusion in the scheme.
- Surveys of biodiversity that have already been completed for areas A and B must now be carried out in full for area C; the applicant's claim that the A and B results can be used for C are clearly wrong given the different landscape character of area C.
- The scoping EIA's risk assessment for Major Accidents and Disasters is cursory at best and cannot possibly justify the scoping out of this important matter from the EIA. The applicant needs to carry out a much more rigorous risk assessment exercise on hazards that they have failed to even consider in this scoping report. The risk assessment must explicitly acknowledge the high level of uncertainty related to the 'experimental' nature of such large-scale solar farms and the expected increase in extreme climate events during its 40 year working life.
- It is essential that the risk of a Major Accident or Disaster caused by fire in the scheme's Battery Energy Storage System (BESS) is scoped in for further assessment as part of the EIA. We have particular concern about the close proximity to numerous dwellings in area C, but the suitability of the entire scheme area for BESS must be seriously questioned because water used to put out a lithium battery fire could contaminate the underlying principal chalk aquifer that supplies water to the whole of Cambridgeshire.
- The scoping EIA inadequately assesses the risk to a regional source of groundwater during the operation phase of this development. Groundwater must be scoped-in for further assessment in the EIA and ES.

- Because of the numerous errors and oversights in the scoping EIA report related to water this topic must be further assessed in the EIA for inclusion in the ES.
- The applicant's claim that there is less BMV agricultural land in areas A and B than found by earlier analysis must be treated with caution until there is full transparency about the testing methodology and/or the survey is confirmed by an independent source.
- There has been insufficient effort to justify the use of BMV land by the proposed solar farm. A much more rigorous case needs to be presented by the applicant that they were unable to find any suitable location with non-BMV land.
- Parish Councils are not listed as consultees in relation to landscape and visual matters. As the closest layer of local government to many of the key receptors being assessed within the Landscape and Visual Impact Assessment (LVIA) our advice should definitely be sought.
- We can advise from our local knowledge that the existing local roads are not currently suitable for carrying the expected volume of construction HGVs, particularly in the case of area C, Six Mile Bottom Road and West Wratting High Street.
- The Population baseline conditions for area C have not been adequately researched and the list of community assets for West Wratting is incomplete. The section on development land and businesses does not mention area C at all. Population matters, including the impact of the solar farm development on resident's health, must be scoped-in to the EIA.

Background about West Wratting

Character and nature of our community

Most of the ~200 houses in West Wratting are situated close to the High Street with others in more isolated parts of the parish. Many of its ~500 residents have lived in the village for a large proportion of their lives while others have chosen to move to West Wratting in order to enjoy the countryside. In choosing to live here they sacrifice good transport links and the convenience of having a local shop in order to enjoy a more peaceful country lifestyle. Many residents, particularly the dog walkers, enjoy the rural setting for regular walks on unpaved footpaths where we can enjoy seeing the changing seasons as arable crops grow, ripen and harvest, and trees come into leaf offering refuge for wildlife.

There is a good community spirit within our village which is evident when visiting the monthly café held in our village hall. Our Church has regular services and seasonal events such as Easter egg hunts, barbecues, and village fetes in the church grounds. These events bring all age groups together.



Figure 1. New Year's Day walk on footpaths around West Wratting Park 1/1/24



Figure 2. In the grounds of Saint Andrews Church 2022

The landscape of West Wratting and the development areas

The solar farm's development areas A and B are in a chalk hills landscape (7A in figure 3), whilst area C is a wooded claylands landscape (4D, 4E). The entire area of the proposed solar farm is on landscape classified as good condition with strong character, which the Greater Cambridge Shared Planning's landscape assessment judged to need a management strategy to "conserve" so that the local distinctiveness and sense of place are appropriately protected, managed and enhanced.

The parish of West Wratting - which contains ~65% of the solar farm area - includes both chalk hills and wooded clayland landscape

Eastern chalk hills landscape

The chalk hills Landscape Character Area (LCA), 7A in figure 3, is a gently rolling rural landscape dominated by large scale arable production. All of development area A and most of area B are in this LCA. Its fields are large with a regular pattern, enclosed by low hawthorn hedgerows. Key characteristics are scattered broadleaf, coniferous and mixed shelterbelts, as well as lines of trees planted along roads. The 13 wind turbines at Wadlow Wind Farm in West Wratting parish are prominent features on the skyline of many views. Other than a few isolated houses there are no areas of habitation in areas A and B.

In this area Fleam Dyke is a distinctive historic linear feature, as is the Roman road which forms the southwestern boundary. Both are sites of special scientific interest (SSSIs). The Harcamlow Way long distance path follows the route of Fleam Dyke, which contains a fragment of lowland calcareous grassland that adds diversity to the otherwise simple landscape. The E2 European Long Distance Route follows the route of the Roman road, and the ancient Icknield Way trail follows straight tracks and roads in the northeast. These walking trails provide connectivity with the generally sparse Public Rights of Way (PROW) network elsewhere in this landscape area, and connect to recreational and historical features in neighbouring LCAs.

Wooded claylands landscape

Area C of the scheme is mostly a wooded claylands Landscape Character Area, 4D and 4E in figure 3, which is a rolling, tranquil, rural landscape with scattered and some ancient woodland. Arable fields are generally large, enclosed by well-trimmed, sometimes gappy hedgerows with occasional hedgerow trees, and straight open ditches.

The small villages of West Wratting and Balsham are linear and have a wooded setting, with mature hedgerows and trees that contribute to their rural character. These settlements are interspersed with isolated farms. West Wratting Park (Grade II*) forms the eastern edge of West Wratting village, introducing parkland character to the landscape with enclosing fields that give it a soft edge. The landform and woodland cover combine to create long expansive views which extend to distant wooded skylines. The area generally has a remote, rural character.

The routes of the historic Icknield Way and Harcamlow Way pass through this LCA, linking the area with historical and ecological sites in neighbouring LCAs. Part of their route is along the distinctive linear Roman Road in the south of the LCA.

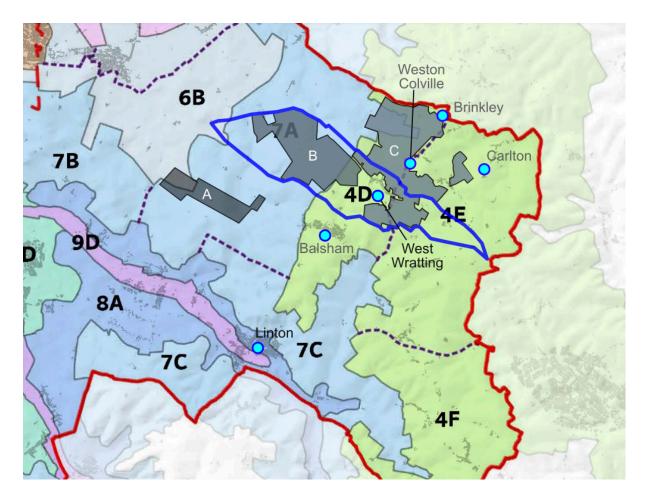


Figure 3. The boundary of West Wratting Parish (blue) and the solar farm areas A, B, C (dark gray) superimposed on the landscape character map (figure 4.1) from the Greater Cambridge Shared Partnership's Landscape Character Assessment¹.

General difficulties and uncertainties

There are a few general difficulties and uncertainties with the scoping EIA report mostly relating to its lack of sufficient information. In addition, errors in earlier chapters (corrected in later sections) reveal that some parts were written before area C was added to the scheme, whilst other parts appear to have been copied from documentation about other NSIP solar farms, e.g., the list of directions and distances of habitats from the solar farm in section 4.11.6 suggest it is copied from the Sunnica documentation.

Perhaps the biggest uncertainty results from the inherent unreliability of data about the design, installation and operation of such an unprecedentedly large-scale solar industrial facility. This means that the requirement to identify "any difficulties, uncertainties and assumptions" (4.5.5) must be rigorously met in the EIA. This point is particularly relevant to the final claim in 4.7.1 that the 'worst-case' scenario of the decommissioning phase will be

¹ Greater Cambridge Shared Partnership *Landscape Character Assessment* (2021). https://consultations.greatercambridgeplanning.org/sites/gcp/files/2021-08/LandscapeCharacterAssessment_GCLP_210831_Part_A.pdf

carefully assessed by the EIA. Since decommissioning will not begin until 2070, there is very limited ability to genuinely assess this period, and this self-evident knowledge gap should clearly be stated as a major risk in and of itself.

At this stage the internal layout of the scheme (e.g., position of solar panels, batteries, etc.) has not been published. In fact the scoping report repeatedly says "the detailed design of the Scheme is still emerging, as are the environmental surveys and assessments required to support the planning and EIA process". Section 2.5.3 tells us that the applicant intends to use the 'Rochdale Envelope' approach² to delay finalising details of design, with some of them possibly not being decided until after the development consent order (DCO) is made!

It's currently unclear if or how land used by Wadlow Wind Farm (in area B) will be used by the solar farm, which appears to occupy the same space in published plans. This creates lots of uncertainty about how Fleam Dyke will be affected by Kingsway solar farm.

The design of the scheme should have been taken to a more mature stage before the scoping EIA report was presented to the planning inspectorate and to the statutory consultees for comment; in our opinion it was rushed through too early in the design process.

Choice of location (alternatives considered)

Chapter 3 of the scoping EIA report discusses "the reasonable alternatives studied by the applicant" that must be included in the environmental statement (ES). We posit that the route by which the applicant arrived at the area considered in their scheme was much more haphazard than they describe in sections 3.2.2 onwards; this is particularly true of area C. which was clearly added to the plan sometime after parts of the scoping EIA report had been written.

The sole criteria offered in 3.2.2 of finding 'sufficient land offered by willing landowners' proximate to the grid is neither a logical nor credible basis for identifying the 'best' site for such a vast solar industrial complex. Particularly in light of the explicit planning protection of the rural open countryside, Best Most Versatile (BMV) arable land, residential amenities and water protection, the claim in 3.2.4 that 'careful consideration of site options' led to the selection of area C is self-evidently false.

Material presented by Kingsway in March 2024 (that we have on record³) stated that the original parcels of land, A and B, were chosen primarily because they could use the existing national grid infrastructure. That encouraged some initial local support for the scheme and enabled them to obtain provisional lease agreements from some landowners. Despite that grid connection no longer being available the applicant has chosen to continue with A and B

² Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope, https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-n ine-rochdale-envelope

³ Kingsway Solar Farm, Balsham Parish Council Introduction Meeting, 18 March 2024 https://westwratting.org.uk/wp-content/uploads/2024/12/240318 Kingsway-presentation.pdf

in their plan by adding the development of a new ~15 km pylon link to a substation that has not yet been built. The applicant is also now saying that the main reason for including areas A and B in their plan is that they have agreement from the landowners. The argument has switched! We agree with Brinkley Parish Council's comments in response to the non-statutory consultation⁴ that the selection process was perverse and a more rigorous process should have been used to establish possible locations where the least harm would be caused.

The Table in 3.2.5 outlining environmental considerations in site selection simply notes the presence of several sites of special historic, ecological and scientific importance but does not say anything about how the significance of these sites was, will be or should be assessed. In addition, this table substantially underestimates the degree of flooding in the area - particularly in area C around Weston Colville.

Although it is noted in 3.2.6 that topography and aspect were considered in selection of the site(s), it is not at all clear how this was factored in. Large parts of areas A and B are elevated, and thus would create highly visible industrial facilities which could be seen from several miles away. Other areas, for example, slope due west, making them especially ill-suited for solar energy generation.

Section 3.2.1 says that site selection was informed by local planning policies for the relevant county and district councils. A development of this scale in this landscape clearly contravenes those local policies. In reality the local planning policies are being ignored. Similarly, section 3.2.4 says that a key factor in choosing the location was land characteristics and environmental qualities; this is despite the fact that the three land areas have a "rolling rural landscape" - making it impossible to screen large areas of land from the historic linear features in this area (Fleam Dyke, Ickneild Way, etc.) - and that the underlying principal chalk aquifer calls into question the <u>safety of including BESS</u> as part of this scheme.

Table 3-1 states that "Consideration was given to the proximity of nearby sensitive human receptors which include residential dwellings, populated areas and villages". This may well be another example of something that was written before area C was added to the scheme; it can possibly be considered true for areas A and B, but is definitely not true of area C which effectively surrounds several villages with a combined population of more than 1500 people—with more houses being built. That claim goes on to say "The Applicant also considered the location of PRoWs in the area and sought to identify a site which would reduce impact on these routes". Again, this must have been written before area C with its numerous PRoWs was added to the scheme, and is inconsistent with what is stated elsewhere in the report⁵.

We believe that in truth area C has been added to the scheme late and in a particularly careless way. There is currently no Land Use Framework in the UK but the most respected

⁴ Brinkley Parish Council: Response to non-statutory consultation re Kingsway Solar Proposals https://westwratting.org.uk/wp-content/uploads/2024/12/20241212-Kingsway-Solar-stage-one.pdf

⁵ e.g., Section 6.8.5 says "There are numerous PRoWs which are within, intersect or are located within 500 m of the site", and paragraph 2.4.31 acknowledges that of the 174 PRoW inside the scheme, the largest number are in area C.

work to identify where solar panels should be located⁶ shows suitable land in the vicinity of areas A and B but not C.

In summary, the environmental statement needs to present a much more rigorous justification for the inclusion of area C in the scheme than is suggested by chapter 3 of the scoping EIA report.

Major accidents and disasters

Section 5.6 concerning the risk of major accidents or disasters significantly downplays the need to assess these risks, and their potential impact, on the grounds that: a) such events are by definition rare, b) the existing guidance at national and international level already covers them and c) risk management will be continually built into the scheme as it evolves. These justifications are insufficient, and this section is one of the most problematic in the entire scoping EIA report. We strongly contend that major accidents and disasters must be scoped-in for further assessment in the EIA and ES.

BESS safety

The proposal to exclude major accidents and disasters from the scope of the EIA despite recognising (in table 5-2) that there is a fire risk associated with the Battery Energy Storage System (BESS) shows that the applicant has not adequately researched this topic. The massively simplistic justification that "the mitigation in place is generally sufficient to manage vulnerabilities to major accidents and/or disasters without the need for additional mitigation in most circumstances" (5.6.6) and that "no significant effects in relation to major accidents and disasters are anticipated" (5.6.6) shows that the applicant does not understand the impact of such an event both locally and regionally - and alone justifies the need for this matter being included for further assessment in the EIA and ES.

BESS fires are rare but when they do occur the impact is severe and potentially life threatening so the overall risk is undeniably high as detailed in numerous articles⁷ and in advice from the National Fire Chiefs Council⁸. It is certainly not comforting to read in section 2.10.8 of the scoping EIA that "all safety concerns around the BESS element are addressed in so far as is reasonably practicable". From what has been learnt from BESS fires at fairly

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⁶ How England can produce more onshore renewable energy fast, Friends of the Earth and Environmental Intelligence Centre at Exeter University (2024),

https://policy.friendsoftheearth.uk/insight/how-england-can-produce-more-onshore-renewable-energy-fast and particularly the map at

https://mapst.ac/foe/onshore-renewables-england#12.13/52.13775/0.30297

⁷ e.g., *Safety of Grid Scale Lithium-ion Battery Energy Storage Systems*, https://www.researchgate.net/publication/352158070_Safety_of_Grid_Scale_Lithium-ion_Battery_Energy_Storage_Systems

⁸ Grid Scale Battery Energy Storage System planning – Guidance for FRS, https://nfcc.org.uk/wp-content/uploads/2023/10/Grid-Scale-Battery-Energy-Storage-System-planning-Guidance-for-FRS.pdf

small scale facilities (~1 MW) experts have warned that a fire at a very large facility (>100 MW) would have very severe and potentially catastrophic consequences⁹.

Lithium batteries burn intensely and all current designs likely to be used for this project produce a mixture of combustion products that includes hydrogen fluoride, HF, the most highly corrosive acid¹⁰. The dangerously toxic plume of acid vapor can be dispersed over many kilometers by the prevailing wind, and the cooling water that must be used to prevent escalation of the fire to other battery units becomes contaminated with the acid. The scoping EIA acknowledges that there are risks of the contaminated fire water entering surface watercourses or the ground (2.7.37), which is particularly concerning given the scheme is situated over a principal chalk aquifer (2.4.22) that is of regional importance in supplying drinking water to Cambridgeshire, Suffolk and further afield.

Many experts in this area agree that because of the fire risk and, in particular, the consequential spreading of HF, sizable lithium batteries should not be located anywhere near urban areas, as in this proposal involving West Wratting, Weston Colville, Brinkley, Carlton and Balsham. A safe distance is difficult to determine as it depends on atmospheric conditions, but an absolute minimum distance should certainly be no less than 1 km if adequate warning and evacuation measures are in place. Were an atmospheric temperature inversion to coexist with the fire, the safe distance would be significantly greater, and at least twice that distance. The possible repercussions in terms of substantial legal claims for injury due inhalation of significant doses of HF by occupant in dwellings downwind of a battery fire must be very significant.

There needs to be a much more rigorous justification from the applicant for positioning lithium-ion batteries anywhere near residences or over a principal aquifer, and information about the layout and mitigation measures needs to be comprehensive and detailed; it also needs to be in the EIA, not just in a outline Battery Safety Management Plan as proposed in section 2.7.19.

Other

Battery fires are only the most obvious known risk to the solar farm that may arise before decommissioning of the solar farm begins in 2070.

The increasing incidence of extreme climate events is the most obvious cause of potentially catastrophic damage to the solar farm with potentially serious colloquial damage to nearby villages. Events in 2024 have shown this is not just alarmist talk, with significant damage occurring to the 50 MW Porth Wen Solar Farm in Anglesea¹¹ caused by wind during a storm,

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⁹ Arizona regulator warns of 'unacceptable hazards' of lithium batteries, https://www.batteriesinternational.com/2019/08/28/arizona-regulator-warns-of-unacceptable-hazards-of-lithium-batteries/

¹⁰ Review of gas emissions from lithium-ion battery thermal runaway failure - Considering toxic and flammable compounds, Bugryniec et. al. J. Energy Storage, 87 (2024) https://doi.org/10.1016/j.est.2024.111288.

¹¹ Solar Farms and Wind Turbines Tested and Failed by Storm Darragh, The Civil Engineer, https://www.thecivilengineer.org/news/solar-farms-and-wind-turbines-tested-and-failed-by-storm-darragh

and hailstone damage to the 350 MW Fighting Jays solar farm in south-east Texas¹². Based on current climate predictions similar events in the area of Kingsway solar farm are not just possible in the next 45 years, but inevitable.

A related subject is flooding. The environmental Agency warns that the risk of flooding is increasing¹³, with potentially 1 in 4 homes affected by 2050. Local knowledge tells us that area C of the scheme - particularly around Weston Colville - is already prone to flooding, and this will inevitably get worse. For this part of the EIA the applicant is wrong in simply using current data to assess risks to the solar farm and to conclude that "the majority of the Site is within Flood Zone 1, and therefore considered to be low risk"¹⁴.

Other security issues are of human origin including the targeting of solar farms during warfare, vandalism, security breaches, data theft, mismanagement, misconduct, fraud, bankruptcy and market failure. At the very least an acknowledgement of the huge uncertainty surrounding the actual risks of this vast half-century industrial scheme should be acknowledged.

Summary

It is essential that the risk of a major accident or disaster caused by fire in the BESS is scoped in for further assessment as part of the EIA and therefore considered in the ES. This is particularly the case in relation to area C which is in close proximity to numerous dwellings.

As part of the EIA the applicant needs to carry out a more rigorous risk assessment exercise on other hazards that they have failed to even consider in their cursory review, summarized in table 5-2; that simplistic listing of four items paired with reassuring prose is not a good example of responsible industrial planning.

Agricultural land classification

In the scoping EIA report section 6.4.5 (repeated in 6.8.5) the applicant says that a site-specific Agricultural Land Classification (ALC) survey was completed in spring 2024 for areas A and B and gives percentages of soil types (1 to 4) that were found to be present. They claim that 45.9% land in areas A and B is of grade 3a or better, and so is considered Best Most Versatile (BMV). This is a downgrading of the previous classifications for this land which found that all this area is BMV^{15,16}. Another ALC survey is planned for area C in early 2025.

¹² 'Golf ball-sized' hailstorms damage Fighting Jays solar project; Array launches hail tracking software. https://www.pv-tech.org/hailstorms-fighting-jays-solar-project-array-hail-tracking-software/13

https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment

¹⁴ Concerns about the <u>Assessment scenarios to be considered by the EIA</u> are considered elsewhere in this document.

Agricultural Land Classification map Eastern Region (ALC008), https://publications.naturalengland.org.uk/publication/127056?category=5954148537204736
 Likelihood of Best and Most Versatile (BMV) Agricultural Land (ALC020), https://publications.naturalengland.org.uk/publication/6205542189498368?category=5208993007403 008

The applicant's new survey is not referenced in any way so the stated ALC grades need to be viewed with some skepticism. Other applicants for solar farm projects have previously published the results of surveys that downgraded the quality of agricultural land using unspecified methodologies that were later shown to be incorrect by further independent surveying. The results presented by the applicant in the scoping EIA will need to be challenged by local authorities for this scheme.

In an early section of the scoping EIA report (table 3-1 in 3.2.5) the applicant says that "planning policy seeks to minimise impacts on the best and most versatile (BMV) agricultural land (defined as grades 1, 2 and 3a) but it doesn't preclude its use for solar development and nor should it be a predominating factor in determining its location. Policy simply establishes a preference for development on land graded 3b, 4 or 5 and to utilise previously developed land, brownfield land, contaminated land or industrial land where possible". Essentially the applicant is making an early case to ignore the guidelines from pretty much everywhere that solar farm developments should avoid using BMV cropland where possible 17 including National Policy Statements (NPSs) 18. This is in preparation for the scheme causing "likely significant effects relating to the availability of BMV agricultural land (adverse effects during all three phases)", as stated in section 6.4.7.

In summary, we believe the degraded land classifications of areas A and B (and probably likewise for area C) should be treated with caution until there is full transparency about the testing methodology and/or the survey is confirmed by an independent source. Moreover, we think there has been insufficient effort (in section 3) to prove why the loss of BMV is justified, and a much more rigorous case needs to be presented that it was not possible to find non-BMV land that was available for lease and at a similar distance from a connection point to the national grid.

Landscape and visual amenity

Section 6.2 of the scoping EIA considers the effect of the scheme on landscape and visual amenity. In some respects, this scoping report pre-judges the outcome of the EIA; this cannot be right. We strongly contend that the scale, geographical extent and duration of the proposed development will cause widespread substantial and significant adverse landscape impacts, and prolonged adverse visual impacts¹⁹. These will be felt most keenly by the residents of West Wratting, Weston Colville, and the other villages that are in such close proximity to the scheme, particularly Area C.

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¹⁷ Planning guidance for the development of large scale ground mounted solar PV systems, Building Research Establishment (BRE),

https://files.bregroup.com/solar/KN5524_Planning_Guidance_reduced.pdf

NPS EN-3 - Renewable energy infrastructure, paras 3.10.14-3.10.16 86
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114
7382/NPS EN-3.pdf and EN-1 Overarching National Policy Statement for Energy, para 5.11.12
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114
7380/NPS EN-1.pdf

¹⁹ This is using the methodology of appendix C to judge the magnitude of the effect arising from the scale, geographic extent and duration of the scheme as 'substantial' for all residents, and the significance of change both for the region and community as 'significant'.

The effect on residents

We maintain that the residents are not just affected by the impact on their public views and public visual amenity (i.e., the adverse effects on views and visual amenity at their place of residence, which is less important to planning as mentioned in 6.2.11) because as rural people their lives are intimately related to the landscape in which they live - probably more so than for urban dwellers. Consequently, the imposition of large scale utilitarian objects in the rural landscape that the residents love so dearly will cause them genuine grief.

This may not be obvious to people who are not themselves from a rural community. For example, the scoping EIA implies in section 6.2.5 (baseline conditions on visual receptor: settlements) that these changes won't impact the residents because the "inward looking nature of many of the settlements" will limit views of the scheme. To say "there is theoretical potential to see elements of the scheme from the edges of these settlements" pre-judges the outcome of the EIA and suggests that it was written by somebody who doesn't understand how rural dwellers live in their landscape. We don't just live on our high streets or view the outside world from the edge of our settlements. We live here because we have chosen to belong in the countryside. We get out and walk the pathways around our villages almost every day and so look beyond the settlement in which we live. In this respect the residents are also the main "recreational users of PRoW [that] would likely be the most sensitive visual receptors of any change in the landscape associated with the Scheme", as recognised in section 6.2.5 (baseline conditions on visual receptor: recreational routes).

The effect on West Wratting and PRoWs

The description of 'Landscape context' in section 6.2.5 of the scoping EIA does not mention any of the villages near areas A, B or C; instead it mentions villages and houses that are 12 km away and North of the A14, close to the recently approved Sunnica solar farm; this section appears not to have been written for this NSIP.

In section 6.2.5 on 'Visual receptors' the settlement of West Wratting and Weston Colville are described as "directly adjacent to Developable Area C". This is a poor and perhaps misleading description given that these villages are essentially surrounded by the development, as can be seen in figure 3 and figure 4. For example, from the West Wratting village centre from a North West direction right round to Southwest - over 270° - the village is surrounded by Area C. The text in this section also incorrectly says that just the outer edges of West Wratting are within the ZTV, which is the zone where the solar panels and substation are theoretically visible, but figures H1 and H2 clearly show that West Wratting is entirely inside the ZTV, as are Weston Colville, Weston Green, Willingham Green and most of Carlton. In and around these villages there will be more than just "distant and filtered glimpses" of the solar farm infrastructure. The huge scale of the development in area C means that the landscape immediately around the village will be changed from rural beauty to an industrial power station, and we will lose the countryside environment in which we've chosen to live.

The description in section 6.2.5 of the effect of the change in landscape and visual amenity on public rights of way (PRoW) downplays the quantity of these routes that will be affected, particularly in area C, merely saying there are "several PRoW within the study area". Elsewhere the report correctly says "there are numerous PRoWs which are within, intersect

or are located within 500 m of the site", and paragraph 2.4.31 acknowledges that of the 174 PRoW inside the scheme, the largest number are in area C.

The potential for significant landscape and visual effects during construction, operation and decommissioning of the scheme are acknowledged in 6.2.7. There are several references in section 6 to the landscapes - both chalk hills and clay woodland - having a rolling and gently undulating character with "long distance and open views around the study area". The elevated land in the middle of area B with its 13 wind turbines is visible from many miles away, particularly along the ancient Icknield Way long distance footpath, so co-locating the solar farm there (which appears possible from the published plans) would make the new infrastructure very visible. Given the character of this landscape it's hard to understand how the applicant can say "it is likely that any significant [visual] effects would extend across a much narrower distance from the site boundary than the ZTV". Because the panels will be higher than most existing hedgerows²⁰ and because the targeted area has a comparatively hilly, rolling and undulating landscape the panels will be very hard to screen from PRoW and roads in the development areas and wider afield; we do not believe the statement in 6.2.5 that "hedgerows, shelterbelts, ... and the gently undulating topography can provide substantial screening to obscure existing vertical structures".

Use of infrared lighting

It is proposed in section 6.2 (and 2.7.32) that non-continuous sensor-triggered infrared lighting is used to mitigate the impact of lighting on landscape character and visual amenity. West Wratting welcomes this because we have chosen to not have any street lighting in the village to preserve our excellent low levels of light pollution. Table 6.2.9 does say that this approach would be used in the construction, operation and decommissioning phases, but it also says that "there may be need for occasional and temporary construction lighting". Because this exception case is poorly defined and because construction is likely to last 3 years we request that lighting impacts on landscape character and visual amenity be scoped in for further assessment in the EIA and ES. Because this matter is important enough to be planned in the operational phase the extent and duration of any exception in the construction phase needs to be more clearly defined.

Scoping questions asked in section 6.2.13

Do you agree with the proposed consultees to be engaged with on this topic? Parish Councils are not listed as consultees in section 6.2.1. As the closest layer of local government to many of the key receptors being assessed within the Landscape and Visual Impact Assessment (LVIA) our advice should definitely be sought, particularly on the selection of appropriate viewpoints.

Do you agree that the surveys proposed to inform the LVIA are appropriate? Section 6.2.4 says that surveys of the proposed developable areas were carried out during winter, spring and summer months. It seems unlikely that surveys of area C have been carried out in spring because other evidence from the report indicates that area C was added to the project later than spring 2024.

²⁰ 2.7.4 says the panels are "typically up to 3.5 m high".

Are any receptors/assets/resources not identified that you would like to see included in the LVIA?

No; however, it's important to understand how much more profoundly residents of rural villages will be affected by changes to their surrounding landscape and visual amenity than urban dwellers, as described above.

Do you agree with the proposed additional (secondary and tertiary) mitigation measures and is this mitigation appropriate?

We have to express our deep skepticism about the statement made in section 6.2.6 that "the landscape design will seek to deliver landscape enhancements over and above the requirement to simply mitigate adverse effects." Without some explanation about the details of this or examples this sounds extremely unlikely. Similarly we cannot believe that "the scheme will be designed sensitively with consideration to complementing the local character" (6.2.6). In addition, section 6.2.10. says that a mitigation strategy will be developed that will deliver significant "green infrastructure connectivity", but the applicant has already told WWPC in a private meeting that the residents of West Wratting will not be able to take direct advantage of the green energy generated by the solar farm.

Do you agree with the landscape and visual receptors that are proposed to be scoped in and out of further assessment?

On the whole yes, but we do not accept some of the judgements made in the scoping - surely, those judgements can only be made by the EIA itself. We also request that the impact of lighting on landscape character and visual amenity remain in scope.

Are there any specific viewpoints that you would like us to consider and/or illustrate as a photomontage?

Suggested viewpoints of and from heritage assets are shown in Appendix A which includes links to photographs from those viewpoints. These assets include views of the landscape from along the linear features of the Icknield Way, Fleam Dyke, Harcamlow Way and the Roman Road. It will be important to use views that will show the significance and extent of changes to the settings of the Grade II* listed buildings that are inside or on the boundary of area C. This includes land inside the scheme that is immediately adjacent to the churches at West Wratting and Weston Colville, and the large area of land to the South East of the West Wratting Park House, which was a designed parkland setting for this early 19th century manor house.

Are there any other developments which you consider it will be necessary for us to address in a cumulative landscape and visual impact assessment?

It seems unfair not to include the existing presence of 13 wind turbines in the middle of area B, and the pylons that already exist to connect them to the existing substation at Burwell.

Cultural Heritage

Listed buildings

West Wratting has 28 listed properties, many of which are in the Conservation Area that runs along the northeast side of the High Street, directly adjacent to Area C of the proposed solar farm.

Paragraph 2.4.24 of the scoping EIA report incorrectly says "there are no listed buildings within the developable areas"²¹. In fact, although there are no listed buildings in areas A and B there are three listed buildings that are well inside area C including a grade II* early 19th century manor house that is in a designed landscape setting.

- 1. II* West Wratting Park House
- 2. II Stables at West Wratting Park
- 3. II Garden Wall at West Wratting Park

There are several other listed buildings right on the boundary of development area C, including four of grade II*.

- 4. II* Windmill at Mill Cottage, West Wratting
- 5. II* Church of St Andrew, West Wratting
- 6. II Paddock Cottage, West Wratting
- 7. II* Concordia House, West Wratting.
- 8. II <u>Cromwell Cottage, Carlton</u>
- 9. II <u>Lambra Cottage Restormel Cottage, Carlton</u>
- 10. II Weston Colville Hall (surrounded)
- 11. II* Church of St Mary, Weston Colville
- 12. II <u>Barns</u>, <u>Pound Farmhouse</u> (2), Weston Green, which is missing from the scoping EIA report

In addition, there are numerous other listed buildings within a few hundred metres of development area C in both West Wratting and Weston Colville/Weston Green.

One area of particular concern is that surrounding the West Wratting Parish Church of St Andrew, which is a Grade II* listed building. Putting solar panels in the fields surrounding this would very significantly impact on the heritage value of this building, since the panels would be very visible. It would materially alter the atmosphere of tranquillity that the building currently possesses. Further, the churchyard is regularly used for community events

²¹ This is another example that shows how the scoping EIA has not been correctly updated since area C was added to the scheme. This error is corrected in section 6.

(figure 2) and not only would the visual impact of the solar panels be considerable, but the possibility of glare from panels in the south easterly direction may sometimes render the space unusable.

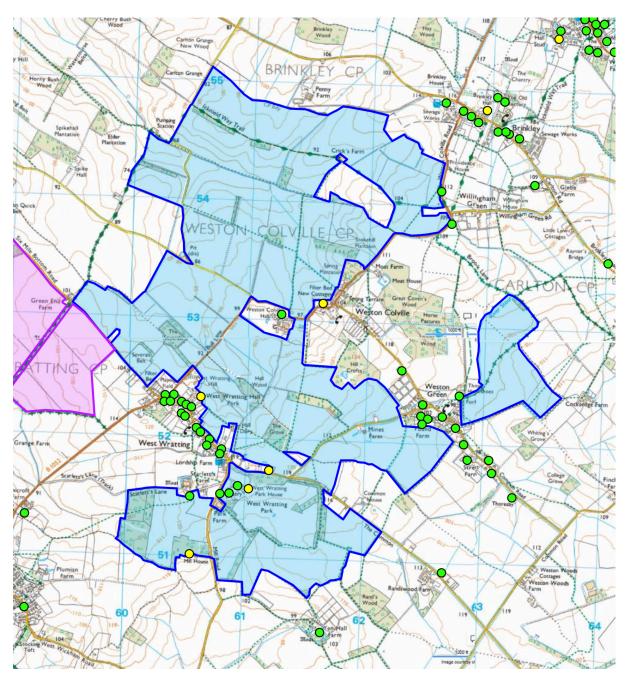


Figure 4. Listed buildings in and around area C (blue). Grade II buildings are shown in green and grade II* in yellow. It is similar to figure I10 in the scoping EIA report.

The significance of the scheme (using the methodology of appendix C) could be very large for some assets of high importance (grade II*) that are in or close to area C if their setting in the landscape is compromised by nearby and visible development. This is particularly true of the land to the South East of West Wratting Park House which has grand sweeping long distance views of an area which was once designed parkland and is now agricultural land. Obviously important views back towards the manor house from PRoWs on that land would also be compromised by development of that area.

Similarly, the settings of the churches at West Wratting and Weston Colville and of Concordia house - which are all right on the boundary of area C - must not be visually compromised by nearby solar farm infrastructure. The text of section 6.3 does not make clear the potential level of change to the setting of these assets. Section 6.8.5 says that both churches are located approximately 20 m from Area C but figure 10 shows their churchyards are immediately adjacent to the scheme boundary.

Designated and non-designated heritage assets are much more sparse in areas A and B of the scheme, but these areas and the grid connection corridor do contain the scheduled monument Fleam Dyke, and the remains of sites that were part of a prehistoric funerary landscape.

Archeology

There have been two detailed surveys of the archaeology of West Wratting and Weston Colville. According to the 1991 assessment²² the area has yielded several 'significant' prehistoric artefacts as well as later findings of equal if not greater importance - especially in the Medieval period. West Wratting and Weston Colville were 'substantial villages' by the eleventh century surrounded by 'extensive' fields, earthworks and settlement.

The 2008 report²³ is more detailed and describes numerous Neolithic and Mesolithic artefacts and tools as well as Bronze Age flints, Roman, Saxon and Medieval pottery and extensive earthworks. It concludes that the area is archaeologically considered to be a 'rich historical environment with evidence of activity from the early prehistoric period to the present', and notes that the impact of any development on any remaining archaeological evidence would be 'severe'.

Scoping questions asked in section 6.3.14

Do you agree with the proposed consultees to be engaged with on this topic? In addition to the groups and organisations outlined, other interested parties that should be consulted include Cambridge Past, Present and Future (CPPF) as well as the Fleam Dyke and Roman Road Association (FDRRA). CPPF focuses on protecting and enhancing Cambridge's historic and natural assets, while the FDRRA champions the preservation of ancient pathways and their surrounding landscapes.

²² Mines Farm, Weston Green, Weston Colville, Cambridgeshire, G.Appleby, Cambridge Archaeological Unit (2008). https://doi.org/10.17863/CAM.101217

²³ *The Archaeology of West Wratting*, R.Boast, Cambridge Archaeological Unit (1991). https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1026253

²⁴ Possibly Cambridge Historic Environment Record (CHER) MCB17379.

Do you agree with the proposed study area? Yes, but there are factors that have not been identified.

The proposed solar farm is in close proximity to <u>Sunnica solar farm</u>. Areas where the project might combine with other developments (i.e. grid connection at Burwell South) to produce cumulative impacts on cultural heritage should be assessed.

Do you agree that the data sources listed to inform the EIA baseline characterisation are appropriate?

This should also include consultations with local historians and community groups, together with any community-led projects such as the <u>Balsham Map Project</u>.

Do you agree that the surveys proposed to inform the EIA baseline characterisation are appropriate?

This section appears to be comprehensive, but this is a question that is best answered by South Cambridgeshire District Council Planning as we are not experts in this area.

Are any receptors/assets/resources not identified that you would like to see included in the EIA?

No further heritage areas identified in areas A and B.

The potential Roman villa and well in area C (described above) should be added to the lists of assets to be assessed, and there needs to be a more detailed look at the CHER records.

The impact of a solar farm on Fleam Dyke (scheduled monument) requires particularly sensitive management to preserve its cultural, archaeological, and environmental value. Any disturbance could compromise its archaeological integrity. The dyke contributes to the sense of place and continuity in the landscape, so visual or physical changes may undermine its perceived value as a historical landmark. This is particularly important in the context of any connection corridors and laying of cables (such as the connection between land areas A and B) across the Fleam Dyke path, as highlighted in section 6.3.9.

Do you agree with the proposed additional (secondary and tertiary) mitigation measures and is this mitigation appropriate?

The proposed secondary mitigation to setting (section 6.3.7) is poorly defined as "most likely involve planting and landscaping". More clarity is needed about what is appropriate for different cases. There is no mention of tertiary mitigation factors.

Do you agree with the receptors/matters that are proposed to be scoped in and out of further assessment?

Three of the listed buildings that (we assume) are scoped-in as parts of the "within the 2 km study area" group are grade II* listed buildings that are right on the boundary of area C²⁵. These will have similar sensitivity to the 9 listed buildings that are fully within the site boundary so must be treated similarly. Weston Colville Hall is a grade II listed building that is in the middle of area C and entirely surrounded by land used by the scheme. It too should be treated with the same priority as buildings that are fully within the site boundary.

We assume (and hope) that the "Construction activity [that] has the potential to directly impact on these assets ..." in column 3 of table 6.3.9 includes all activity that could physically

²⁵ i.e., the churches at West Wratting and Weston Colville and Concordia house.

damage the receptors, including indirect causes such as subsidence due to altered drainage.

Traffic and Transport

Section 6.7 of the scoping EIA report addresses traffic and transport issues, which local knowledge tells us will be considerable, particularly for the development of area C using Six Mile Bottom Road.

The traffic plan is outlined in chapter 2. Which says that "construction access will be via the four junctions along the A11, and then onto the local road network; Six Mile Bottom Road, London Road, Balsham Road and an unnamed farm access via Worsted Lodge" (2.7.33). These routes are shown on a poor quality map, figure 2.2. on page 37^{26} . Because areas A and B of the scheme are fairly close to the A11 it may be possible to minimise use of the rural roads by using existing tracks in the wind farm complex and by building some additional access roads inside the scheme boundary; however, to reach the more distant area C from the A11 considerable use will need to be made of the local roads. Unfortunately these are probably not suitable for HGV traffic, and certainly not at the suggested average volume of 80-100 HGV movements per day²⁷, excluding construction staff transportation and ancillary construction traffic (section 2.9.5). The roads between A11 and area C have little to no ability to absorb this increase in level of heavy traffic without fundamentally improving their present condition. Six Mile Bottom Road is particularly concerning.

In table 6.7.5 Six Mile Bottom Road is shown as having sufficient space for "two streams of traffic passing each other". We are sorry to say that is nonsense. Two HGVs struggle to pass each other along that road at all, and in practice even two-way continuous car traffic is not possible at most times of the year because the effective road width is narrowed by deep potholes on both sides of the road. During the winter months there are very frequent occurrences of cars needing to be recovered by the RAC, AA, etc. because their wheels were damaged by driving too close to the edge of the road²⁸. Any increase in HGV traffic will further degrade the quality of that road, possibly making it even more of a hazard for road users. Without major resurfacing along the entire 3 mile length of this road from West Wratting to Six Mile Bottom (///overlaid.stretcher.deprives to ///chatted.shape.marzipan), and widening in some locations, this road is impractical for construction vehicles. Simply adding more passing places will not be sufficient.

Near the village of West Wratting Six Mile Bottom Road has no footpath, causing residents - including school children - to have to walk on the road. This route has been classified as dangerous by Cambridgeshire County Council Passenger Transport Team due to having no visibility and no escape from traffic²⁹. Construction traffic should not be allowed to use that section of road unless a safe route is first provided for pedestrians. The High Street in West

²⁶ Elsewhere (6.7.2) reference is made to map 2-3 showing transport routes, but that does not exist.

²⁷ A parishioner who has worked on similar projects estimates ~120 HGV movements per day for a

 $^{^{27}}$ A parishioner who has worked on similar projects estimates ~120 HGV movements per day for a project of this size.

²⁸ At peak times this occurs almost daily.

²⁹ Communication to West Wratting Parish Council, 8th January 2024

Wratting (and other small villages) are also narrow, with poor or non-continuous footpaths. There must be no use of roads through the centre of villages by HGV construction traffic. Further, there are two locations in the High Street of West Wratting which are used by buses for the collection and return of both primary and secondary school children. One is close to the junction with Six Mile Bottom Road and the other close to the Chestnut pub. The safety of these children should be paramount and there should thus be no use of the High Street by non-HGV construction traffic between the hours of 07:30-09:00 and 15:00-16:30.

The quality of The Common road at the South end of West Wratting between the Mill Road and High Street junction (///yield.ranks.tweed) and the junction with Chapel Road (///streaks.ringers.toasted) is also extremely poor and would rapidly degrade further if subject to a higher volume of HGV traffic. In this case the potholes extend across the road rather than just being at the sides. This stretch of road also has no footpath, with little opportunity for pedestrians to escape from the roadway to escape traffic. Again, it must not be used by construction traffic without improving pedestrian safety and resurfacing.

Section 6.7.3 indicates there is only limited and rather old baseline data from the Department for Transport (DfT) for traffic using the roads around West Wratting. Our own community speedwatch data shows that there has been a considerable increase in traffic in the last few years. Section 6.7.4 acknowledges that "supplementary traffic surveys may be required" where data is poor, but this should be revised to "will be required". The proposal to use neutral 24 hour data is flawed because there is much seasonal variation in local agricultural traffic so sampling methodologies need to take account of this. It is noted that there is no indication at this stage of construction traffic volumes, which will only be known post-design. The EIA will have to take the full design conditions into account.

In summary, section 2.9.9 says that "existing local roads would be utilised to access the site, subject to the suitability of these roads to carry HGVs". We can advise from our local knowledge that the existing local roads are not currently suitable for carrying HGVs, particularly in the case of area C, Six Mile Bottom Road and West Wratting High Street. There is significant ambiguity in the scoping EIA around access to areas B and C, which may cause heavy traffic flows through the nearby villages. Traffic baseline data is poor, and the data collection methodology appears inappropriate for the seasonal nature of local traffic.

Biodiversity, habitats and wildlife

Section 6.1 of the scoping EIA report is concerned with the impact of the scheme on biodiversity and wildlife. Relevant surveys have already been carried out in areas A and B but not yet for area C or for the connection corridors, so these two regions are dealt with separately in the tables of matters to be scoped in and out for further assessment. We wish to question the scoping out of some receptors from areas A and B, and challenge the justification for scoping out many receptors for area C without even doing surveys.

All areas

Section 4.11.5 notes that the Habitats Regulation Assessment (HRA³⁰) exercise will be applied only for 'protected national sites' within 10 km of the scheme, but given the extensive biodiversity of the entire area affected by the scheme – which is one of the key regions of biodiversity recovery in the 'nature deprived' Cambridgeshire region as a whole – a much more inclusive range of ecologically significant habitats should be assessed. For example, although Fleam Dyke (SSSI and Scheduled Monument) is not a special area of conservation (SAC) we believe an HRA should be carried out there because it is close to areas A and B, and has distinctly different species-rich chalk scrub and grassland priority habitat that is rare in Cambridgeshire and uncommon in south, central and eastern England³¹ (page 95). An HRA should also be carried out on Lower Wood in Weston Colville and on all areas of woodland >5 acres within the scheme as many of these are home to rare and endangered species of plants, animals, fungi, insects and microbiota.

Due to the ecological importance and potential for biodiversity enhancement calcareous grassland should not be scoped out from further assessment in the EIA. It is also not acceptable to scope out brown hares as a biodiversity receptor because they are listed in the UK Biodiversity Action Plan (BAP) due to long-term decline³².

Area C

Incomplete surveying is highlighted in section 6.1.13 as a "difficulty and uncertainty", and 6.1.3 says that Area C and the connection corridors "will be subject to survey in 2025". We believe that this subject area is so important and so reliant on field surveys that the scoping EIA should really not have been put forward for consideration until after those surveys were complete.

Section 6.1.9 states:

"Whilst the Inter Array Connection Corridors and Developable Area C – East have not been subject to ecological baseline surveys, their close proximity to Developable Areas A - West and B - Central means that they are known to contain similar habitats and be subject to similar constraints to Developable Areas A and B".

As described elsewhere in the scoping EIA report and shown clearly in figure 3 area C is a distinctly different landscape character to areas A and B (being wooded clayland rather than chalk hills), so the ecology and habitats are likely to be different. This is definitely apparent to those of us who live here. Moreover, the relevant waterbodies for area C are different from those of areas A and B³³.

Because of these differences we believe section 6.1.9 is not an adequate justification for scoping out a number of receptors/matters from further assessment in area C, including:

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³⁰ The Habitats Regulations: What's at risk and how can we build on and strengthen the Regulations to be more effective for nature and people?

³¹ https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1001069.pdf

³² UK Biodiversity Action Plan, Joint Nature Conservation Committee (JNCC). https://jncc.gov.uk/our-work/uk-bap/.

³³ A and B have Swaffham-Bulbeck Lode and Bottisham Lode-Quy Water, whilst for area C the relevant waterbodies are the Stour (u/s Wixoe) and Granta.

woodlands, rivers, streams, hedgerows, reptiles, non-ground nesting birds, peregrine, barn owl and other raptors, bats, badgers, otter and water vole (table 6.1.9 from pages 157-165). Surveys of all these matters must be carried out for area C as they have been for A and B.

The error in the argument presented in section 6.1.9 (above) is emphasised by the justification that's given for scoping-out badgers from area C, which is that "the design will seek to avoid all known setts" (6.1.9 on page 164). The aerial survey mentioned on page 118 is unlikely to have located all badger setts in area C³⁴, so without carrying out a proper land-based survey as was done in areas A and B the existence of all setts will not be known.

We would like to point out that barn owls are known to nest and hunt in area B (particularly at ///mouse.snuck.humidity) and C (near ///spreads.importing.pays) in addition to area A which is mentioned on page 151 of the scoping EIA. Water vole have also lived in area C, as do many bats.

We would like to comment that the difficulties and uncertainties section (6.1.13) should include acknowledgement that most if not all research data about the effect of solar farms on biodiversity, habitat and wildlife have been generated from much smaller scale solar arrays, and there is considerable uncertainty associated with extrapolating the findings to a scheme of this size.

In summary, we must respond "no" to the scoping question in section 6.1.14 - *Do you agree with the receptors/matters that are proposed to be scoped in and out of the EIA?* The following matters must be scoped in for further assessment by the EIA and ES by carrying out surveys in area C (and the connection corridors) as they have been for areas A and B: woodlands, rivers, streams, hedgerows, reptiles, non-ground nesting birds, peregrine, barn owl and other raptors, bats, badgers, otter and water vole. Furthermore, because of its proximity to areas A and B an HRA should be carried out on Fleam Dyke, and calcareous grassland and brown hares should not be scoped out from further assessment in the EIA.

Water and flooding

The topic of water and flooding is addressed in several places in the scoping EIA document and various errors in the report indicate that it was not adequately reviewed after the late addition of area C to the scheme. For this reason water should not be excluded from the scope of the EIA, as proposed in 5.2.

In section 4.11.2 only two waterbodies are named for inclusion in a Water Framework Directive (WFD) assessment: Swaffham-Bulbeck Lode and Bottisham Lode-Quy Water. These are relevant for areas A and B, but the waterbodies for area C, Stour (u/s Wixoe) and Granta, are not mentioned. The latter two should also have a WFD assessment carried out. The Stour and Granta WFDs are later mentioned in 5.2.17 and 5.2.18.

Section 5.2.7 concerning the main rivers identified within the site boundary does not include the river Stour. This is described elsewhere as being "located to the east of the site" (5.2.8)

³⁴ e.g., the badger sett at <u>///pump.newlyweds.listening</u> is not apparent.

and ">5 km to the east of the Developable Area B" (2.4.29), but which in fact has its headwaters in area C, as clearly shown on ordinance survey maps (figure 4, grid reference TL631532). It is therefore incorrect to claim that there are "no Main Rivers" within the site.

The same watercourse is described in the Flood Map for Planning, section 5.2.25, as a 'tributary of the River Stour' that runs through the centre an isolated land parcel in area C. A field survey would quickly show that it runs, in fact, directly adjacent to Common road and Weston Green, i.e., through the very centre of the village, and through both Category 3 flood zones and adjacent to several listed buildings.

Paragraph 5.2.32 claims that there are no expected changes within the site or study area which would change the characteristics of surface water runoff, using the Water Framework Directive and Environment Agency (EA) guidance as a point of reference. However the EA has already changed how they measure surface water runoff as of their most recent report in December 2024, making this claim immediately inaccurate. It is equally inaccurate in its expectation that further changes in the amount and characterisation of surface water runoff – or other Water Directive criteria – will not change within the future lifetime of the site, which is proposed to last until at least 2070.

Section 5.2.33 lists several bullet points justifying the scoping out of water considerations, including 'raw water requirements for plant cleaning' and other purposes, but does not consider how such water would be disposed of, not the need for even larger amounts of water to be kept on site for battery accidents – all of which would need to be prevented from entering the soil or other waterways as it would have become highly toxic.

Because of the numerous errors and oversights in the scoping EIA report related to water, only some of which are outlined above, this topic must be further assessed in the EIA for inclusion in the ES.

Groundwater

As mentioned in 2.4.22 and in the Hydrogeology section of 6.4.5 "the bedrock deposits underlying the Site form a principal aquifer". Using the methodology of appendix C the importance of this is very high because the principal aquifer provides a regionally important resource. The magnitude of impact caused by contamination or reduction of this resource could be major so the overall significance is very large.

Given the importance of this topic it is concerning that groundwater contamination is scoped out for the operation phase (6.4.9). The scoping EIA report justified this by claiming it "will be appropriately protected by mitigation measures ... put in place to reduce the potential for contamination during operation, such as measures to prevent discharge, losses or fire from the BESS"; however, there is no detail about what these mitigation measures will be and no evidence presented that they will be adequate either for usual operation or in the case of a BESS fire. The applicant's simple assertion that the effects to groundwater are not likely to be significant because of the "characteristics of the operational phase" must be challenged because these 'characteristics' are not explained; this is a wholly inadequate assessment of the scheme's level of risk to the region's water supply.

The poor level of baseline understanding (e.g., "depth to groundwater is unconfirmed") indicates that hydrogeology data must be improved, including surveys of developable areas A, B and C by independent third-parties.

In summary, section 6.4 inadequately assesses the risk to a regional source of groundwater during the operation phase of this development. This must be scoped-in for further assessment in the EIA and ES.

Population³⁵ and Health

Section 5.8.4 proposes that because human health impacts will be captured by other assessments "human health is not subject to a stand-alone assessment and therefore a separate ES chapter is excluded from the scope of the EIA". Although we agree that no stand-alone assessment is needed we would prefer the relevant material from other assessments to be collected into a separate ES chapter, particularly for the topics bulleted in section 5.8.1.

As we try to explain in '<u>The effect on residents</u>' section of 'Landscape and visual amenity' there will definitely be a detrimental impact to the mental health and wellbeing of residents of rural villages that are in close proximity to the scheme - particularly so for those next to area C - who will face an immediate and enduring decline in their quality of life due to the changes. This impact on the population does not seem to be addressed anywhere in the scoping EIA document. We believe it should be part of health considerations in the EIA.

One specific area of concern is the proposed construction schedule of 07:00 to 19:00 Monday to Friday, and 07:00 to 13:00 on Saturday, with construction staff travelling to the site pre-07:00 and departing after 19:00 (for weekdays). We consider this to be unacceptable. To prevent detrimental harm to residential amenity for the majority of residents we recommended that construction hours should be limited to between 08:00 and 18:00 Monday-Friday, 08:00 and 13:00 on Saturday, and at no time on Sundays, Public Holidays or Bank Holidays.

Section 6.8.9 proposes that private properties and housing to be scoped out of further assessment with the justification that "*No significant effects are expected in relation to private property and housing*". We challenge this claim, based on an analysis of the effect of another solar farm on house prices³⁶ and on the experience of people who are currently trying to move. This definite socio-economic effect should be in-scope for the EIA with an explanation by the applicant of how they propose to mitigate this impact of their scheme.

West Wratting Parish Council

³⁵ Section 6.8 explains that the term 'population' in this chapter relates to impacts to the population in relation to the socio-economic effects which may occur as a result of the construction, operation and decommissioning of the scheme.

³⁶ The effect of Botley West Solar Farm on local house values, https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/General/General-Advice-00769-2-Attachment.pdf

Section 6.8.5 on baseline conditions has not been adequately researched for area C. The section on development land and businesses does not mention area C at all, and these (e.g., the stables and riding school) must be scoped into the EIA. Similarly the list of community assets for West Wratting is incomplete and this must be corrected when these are assessed further for the EIA. We want to mention in particular omission of the Brinkley woodland cemetery (///slimy.liquid.inventors) from the list of community land in area C.

Assessment scenarios to be considered by the EIA

We have serious concerns about the overall approach to the EIA that will be taken by the applicant, as set out in chapter 4.

Section 4.7.1 outlining the scope of the assessment scenarios employs a comparison between the *Existing Baseline* (without the proposed scheme) and the *Future Baseline* (with the scheme) for evaluating the impact of the construction, operational and decommissioning phases. Given the accelerating pace of climate change, however, this comparative framework is inadequate as it should also include a Future Baseline *WITHOUT* the scheme. Recent figures from the Environmental Agency, for example, estimate a substantial increase in surface water ('flash') flooding, concluding that by 2050 1 in 4 homes in the UK will be flooded. A proper evaluation, therefore, would not simply compare the risks now without the scheme to the risks later with it, but instead would consider the cumulative effects of the risks LATER without the scheme ADDED TO the risks introduced by the scheme itself. In other words the assessment cannot simply be comparative: it must be both comparative and cumulative. This is because future proofing the scheme crucially depends on taking into account the cumulative changes affecting the existing baseline (e.g., soil, flooding, climate), as well as the added effects of the scheme itself (heat, erosion, accidents, etc.).

Existing baseline guidance based on parameters established from past experience are by definition incomplete for a novel industrial complex of this scale and complexity – especially one that is situated directly adjacent to numerous 'sensitive receptors' including villages, hundreds of acres of valuable arable land, vital niches of wildlife and biodiversity and primary water sources. The impact assessment must be candid and honest about these considerable uncertainties, not hide them under the fig leaf of supposed risk equivalencies based on shallow data findings and misleading comparisons.

Appendix A:

This appendix shows important viewpoints that may potentially be impacted by the Kingsway solar farm scheme. Most of the views are related to cultural heritage assets, the Ickneild Way, or Fleam Dyke.

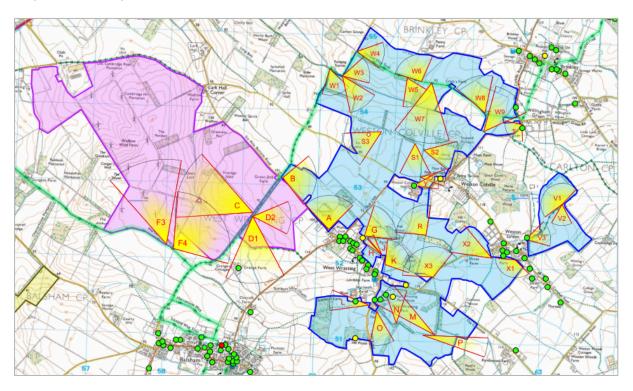


Figure A1. Important viewpoints in the development areas. Grade II buildings are shown by green circles and grade II* by yellow. Ickneild way and Fleam Dyke are shown by green lines.

A high resolution version of figure $A1^{37}$ and photographs from each of the viewpoints can be viewed online and downloaded from https://tinyurl.com/yc39pv6k

Rows with orange background are related to the Ickneild Way, or Fleam Dyke. Rows with green background are related to grade II listed buildings. Rows with yellow background are related to grade II* listed buildings.

	summary	filename	viewpoint	direction
Α	From N edge of West Wratting	A_aquatics.snacking. warmers_N.JPEG	aquatics.snacking.warmers	N wide
В	From Ickneild way at SMB road crossing	B_infringe.excavate.d evelop_E.JPEG	infringe.excavate.develop	E wide
С	From Ickneild way towards wind	C_caravan.coconut.g	caravan.coconut.gurgling	W

³⁷ https://drive.google.com/file/d/1j3Cr5v4y0ZZNAAc5vJEyQP8rI4S98CKF/view?usp=sharing

	farm	urgling W.JPG		
	Taitti	D1 bronzes.slam.nec		
D1	From Ickneild way	klaces_S170.JPEG	bronzes.slam.necklaces	S 170 deg
D2	Ickneild Way/Fox Road	D2_bronzes.slam.nec klaces_E.jpeg	bronzes.slam.necklaces	E
F3	From Fleam Dyke N	F3_mascot.renewals. weep_N.JPG	mascot.renewals.weep	N
F4	Fleam Dyke montage N-E	F4_Fleam_montage_ view.png	barmaid.damp.reset	N-E
G	From West Wratting church	G_imitate.flop.profess _NE33.JPEG	imitate.flop.profess	NE 33 deg
Н	Across horse fields to WW church	H_alike.lovely.tuck_29 2.JPG	alike.lovely.tuck	WNW 292 deg
J	Across horse fields to WW church	J_alike.lovely.tuck_N W.JPG	alike.lovely.tuck	NW
K	View from stables	K_muddle.gain.scoote rs_65.jpg	muddle.gain.scooters	ENE 65 deg
L	Paddock Cottage (grade II) with Red Kite	L_guards.novels.prom oting_W.JPG	guards.novels.promoting	W
М	West Wratting Park (grade II*)	M_leaves.printing.obs ervers_309.JPEG	leaves.printing.observers	NW 309 deg
N	West Wratting Park (grade II*)	N_crashing.hunk.neck laces_N.JPG	crashing.hunk.necklaces	N
0	From Park Farm	O_milky.downs.consul ts_S.JPEG	milky.downs.consults	S 175 deg
Р	Towards Randswood Farm	P_overdrive.dreamers .trips_SE.JPEG	overdrive.dreamers.trips	SE 136 deg
Q	From footpath towards church	Q_hammer.remission. sized ESE	hammer.remission.sized	ESE
Υ	From Weston Colville Hall towards St Mary's church	Y_attend.magically.gr azes_E.png	attend.magically.grazes	E
R	Towards Weston Colville Hall and St Mary's church	R_passively.stray.soni c_W-N.JPG	passively.stray.sonic	W-N
S1	Towards Weston Colville Hall	S1_opposite.envelope d.asleep_S.JPG	opposite.enveloped.asleep	S
S2	Towards Weston Colville	S2_grit.gazed.bombs hell ESE	grit.gazed.bombshell	ESE
S3	Capped Roman well (marked by cone)	S3_roman_well.JPG	clattered.starred.classed	250 deg
W1	From Ickneild way	W1_meanwhile.blitz.w inning_183.JPEG	meanwhile.blitz.winning	S
W2	From Ickneild way	W2_gravel.grass.soap s_SE.JPEG	gravel.grass.soaps	SE
W3	From Ickneild way	W3_gravel.grass.soap s_NE.JPEG	gravel.grass.soaps	NE
W4	From Ickneild way	W4_pronouns.flagged .explained_72.JPEG	pronouns.flagged.explained	72 deg

W5	From Ickneild way	W5_itself.cigar.reflect ed_169.png	itself.cigar.reflected	169 deg
W6	From Ickneild way	W6_neck.hobbyists.w alking_NNW.JPEG	neck.hobbyists.walking	NNW
W7	From Ickneild way	W7_plastic.mothering. shade_S.jpg	plastic.mothering.shade	s
W8	From Ickneild way	W8_plantings.cutawa y.verge_N.JPEG	plantings.cutaway.verge	NNW
W9	Looking across the Ickneild way	W9_frozen.forkful.clip board_NNE.JPEG	frozen.forkful.clipboard	NNE
Т	Grade II cottage facing area C	T_dorms.wages.quits _SW.png	dorms.wages.quits	SW
V1	In isolated area NE Weston Green	V1_recover.grumbling .relished_NW.png	recover.grumbling.relished	NW
V2	In isolated area NE Weston Green	V2_recover.grumbling .relished_S.JPEG	recover.grumbling.relished	s
V3	3 Horseshoes Pub (grade II)	V3_weds.scouted.obt ain_E.JPEG	weds.scouted.obtain	E
X1	South of Weston Green	X1_tabloid.officer.stea m_SSW.JPEG	tabloid.officer.steam	SSW
X2	South West of Weston Green towards Weston House	X2_onwards.memory. excavate_WNW.JPE G	onwards.memory.excavate	WNW
Х3	Towards The Grove wood in West Wratting	X3_today.collision.qua lify_NW.png	today.collision.qualify	NW