

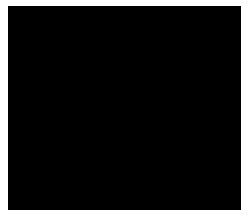


**Response to Environmental Statement
submitted in relation to
Berden Hall Solar Farm
(Pelham Solar)**

PINS Reference:

S62A/22/0006

14 February 2023



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6	Report of Bruce Bamber (Director of Railton TPC Ltd who has over 30 years of experience working within the transport planning industry for both private and public sector clients)	Separate document

A OVERVIEW

1. This submission has been prepared by “Protect the Pelhams” (an action group set up by local residents opposed to the industrialisation of the countryside) in response to the additional information submitted by Berden Solar Limited (the “Applicant”) by way of Environmental Statement (“ES”) in connection with its proposal to construct a 49.99 MW solar farm and associated infrastructure on 177 acres of agricultural land (the “Proposed Development”). The site (the “Site”) is located at land to the West of Berden and to the East of Stocking Pelham in East Hertfordshire and in close proximity to Grade 1 listed St Nicholas Church, Grade 2* listed Berden Hall and the site of a Scheduled Monument at the Crump.
2. This representation should be read in conjunction with the earlier document submitted by Protect the Pelhams:
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1103815/Protect the Pelhams 1 Redacted.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1103815/Protect_the_Pelhams_1_Redacted.pdf)

A1: Summary of deficiencies in the ES

3. The information set out below (supported by the attached Appendices) demonstrates that, notwithstanding the provision of additional information by the Applicant in its ES, there are still compelling reasons to **REJECT** the application. These include (but are not limited to) the following:
 - The selection of the Site (which comprises a large area of BMV land) has not been justified. The Applicant has provided no evidence that any alternative sites have been considered;
 - The Applicant’s approach to considering cumulative effects is deficient in a number of respects:
 - The Applicant has failed to consider the cumulative effect of the Proposed Development in conjunction with a number of existing or proposed “renewable energy” developments in the vicinity of the site;
 - The failure by the Applicant to consider the cumulative visual effects of both its current application and the existing BESS (which the Applicant constructed in 2019) is a material omission;
 - The consideration of the cumulative visual impact of the Proposed Development and the second proposed solar farm in Berden (Pelham Spring) is not credible;
 - The cumulative effect of the two solar farms on The Crump (Grade 2 listed building and Scheduled Monument) is underestimated;
 - The purported assessment of the cumulative noise impact is deficient and both Uttlesford and East Herts Environmental Health Officers have objected on the grounds of the cumulative impact of the noise from the Proposed Development in combination with existing sources of low frequency noise;

- The Applicant has ignored the evidence which shows that there is significant potential for adverse cumulative transport impacts arising from the four large developments being proposed for a relatively small area south of Berden;
 - The choice of viewpoints selected by the Applicant to illustrate the anticipated visual impact of the solar development is not representative – for example - no views are offered looking North from footpath 5/26 which runs through the middle of the Proposed Development;
 - Planting hedgerows will be insufficient to mitigate the visual impact of the Proposed Development from all views (which is unsurprising given the open nature of the site and the fact that it slopes);
 - The Applicant continues to down play the impact its Proposed Development on Heritage Assets in close proximity to the Site. It has also been highly selective in its choice of views to illustrate the anticipated impact of the solar development on Heritage Assets and has failed to include views from Footpaths 24, 26 and 27;
 - The proposed approach to mitigation in relation to the Skylark population on the Site is inadequate because neither of the mitigation areas proposed are suitable (the first area (east behind The Street) being crossed by pylons and the second area being located too far from the site.
 - As noted by the Highway Authority, the revised CTMP does not include any detailed assessment or proposals for managing constrained sections of the highway network through Essex.
4. We look forward to expanding on these points at the hearing and ask (again) that three representatives of Protect the Pelhams should be given the opportunity to speak. We further request (again) that all three the consultants who have prepared reports on behalf of Protect the Pelhams (Peter Radmall, Dr Richard Hoggett and Bruce Bamber) should be invited to speak the hearing.

B ALTERNATIVE SITES

B1 The Applicant has considered no alternative sites and has thereby failed to satisfy the requirement of the EIA Regulations

1. The Applicant notes (at paragraph 3.47 of the ES) that Regulation 18 2(d) of the EIA Regulations require that an ES should include:

“a description of the reasonable alternatives studied by the developer, which are relevant to the Proposed Development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment”

2. And that Schedule 4(2) of the EIA Regulations also sets out the need for:

“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

3. However, the Applicant has provided **NO EVIDENCE** that any alternative sites have been considered. In its response to the above requirements of the EIA Regulations, the Applicant simply explains (in paragraph 3.50) that:

“The main driver for location the solar farm at this location is its proximity to the existing Pelham Substation and the high solar irradiance associated with the area. In addition, the Site is already afforded a high degree of visual enclosure with the opportunity of providing additional screening that can become effective within a short timeframe, minimising its impact on the wider landscape”.

4. In fact the site has little visual enclosure and is clearly visible for most of the length of the C-road between Berden and Stocking Pelham, and is crossed by several footpaths
5. As noted in PtP’s Objection to the Proposed Development, it comes as no surprise that the Applicant has failed to consider any alternative sites given that the Applicant’s FAQ document (published on its project website shortly after the exhibition which took place at Berden Village Hall in March 2022) contains the following text:

Question: *“What other locations did you consider?”*

Answer: *None. Statera Energy has selected this site on its merits alone and believes it is a good site to promote.”*

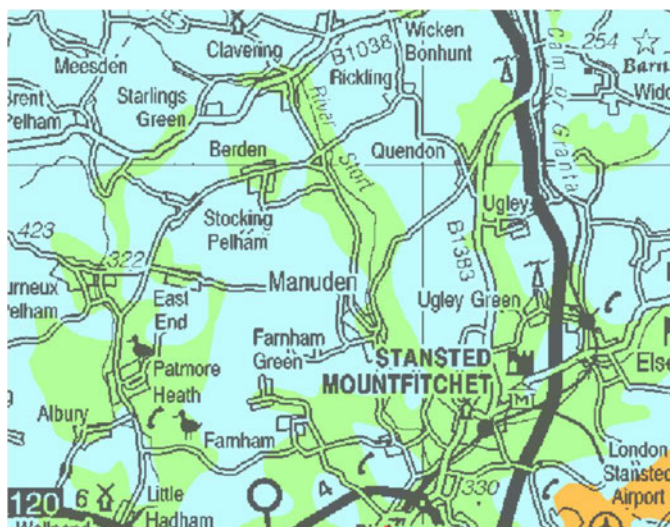
6. This is **unacceptable**, particularly in circumstances where the majority of the site for the Proposed Development comprises BMV land.
7. Whilst it is understood that not all applications for permission to construct a solar “farm” require the production of an Environmental Statement, it is useful to consider the approach adopted by Applicants for similar developments.

8. In July 2020, Colchester Borough Council issued a Screening Opinion in response to an application by Low Carbon for permission to construct a 49.9MW solar “farm” on land at Layer De La Haye. The Screening Opinion (attached as **Appendix 1**) determined that the proposed scheme had the potential to cause significant environmental effects in terms of its scale and siting/location and therefore that an Environment Statement was required. It should be noted that the site proposed for the solar “farm” at Layer De La Haye was predominantly Grade 3b Land and therefore NOT BMV land.
9. Volume 1 (Part 4) of the Environment Statement produced in respect of the proposed solar “farm” at Layer De La Haye (included at **Appendix 2**) explained that:

An Alternative Site Assessment report accompanies the planning application. It demonstrates the process that the applicant went through to identify the Site, including the consideration of previously developed land and lower grade agricultural land. The overall aim of the assessment is to demonstrate that the applicant has given due consideration to the benefits and constraints associated with the Site when selecting it for development.

10. The Alternative Site Assessment report in relation to Layer De La Haye (attached as **Appendix 3**) takes the form of a sequential assessment in which the applicant explains that its approach to site selection involved:
 - definition of a search area;
 - analysis of previously developed land;
 - analysis of lower grade agricultural land;
 - establishment of a long-list;
 - long-list filtering to create a short list of sites; and
 - assessment of the shortlist.
11. It is clear that the approach to site selection undertaken in relation to Layer De La Haye is by no means exemplary (for example, the choice of Search Area is considered to be completely inadequate and the failure to take into account proximity to Heritage Assets is also a material shortcoming). Nevertheless, it is notable that, even in the very limited search area selected by the applicant, **48 sites** were selected for inclusion in a long-list following the analysis of lower grade agricultural land. Thereafter, **a sub-set of 8 sites were short-listed for further analysis.**
12. As noted in PtP’s original objection, it is simply not credible for the Applicant to suggest that no lower grade land within a reasonable distance of a viable point of connection to the grid exists. The ALC map of the Eastern Region published by Natural England (extract below) suggests otherwise.

N.B. Green areas denote Grade 3 land



C CUMULATIVE IMPACTS

C1 The assessment of cumulative effects undertaken by the Applicant is incomplete and does not follow best practice guidance issued by the Planning Inspectorate

13. Advice Note Seventeen¹ published by the Planning Inspectorate (“**Advice Note 17**”) provides guidance on the preferred approach to undertaking a cumulative effects assessment (“CEA”). Advice Note 17 begins by noting that:

“The requirement for cumulative effects assessment (CEA) is set out in the Environmental Impact Assessment (EIA) Directive (EIA Directive 2014/52/EU which amends EIA Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment).”

14. Advice Note 17 presents a four-stage approach to CEA that applicants should to adopt being:

- Stage 1: Establishing the long list of ‘other existing development and/or approved development’;
- Stage 2: Establishing the short list;
- Stage 3: Information gathering; and
- Stage 4: Assessment

15. In relation to **Stage 1** (Establishing the long list of other existing and/or approved development) Advice Note 17 sets out that:

*“Other existing development and/or approved development’ likely to result in significant cumulative effects should be identified and assessed by the applicant in the CEA. In order to establish the relevant ‘other existing development and/or approved development’ **the applicant should determine the Zone of Influence (ZOI) for each environmental aspect considered within the ES. The ZOI for each aspect should be documented within the ES.***

16. The Advice Note then continues that:

*“**The ZOI for each aspect** should support a desk study exercise to identify the long list of other existing development and/or approved development in the form of planning applications, relevant development plans and any other available and relevant sources (e.g. consultation response information particularly from a relevant planning authority).*

¹ <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/>

17. At **Stage 2** the Advice Note establishes that applicants should apply threshold criteria to the long list, in order to establish a shortlist of other existing development and/or approved development and to ensure that the CEA is proportionate. The Advice Note also sets out that criteria used to determine whether to include or exclude ‘other existing development and/or approved development’ from further assessment should be clearly presented and should address

- **Temporal scope:** The applicant may wish to consider the relative construction, operation and decommissioning programmes of the ‘other existing development and/or approved development’ identified in the ZOI to establish whether there is overlap and any potential for interaction.
- **Scale and nature of development:** The applicant may wish to consider whether the scale and nature of the ‘other existing development and/or approved development’ identified in the ZOI are likely to interact with the proposed scheme.
- **Other factors:** The applicant should consider whether there are any other factors, such as the nature and/ or capacity of the receiving environment that would make a significant cumulative effect with ‘other existing development and/or approved development’ more or less likely and may consider utilising a source-pathway receptor approach to inform the assessment.
- **Documentation:** The reasons for excluding any development from further consideration should be clearly recorded.

18. The applicant is then required to indicate the certainty that can be applied to each ‘other existing development and/or approved development’ and it is suggested that existing or Proposed Developments are assigned in tiers which descend from Tier 1 (most certain) to Tier 3 (least certain).

19. It is suggested that a Matrix of the sort illustrated below should be used to the Stage 1 and Stage analysis and to select developments for a shortlist.

‘Other development’ details				Stage 1			Stage 2				
ID	Application Reference	Applicant for ‘other development’ and brief description	Distance from project	Status	Tier	Within ZOI?	Progress to Stage 2?	Overlap in temporal scope?	Scale and nature of development likely to have a significant effect?	Other factors	Progress to Stage 3/4?
1	Xx/xx/xxxx	Energy Developer Land east of village 350MW CCGT District/ County Council name Brief details...	1.5km	DCO Approved 21/09/2014 Including any policy status...	Tier 1	Falls within landscape, transport, noise, air quality and socio-economic ZOI.	Yes	Yes Construction dates Operation dates	Yes The (x)ha site would be visible in the same field of view from local AONB viewpoint as the proposed NSIP (Paragraph x of Energy Developer’s ES). Construction programmes overlap with potential to give rise to cumulative traffic, noise, air quality and socio-economic effects.	n/a	Yes
2	Xx/xx/xxxx	Small housing development District/ County Council name Brief details...	0.5km	Approved 27/10/2011 Including any policy status...	Tier 1	Falls within transport and noise ZOI	Yes	No Construction dates Operation dates	No Small development of less than (x)ha	n/a	No
3	Xx/xx/xxxx	Highways Developer Junction upgrade scheme description, location NSIP/Planning Inspectorate Brief details...	5km	EIA scoping application 10/05/2007 Including any policy status...	Tier 2	Would fall within distance based criteria for landscape ZOI but is not within Zone of Theoretical Visibility for scheme due to topography	No	n/a	n/a	n/a	n/a

20. In relation to the assessment of cumulative effects in relation to the shortlisted sites (**Stage 4**), the Advice Note sets out (among other things) that:

- The assessment should be undertaken to an appropriate level of detail, commensurate with the information available at the time of assessment;
- An assessment should be provided for all Tier 1 and Tier 2 ‘other existing development and/or approved development’, where possible;
- For ‘other existing development and/or approved development’ falling into Tier 3, the applicant should aim to undertake an assessment where possible, although this may be qualitative and at a very high level;
- The assessment should be carried out with **reasonable effort and should be clearly documented** in the ES for example using the format below:

ID	Tier	Application Reference	Applicant for 'other development' and brief description	Assessment of cumulative effect	Proposed mitigation	Residual cumulative effect
<i>Insert name of topic being cumulatively assessed</i>						
<i>ID Number to be carried through from Matrix 1</i>	<i>Tier Number to be carried through from Matrix 1</i>	<i>Details to be carried through from Matrix 1</i>	<i>Details should build on information provided in Matrix 1 and Stage 3 evidence gathering as relevant</i>	<i>Provide relevant baseline description and assessment of effects, cross reference to any detailed information provided as supporting appendices to the CEA, where relevant. Set out any potential likely significant cumulative effects.</i>	<p><i>Set out proposed mitigation measure(s) to address cumulative effect(s).</i></p> <p><i>Cross reference to how stated mitigation is proposed to be secured e.g. reference DCO requirement number.</i></p> <p><i>Provide a statement regarding the contribution of each proposed development to the cumulative effect. If developments contribute equally to an effect, it may be reasonable to propose shared mitigation.</i></p> <p><i>If another development would contribute the majority of a cumulative effect, it may be appropriate to apportion the main burden of mitigation to that 'other development'. However, this should not be used as the basis for avoiding the need to provide appropriate mitigation measures in accordance with the EIA Regulations, and it is expected that appropriate mitigation for the proposed NSIP's effects would be incorporated within the application documents.</i></p> <p><i>Set out any joint mitigation proposals that have been achieved through consultation with 'other development' promoters</i></p>	<p><i>State residual significance of effect and whether beneficial or adverse.</i></p> <p><i>Provide brief commentary on the effectiveness of mitigation e.g. if mitigation reduces but does not avoid an impact or the residual effect is the same as the pre-mitigation effect</i></p>

- Certain assessments, such as transport and associated operational assessments of vehicular emissions (including air and noise) may inherently be cumulative assessments. Where these assessments are comprehensive and include a worst case within the defined assessment parameters, no additional cumulative assessment of these aspects is required. However, the assessment should be reviewed in the event that any new ‘other existing development and/or approved development’ is identified that has potential to exceed the previous worst case assumptions.

C2 The list of other existing and/or approved development selected by the Applicant is materially deficient

21. The Applicant states (at paragraphs 4.50 and 7.133 of the ES) that “in correspondence between Uttlesford District Council (“UDC”) and the Planning Inspectorate” UDC identified the five renewable energy development proposals identified for cumulative assessment being:

- UTT/21/0688/FUL – Land at Cole End Lane, Wimbish (Application granted);
- S62A/22/0004 (UTT/22/1474/PINS) - Land East of Parsonage Road, and South of Hall Road, Takeley (Application granted);
- UTT/21/2846/FUL – Green Energy Hub, Chesterford Park, Great Chesterford (Application granted);
- UTT/22/0007/FUL – Land East of School Lane, Felsted (Application granted); and
- East Herts DC 3/22/0806/FUL – Stocking Pelham Battery Energy Storage System.

22. It is extraordinary that the Applicant **has failed to give any consideration to the cumulative effects** of the following sites which are in close proximity to the Proposed Development:

- the existing National Grid substation at Stocking Pelham;
- the **existing Battery Energy Storage System constructed by the Applicant** (application numbers UTT/16/2316/FUL and UTT/17/2075/FUL) **which is immediately adjacent to the site of the Proposed Development;** and
- an application for yet another Battery Energy Storage System at Green’s Farm (East Herts DC 3/21/0969/FUL) which was submitted before the application for Stocking Pelham Battery Energy Storage System referred to above; and
- a 35 MW solar farm on 146 acres of land at Wickham Hall (East Herts DC 3/21/2601/FUL) which was approved for construction in January 2023.

23. The treatment of the potential cumulative effects of the proposed solar farm immediately to the south of the application site (UTT/21/3356/FUL - Land near Pelham Substation, Maggots End Road, Manuden) – known as “Pelham Spring Solar Farm” is inconsistent. The Applicant attempts to downplay the importance of this development on the grounds planning consent was refused by UDC in January 2022. However, it should have been obvious to the Applicant (and it was certainly obvious to UDC) that a new application for permission to construct Pelham Spring Solar Farm was made to PINS in October 2022. This information was published by UDC in its report on Section 62A applications² which includes the following text:

² <https://uttlesford.moderngov.co.uk/documents/s29728/5.%20S62A%20applications%20to%20PINS.pdf>

“Land near Pelham Substation Maggots End Road Manuden Construction and operation of a solar farm comprising ground mounted solar photovoltaic (PV) arrays and battery storage together with associated development including inverter cabins, DNO substation, customer switchgear, access, fencing, CCTV cameras and Landscaping. The application has been Consultee submitted and we await notification that it is valid - (10/10/2022)”.

24. The “Pelham Spring Solar Farm” application has now been published on the PINS site with reference: S62A/2022/0011.

25. The map below illustrates all of the sites in close proximity to the site of the current application which should have been considered by the Applicant for the purposes of the CEA:

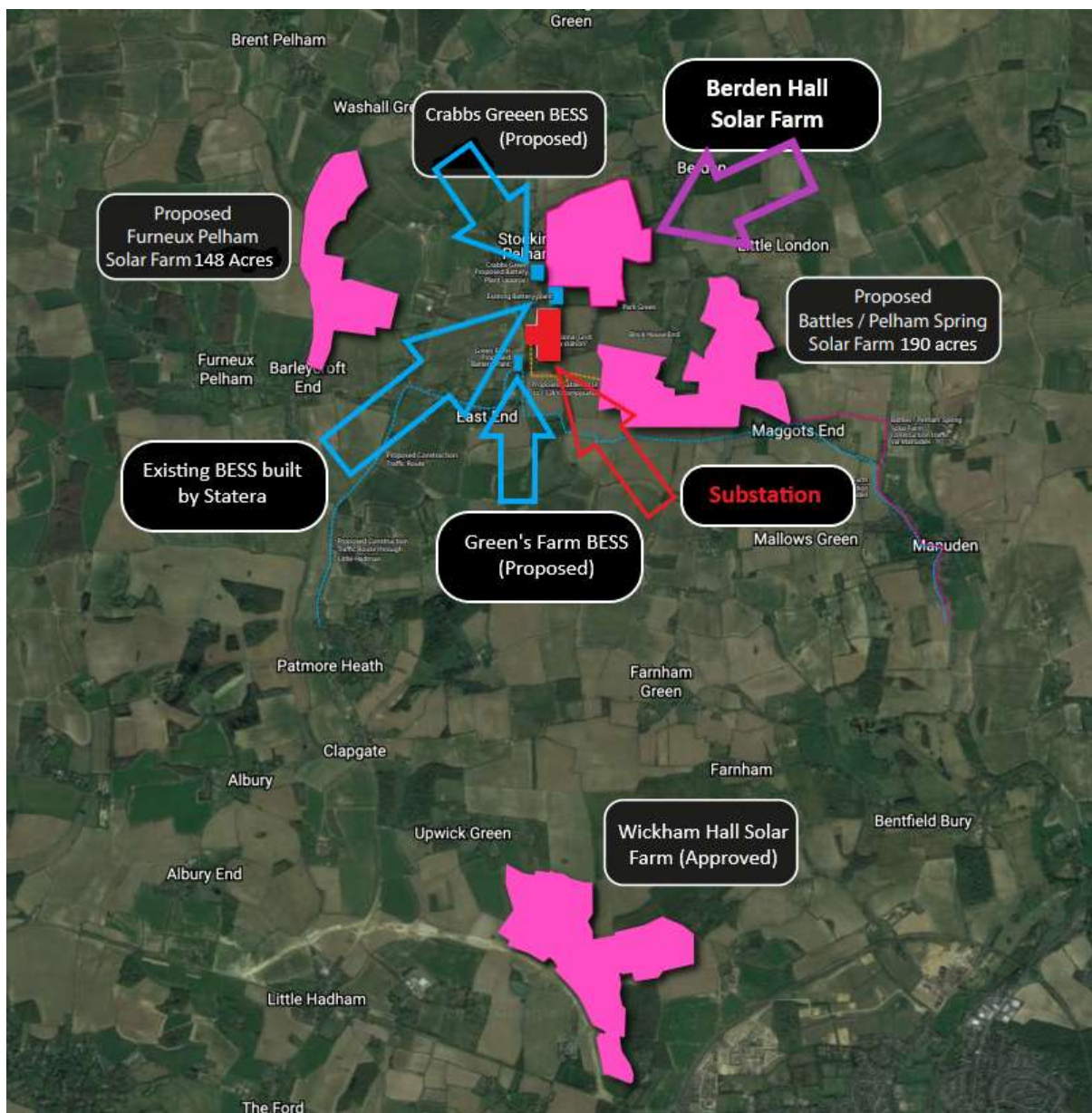


Figure 1: map showing location of existing and Proposed Developments in Berden, Stoking Pelham and surrounding area

C3 The assessment of cumulative effects undertaken by the Applicant is inadequate in terms of its scope and approach and the conclusions reached are not credible

26. The Applicant has failed to determine a Zone of Influence (ZOI) for each environmental aspect considered within the ES but considers cumulative effects on a piecemeal basis. As noted above, the Applicant has failed to give consideration to a number of sites in close proximity to the Proposed Development.

Assessment of Landscape and Visual Cumulative Effects

27. PtPs Landscape Expert (Peter Radmall) has already commented that:

“the effect on the immediate locality (i.e. the countryside gap between Berden and Stocking Pelham) [is considered] to be moderate to major adverse in relation to the loss of separation between the villages and the cumulative increase in the influence of energy infrastructure.

28. As noted above, the failure by the Applicant to consider the cumulative visual effects of both its current application and the existing BESS (which the Applicant constructed in 2019) is a material omission. The proximity of the two developments is illustrated below:



Figure 2: map showing location of the Proposed Development and the existing BESS built by the Applicant

29. Notwithstanding the assertion that there is no requirement to consider the cumulative impact of “Berden Hall Solar Farm and “Pelham Spring Solar Farm”, the Applicant has undertaken some superficial analysis of potential effects. The map provided by the Applicant (at Figure 5.9 and set out below) shows the location of both its Proposed Development and the location of “Pelham Spring Solar Farm”

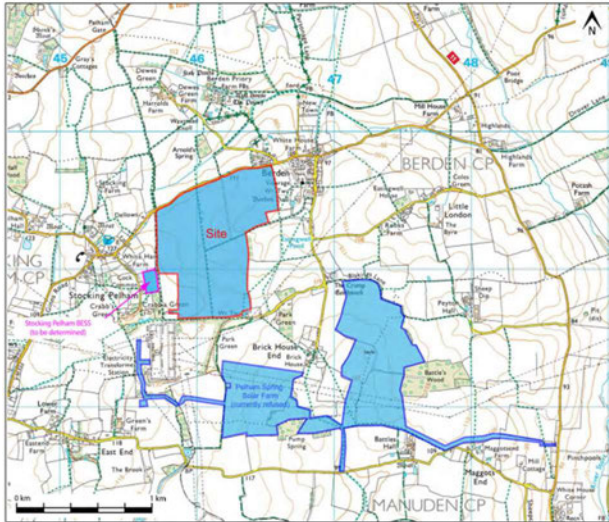


Figure 3: map showing location of the Proposed Development and “Pelham Spring Solar Farm” (proposed)

30. The Applicant acknowledges that:

“There will be some sequential cumulative visual effects as people move through the landscape by roads and PRow”.

31. However, it also states:

“The only road where such effects will be experienced is from The Street as it continues south to a small hamlet at Brick House End, which is a no through road and so traffic use is very low. Users will only be able to glimpse the two solar farms from very few locations and both will be separated by intervening countryside. It is concluded that the sequential visual effects to road users will be Negligible”.

32. This conclusion is not credible. The Applicant fails to point out that Brick House End is on a slope which rises up to The Crump. On arrival at The Crump, users of the lane (which include horse riders, dog walkers and cyclists – in particular parents with young children) will be ideally placed to look down on “Berden Hall Solar Farm” (to their right) and need only turn their heads to the left to look up to Pelham Spring Solar Farm which is to be located prominently on the sloping land below Battles Wood (an ancient woodland).

33. The Applicant acknowledges that:

“There will be more significant effects to users of the PRow network. The PRow network in the area is extensive and certain stretches pass through both proposed solar farms. It is likely that approximately three square kilometres of the countryside through which the network passes will be visually influenced by the proposed solar farms without mitigation. Once the mitigation proposed for both schemes is effective, in summer the cumulative effect will be at worst Minor adverse, mainly due to a loss in openness within the landscape as the screening mitigation blocks views. In winter there will be a greater perception of the solar

farms beyond the leafless hedges and so there will be a Moderate adverse cumulative effect".

34. Whilst the Applicant accepts that:

"The three developments, this application, the Maggots End Solar Farm and the Stocking Pelham BESS if consented, would increase the amount of electrical infrastructure within the locality, increasing the perception that the landscape is adversely dominated by electrical infrastructure due to the substation and recent battery storage facility".

it attempts to argue that the presence of yet more unsightly industrial infrastructure is acceptable as a result of the presence of the substation which " *already had an adverse effect on landscape character.*

35. The Applicant also ignores the conclusion of the Crabb's Green Conservation Area Character Appraisal and Management Proposals Adopted by East Herts DC in 25 July 2018³ which, whilst acknowledging the negative impact of the Stocking Pelham substation and the associated high voltage power lines, highlights the positive characteristics of the area. See, in particular, section 5.1 (General Landscape setting) which notes as follows:

"The area could also be described as the Essex Marches, sharing similar characteristics with the landscape to the east. An organic, ancient landscape with frequent settlements containing a high proportion of vernacular properties. The plateau is gently undulating and is predominantly used for arable farming other than around settlements where the land-use is often pasture. The area has a strong rural character with many village pubs, flint churches, a good rights of way network and prominent scattered blocks of woodland. An electricity transformer station at Stocking Pelham and the associated high voltage power lines which stride across the landscape are a major eyesore in an otherwise mature landscape where cultural patterns are generally intact".

36. The argument that it is acceptable to industrialise a landscape which is predominantly rural in order to "take the pressure off more pristine landscapes" should therefore be given no weight and ignores the overarching requirements of UDC Policy S7 which sets out that (inter alia) that development should only be allowed where its appearance protects or enhances the particular character of the countryside within which it is set, or if there are special reasons why such development needs to be in that location. The Inspector is reminded again of the August 2022 decision in relation to a Proposed Development at Warish Hall, Takeley⁴ which emphasised the importance of Local Plan Policy S7 in which the Inspector noted that:

³

⁴ Appeal Ref: 3291524 Land at Warish Hall Farm, Smiths Green, Takeley

“In my judgement, the development would introduce an urban form of development that would not be sympathetic to the local character and landscape setting, and notwithstanding the mitigating design measures to create green infrastructure and character areas of varying layouts and densities, in the context of Policy S7 and what I heard, I consider that no special reasons have been demonstrated as to why the development, in the form proposed, needs to be there.

“...I consider that the proposal would have a significant adverse effect on local landscape character. It would change the intrinsic rural character of the area by introducing built development into a rural setting This would be apparent from the Protected Lane and PROWs resulting in a significantly adverse visual impact in conflict with LP Policy S7 and NPPF paragraphs 130 and 174b”

Assessment of Cumulative effects on Heritage Assets

37. The Applicant’s purported assessment of cumulative effects on heritage assets is inadequate. Whilst the Applicant notes that Historic England has recommended the cumulative impact on “The Crump” scheduled monument should be assessed given the scale of the Proposed Development and the scale of the Pelham Spring Solar Farm, the Applicant simply concludes that there will be:

“no direct intervisibility between the two schemes”

and relies on the fact that (notwithstanding the obvious proximity of the two schemes):

“the viewer would have to look in opposite directions to see the two proposed solar farms”

38. The Applicant ignores the fact that one of the grounds cited by UDC for refusing the application to build Pelham Spring Solar Farm was that:

“The setting of the heritage assets will inevitably be affected by the proposals which would result in an industrialising effect, contrary to the verdant and rural landscape setting and would result in an erosion of the rural character of the designated heritage assets. The proposals would thereby result in ‘less than substantial’ through change in their setting”

39. Therefore, the Applicant’s purported reliance on the assessment produced by Low Carbon in connection with the Pelham Spring Solar Farm (which - erroneously - concluded that there would be “no harm to the heritage significance of [the Crump]) should be given no weight. Equally, the Applicant’s conclusion that “the overall indirect cumulative effect [on the Crump] would be minor, lacks credibility given the conclusions of PtP’s Heritage Expert (Dr Richard Hoggett) that:

- the Proposed Development of [Berden Hall] solar farm would result in ‘less than substantial’ harm to the significance of the Grade II-listed The Crump, caused due to changes to its setting and the severance of the views to and from the west; and

- The Proposed Development of [Berden Hall] solar farm will change the character of its setting which will in turn result in a detrimental impact upon the significance of the monument resulting in ‘less than substantial harm’ towards the middle of the scale.

40. PtP draws the attention of the inspector to the following comments of Historic England (Dr Jess Tipper) which support the view that the cumulative impact on the Crump of two solar farms in Berden is significant and should be given great weight:

“We were concerned about the cumulative impact of the development and the proposed solar farm at Maggots End on The Crump scheduled monument and we note the cumulative impact assessment that has been submitted with the amended application ES Vol. 1, paras. 6.55-71).

We consider the cumulative harm to the significance of this scheduled monument would be less than substantial and, at least, moderate in scale. The presence of the scheduled monument in the rural and undeveloped nature of the landscape is a rare survival, and the monument draws a considerable amount of significance from how it is experienced in the wider, surrounding landscape. We disagree, therefore, with the conclusion of the cumulative impact assessment that the overall indirect cumulative effect would be minor (ES Vol. 1, para. 6.61).

41. It should also be noted that Historic England’s guidance on “The Setting of Heritage Assets⁵ states the following in relation to “Cumulative change”:

“Where the significance of a heritage asset has been compromised in the past by unsympathetic development affecting its setting, to accord with NPPF policies consideration still needs to be given to whether additional change will further detract from, or can enhance, the significance of the asset.”

42. It follows that there is no basis for concluding that the existing electrical infrastructure in the vicinity of the Crabbs Green (including the BESS constructed by the Applicant) justifies further negative effects on important heritage assets.

Assessment of Cumulative Effects on Ecology

43. The Applicant states that:

“Relationships between landscape (particularly screening of visual impacts) and ecology have been taken into account in the production of the LEMP. No further inter-relationships are likely”.

44. However, the LEMP focuses exclusively on the site of the Proposed Development and gives no consideration to the impact of other developments in the vicinity. Section 7 of the ES purports to consider the cumulative impact of other developments (see Page 7-21). However **the cumulative ecological effects of the Proposed**

Development and Pelham Spring solar farm have NOT been considered. This is a particularly material omission in terms of the impact on Skylarks.

Cumulative effects of Noise

45. The Applicant relies on modelling software to model noise and claims that the noise model considered the Proposed Development and also the cumulative scheme, i.e. the Proposed Development and the adjacent battery storage facility. However, the modelling **takes no account of the second BESS** (proposed for land at Crabbs Green which is immediately adjacent to the Proposed Site – see the map at Figure 1). Nor is it clear that the modelling has taken account of the existing noise from the substation.

46. PtP notes that Uttlesford District Council’s Environment Health Officer has objected to the Proposed Development commenting that they are “not able to apply a robust post construction condition that will ensure that noise from the site will not be detrimental to residential amenity”. The following comments are drawn to the Inspector’s attention:

- The Environmental Health Officer expresses concern that *“low frequency noise levels at noise sensitive receptors will increase because of the Proposed Development and may result in a significant adverse impact when considered individually and cumulatively with the existing facilities”*
- *It is assumed that the higher backgrounds are caused by the existing sub station and battery storage facility being in operation when the background noise measurements were taken for this development. This increase in background noise also shows the impact of the existing facilities on the noise levels in the local area. It is important to note that even with this increase in background noise levels from 2016 the rating level for the cumulative development, compared to the new higher background noise, does not meet the -5 dBA Uttlesford noise standard.*

47. PtP also noted that East Herts Environmental Health Office has objected to the Proposed Development commenting that:

- *It would therefore be inappropriate that this application is judged against a background noise level which includes the existing BESS site. Both the existing BESS and the solar farm (either together and separately) should be assessed against a background noise level which does not include the current noise emitted by either site – all existing equipment must be turned off during measurements. This is in line with the NPPF guidance which seeks to protect the tranquillity of areas that have remained relative undisturbed by noise and prevent adverse impacts on the quality of life of the nearby residents and impacts on the natural environment.*
- *EHDC Environmental Health has received complaints, which have later been evidenced, regarding the current noise environment of the area primarily due to low frequency noise (100Hz and 200Hz) emissions from the existing site but*

especially due to the unenclosed DNO transformer. This has the most impact at night where the noise emitted from equipment is clearly audible over greater distances and presents itself as a continuous 'mains hum'. The RPS report does not sufficiently assess the impact of the dominant frequencies emitted by existing and proposed equipment

48. EHDC's Environmental Health Officer also comments that the noise generated by the existing BESS site is higher than should be the case as a result of the failure by the Applicant to construct a noise mitigation bund.
49. No reliance should be placed on the Applicant's conclusion that the results of the assessment demonstrate that there is a low risk that the sound from the Proposed Development and the cumulative scheme will result in adverse impacts during all assessment time periods (early morning, day-time and night time).

Cumulative effects of Traffic

50. We note the following comments of Essex County Council Highways Department (in their letter dated 10 February 2023:

"The Highway Authority is aware of another Solar Farm and associated battery storage scheme near this site with proposals to use construction routes that could coincide with this route (see attached plan). This gives rise to concerns regarding cumulative impact on roads where there is insufficient carriageway width for two HGVs to pass and with each being submitted independently the control mechanisms contained within the CTMP are unlikely to be deliverable without coordination between schemes or the sites coming forward as a single consolidated planning application".*

* indicated on the plan as being "Pelham Spring Solar Farm (S62A/2022/0011)

51. PtP has commissioned a further report from Bruce Bamber (Director of Railton TPC Ltd who has over 30 years of experience working within the transport planning industry for both private and public sector clients) in relation to the transport proposals put forward by the Applicant. The revised proposals (submitted after the initial planning application) are considered further in section F below. However, Mr Bamber was also asked to consider the cumulative impact of the traffic associated with the Proposed Developments in the area and comments as follows:

- There are further planning applications that have been submitted but yet to be determined in the local area that have the potential to generate significant numbers of HGV movements. These include:
 - 3/21/0969/FUL (E Herts.): Proposed Battery Energy Storage Site: Land At Greens Farm East End Stocking Pelham Buntingford Hertfordshire SG9 0JU (immediately south-west of the Berden Hall Farm site);

- 3/22/0806/FUL (E Herts.): Proposed Battery Energy Storage System and associated infrastructure: Land off Crabbs Lane and Pelham Substation Stocking Pelham Herts (immediately west of the Berden Hall Farm site); and
 - UTT/21/3356 (Uttlesford): Proposed 49.9MW Solar Photovoltaic Farm with battery storage at Pelham Spring (immediately south of the Berden Hall Farm site).
- Submissions made in relation to the first two planning applications on behalf of PtP⁶ set out calculations that indicated that, in cumulative terms, the transport impact could be around 32 additional HGV movements if the developments came forward simultaneously or 16 additional daily HGV movements if the developments came forward sequentially but with the construction period correspondingly doubled.
 - The Pelham Spring development predicts a similar level of daily HGV trip generation (16 HGV movements per day) and it is likely that the Berden Hall Farm development would add in the region of a further 16 daily HGV movements. If all development came forward simultaneously they would generate **around 64 HGV movements per day on the local highway network** or if they were to come forward sequentially the total period over which HGVs would be using the network would be quadrupled.
 - There is strong evidence to show that there is significant potential for adverse cumulative transport impacts arising from the four large developments being proposed for a relatively small area south of Berden.
 - The Applicant has failed to undertake an assessment of the potential for adverse transport environmental impacts either individually or cumulatively. This is a significant failure and one that needs to be rectified before any serious consideration is given to the Proposed Developments.

⁶ https://publicaccess.eastherts.gov.uk/online-applications/files/9D575ED06912E92C67BA8FE9CDD34766/pdf/3_22_0806_FUL-ALDRIDGE_PROTECT_THE_PELHAMS_14_12_22-1908434.pdf - See Page 177

D LANDSCAPE AND VISUAL IMPACT

D1: The choice of viewpoints is selective and the mitigation proposed by the Applicant is insufficient to address fully the visual impact of its Proposed Development

53. The Applicant has selected 15 view points and provides (in Appendix 5.1) photos taken from some of the 15 viewpoints together with photomontages illustrating the anticipated visual impact of the solar development. The choice of viewpoints is, however, highly selective. Why, for example, are **no views offered looking North from footpath 5/26 which runs through the middle of the Proposed Development** (despite the Applicant noting that this is a High (Well used) footpath)? The obvious answer is that the impact on users of these footpaths cannot be mitigated. It is also concerning that the Applicant fails to provide photographs or photo montages from all 15 viewpoints.
54. The Applicant states (at paragraph 5.168) that it has considered the predicted levels of visual effect before and after mitigation and that the results are presented in Table 5.10. It states that the proposed mitigating hedge planting will typically reduce major effects to moderate adverse (orange shading) in winter and minor adverse (green shading) in summer (the latter based on the fact that while the hedges will screen the panels from view, there will be a loss of openness). However, the Applicant is forced to accept that planting hedgerows is insufficient to mitigate the visual impact of its Proposed Development from all views. This is unsurprising given the open nature of the site and the fact that it slopes.
55. Notwithstanding the proposed mitigation (consisting in each case of “Hedge planting”) the Applicant is forced to acknowledge the following residual (i.e. post mitigation) effects on walkers:

View point	Summer	Winter
View 3: PRoW 5/26 as it heads north towards the Pelham Road	Minor adverse in summer	Moderate-Major adverse in winter
View 5: PRoW 5/21 as it passes through the Site	Minor adverse in summer	Moderate to Major adverse in winter
View 12: The start of PRoW 5/26 as it heads north from the Pelham Road.	Moderate adverse in summer	Moderate-Major adverse in winter

56. The poor quality and lack of maintenance of the “mitigation planting” at the site of the Battery Energy Storage Scheme (BESS) constructed by the Applicant demonstrates that the Inspector should have no confidence in the Applicant’s commitment to ensure that hedge planting provides effective mitigation.

58. In support of its application (UTT/17/2075/FUL) to construct the BESS which is immediately adjacent to the Proposed Development, the Applicant committed to the following planting schedule:

TREE PLANTING

Trees to be planted in positions shown on the planting plan. Refer to the specification for topsoil depths, excavation of tree pits, soil ameliorants and staking.

Key	Latin name	Common name	Size	Number
Ac	<i>Acer campestre</i>	Field maple	10 -12 cm girth selected standard	12
Ag	<i>Alnus glutinosa</i>	Alder	2.0 - 2.5 m high feathered tree	5
Qr	<i>Quercus robur</i>	Oak	2.0 - 2.5 m high feathered tree	5
Tc	<i>Tilia cordata</i>	Small leaved lime	10 -12 cm girth selected standard	4
Te	<i>Tilia x europea</i>	Common Lime	10 -12 cm girth selected standard	4

HEDGE PLANTING

To be planted as two staggered rows 750 mm apart, 500 mm between plants. First row to be planted 2250 mm outside the line of the security fence, except around the substation where the first row shall be at least 3 m from the edge of the security fence. The hedge is to be planted through a 2m wide strip of polypropylene weed suppressant matting pegged at regular intervals. Total length = 320 m = 1280 plants. Each transplant to be dipped in a Mycorrhizal root dip (such as Myco-Dip, [redacted] or Root Grow, [redacted])

Percentage mix	Latin name	Common name	Size	Number
40	<i>Acer campestre</i>	Field maple	60 -80 cm bare root transplants	512
10	<i>Crataegus monogyna</i>	Hawthorn	60 -80 cm bare root transplants	128
20	<i>Carpinus betulus</i>	Hornbeam	60 -80 cm bare root transplants	256
30	<i>Corylus avellana</i>	Hazel	60 -80 cm bare root transplants	384

WOODLAND PLANTING

Plants to be planted at 1.75 m centres. Where adjacent to the security fence the first row shall be set 1.5 m from the fence. Total area = 825 m² = 275 plants. The planting mix shall comprise the following, randomly mixed:

Percentage mix	Latin name	Common name	Size	Number
35	<i>Acer campestre</i>	Field maple	60 - 80 cm bare root transplants	96
10	<i>Betula pendula</i>	Silver birch	60 - 80 cm bare root transplants	27
10	<i>Crataegus monogyna</i>	Hawthorn	60 - 80 cm bare root transplants	27
10	<i>Carpinus betulus</i>	Hornbeam	60 - 80 cm bare root transplants	27
25	<i>Corylus avellana</i>	Hazel	60 - 80 cm bare root transplants	70
5	<i>Quercus robur</i>	Oak	60 - 80 cm bare root transplants	14
5	<i>Tilia cordata</i>	Small leaved lime	60 - 80 cm bare root transplants	14

Transplants to be protected with 1.2 m high tree shelters, held firm with stakes recommended by the manufacturer and driven in until firm.

59. The picture of the BESS below (taken in summer 2021) shows the negligible impact of the Applicant's "mitigation" planting:



E HERITAGE IMPACTS

60. The Applicant has provided a new Appendix (5,2) which is stated to be a Heritage Setting Report. This report (compiled for the Applicant by Sightline) comprises a series of photographs taken from 11 viewpoints coupled with “wire frames” to illustrate the visual impact of the Proposed Development on views of Heritage assets.

E1: The Applicant’s Assessment of Heritage Impacts is inadequate because it focuses exclusively on views from PRow

61. In response to the request for an EIA, the Applicant comments as follows (in its letter to PINS dated 2nd September 2022):

- *“The development’s visual impact is the only environmental topic considered to have the potential to have adverse effects on the environment of a likely significance that merits EIA.*
- *These effects will be confined to those using the PRow network that passes through the development*
- *‘None of the remaining reports comprised within the submitted application that relate to other environmental topics have concluded that the development has the potential to have adverse effects on the environment whose significance would merit EIA. All other such topics have therefore been excluded from the proposed ES’.*

62. The Applicant’s approach is not consistent with Historic England’s advice note ‘The Setting of Heritage Assets’ (referred to earlier). Under the sub-heading ‘Appreciating Setting’ in the section covering Setting and the Significance of Heritage Assets, Historic England specifically notes that:

“setting does not depend on public rights or ability to access it, significance is not dependent on numbers of people visiting it”.

63. This point is reiterated by the Applicants’ own consultants in their Heritage Statement where they clearly recognise the significance of the guidance provisions that the impact on heritage setting is not dependent upon public access.

64. Whilst views from public rights of way are important in relation to the experience of users as visual receptors, by limiting their study to views from PRow the Applicants have failed properly to address the harm caused to the setting of heritage assets.

65. Views obtained from, and to, private areas clearly contribute to the setting of the asset as much as views from public road and footpaths. The Applicants have therefore failed fully to assess the impact of the Proposed Development on a number of important heritage assets.

E2: The Applicant has failed to consider a number of key views

66. It is clear that Historic England places considerable reliance on the information provided by the Applicant stating that.

“We welcome the additional information that has been provided in the updated Environmental Statement, and the submission of additional visualisations to assess the impact of the proposed solar farm on the significance of the Church of St Nicholas and Berden Hall as well as the Berden Priory Group. We now consider the impacts and effects of the development on the significance of these highly-graded assets has been adequately assessed”.

67. However, this reliance is misplaced because the Applicant has been highly selective in terms of the views that it has represented. In order to illustrate this point, PtP has commissioned a series of photographs showing views that will be impacted by the Proposed Development and demonstrating the effect on those views of solar panels which are 2.5m high. These photographs are attached as **Appendix 4** and are summarised below:

View	Applicant’s Ref	PtP’s ref
View of Berden Hall and Church of St Nicholas looking East from Footpath 27	Not considered by the Applicant	A
View of the Crump looking East from Footpath 27	Not considered by the Applicant	B
View of Berden Hall and Church of St Nicholas looking East from Footpath 27	Not considered by the Applicant	C
View of the Crump looking East from Footpath 27	Not considered by the Applicant	D
View of the Crump looking East from Footpath 26	Not considered by the Applicant	E
View of Church of St Nicholas looking North-East from Footpath 26	Not considered by the Applicant	F
View of Berden Hall and Church of St Nicholas looking North-East from Footpath 26	Not considered by the Applicant	G
View of Berden Hall and Church of St Nicholas looking North-East from Footpath 26	Not considered by the Applicant	H
View of Berden Hall and Church of St Nicholas looking North-East	Not considered by the Applicant	J
View of Berden Hall and Church of St Nicholas looking North-East from Footpath 24	Not considered by the Applicant	M
View of Berden Hall and Church of St Nicholas looking North-East from Footpath 24	Not considered by the Applicant	N

The Church of St Nicholas: from the east side of the church yard looking west	Applicant's View 1	
The Church of St Nicholas: looking east from the west side of the field to the west.	Applicant's View 2	
The Church of St Nicholas: looking west from the western boundary of the dwelling west of the churchyard	Applicant's View	
Berden Hall: from the west side of the adjacent field	Applicant's View 4	
Berden Hall: looking southwest from the edge of the birch plantation	Applicant's View 5	
Berden Hall: from the edge of the plantation by Berden Hall, looking west	Applicant's View 6	
Berden Hall: looking northeast towards the church and Berden Hall (from Footpath 21)	Applicant's View 7	K
The Crump: looking southeast (from Footpath 21)	Applicant's View 8	L
Berden Priory: looking northwest at the Priory	Applicant's View 9	
Berden Priory: looking south from the southern boundary of the garden	Applicant's View 10	
Berden Priory: looking south towards the site of the proposed solar farm from the PRow south of the Priory	Applicant's View 11	

68. Even the Applicant acknowledges in respect of Viewpoint 8 (The Crump looking southeast) that *"the proposed solar farm will block the view...."*.

E3: The Applicants' Assessment of the impact of the development on Heritage Assets is not credible

69. The attempt by the Applicants' consultants to downplay both the importance of the heritage assets themselves and the impact that the development would have, serves only to undermine their credibility and to bring their impartiality into question.

70. In respect of The Crump, the Applicant's consultants dismiss the harm to the setting of this Scheduled Ancient Monument on the basis that it is 'small scale' and reversible'. The change in character that the development would bring to its surroundings would be very significant indeed and the reversibility would not become effective for 40 years. Two generations would therefore be impacted by the change. PtP refers to the comments of Dr Richard Hoggett who an independent consultant who has been asked to provide a view on the heritage impact (and whose report is appended to our earlier submission. His conclusion in relation to The Crump is that the surrounding agricultural land makes a strong contribution to the significance of this Scheduled Monument, the most important designation for this type of asset and for which great weight, the NPPF tells us, should be given to its harm.

71. In respect of St. Nicholas Church the Applicant again seeks to downplay the level of harm suggesting that the effect on its setting would be 'neutral'. Again, we refer to Dr Hoggett's conclusion that this position is untenable. This is a Grade I listed asset and following the NPPF the greatest weight must be afforded to the harm to its setting which would clearly be considerable.
72. Berden Hall, a Grade II* asset is also assessed as 'neutral' in terms of impact. The land for which permission is sought was a part of the Hall's estate. Not only does its openness therefore afford strong views of and from, the heritage asset but the land itself provides the historical context for this important building.

E4: The Applicants' Assessment of the impact of the development on Heritage Assets remains at odds with the views of Historic England

73. Historic England remain concerned by the proposals. In his response to the ES, Dr Jess Tipper wrote (18 January 2023) that:
- We confirm our view that the Proposed Development will result in harm to the significance of the adjacent scheduled monument known as The Crump through development within its setting. We consider the harm would be less than substantial and, at least, moderate in scale;
 - We also consider the cumulative impact of the proposed solar farm at Maggots End and the current development would also result in harm to The Crump scheduled monument;
 - In our view, the agrarian and undeveloped nature of this landscape contributes to the significance of the scheduled monument. The presence of this asset in the rural landscape is a rare survival, and the monument draws a considerable amount of significance from how it is experienced in the historic landscape setting.

E5: The Mitigation in respect of the harm to Heritage Assets remains inadequate

74. Apart from down-playing the level of harm that would be caused to local heritage, the Applicant has suggested mitigation measures by way of screening, in an attempt to make amends. We refer again to the Historic England advice in which it is stated that:

'As screening can only mitigate negative impacts, rather than removing impacts or providing enhancement, it ought never to be regarded as a substitute for well-designed developments...'

75. The Applicant's solution appears to be to carry out a scheme of planting that might shield the worst effects of the development for the Church and the Berden Hall cluster. It is highly unlikely that their proposals will reduce the harm caused. As illustrated by the photographs at **Appendix 4**, important views will still be lost both from and to the heritage assets. The planting itself will also change the character of the landscape and hence the setting of the heritage assets.

F BIODIVERSITY NET GAIN

F1: The evidence which underpins the BNG Assessment is not robust and its assumptions are flawed

85. The Applicant's BNG Assessment (produced by Consultants, RPS) is predominantly desk-based save for one site visit which was made on September 20th 2022. The assessment draws mainly on the UK Habitat Classification (2020) and from records obtained from Essex Field Club and the Hertfordshire Environmental Records Centre (although the site is in Essex). Although more technical than the (earlier) Cherryfield report, a great deal of the document consists of texts and tables copied and pasted from policy documents.
86. RPS's BNG figure of 88.77% for the solar farm is largely based on three assumptions, which are that:
- a solar grassland seed mix will produce greater biodiversity than a cereal crop;
 - new hedges will meet Defra's conditions; and
 - the meadow grassland seed mix to be sown around the deer fences will fulfil the same ecological function as existing arable field margins.
87. However, these assumptions do not withstand scrutiny and fail to take account of a number of key factors including the following:
- in 2020 and 2021 the south-western field (which is to be covered in solar panels) was planted with lucerne resulting in large numbers of Common Blue, Marbled White and Small Tortoiseshell butterflies. The presence of these species is not included in the baseline assessment;
 - the existing field margins also support large numbers of these and other butterflies and invertebrates as well as many species of wildflowers and grasses including pyramidal orchid, cowslip, field poppy, lesser stitchwort, field scabious, lady's smock and wild marjoram;
 - RPS estimates that it will take 12 years for hedges to become established (and this is likely to be an underestimate); and
 - the tables assessing the hedges before and after construction grossly overestimate the BNG value of the new hedges.
88. The Assessment criticises Defra's BNG metric, arguing (without evidence to support the assertion) that the meadow grassland seed mix to be sown around all the deer fences will fulfil the same ecological function as existing arable field margins. It acknowledges however that these areas will need to be managed in good condition and that it will take time for this target condition to be achieved.
89. The landscaping plan includes 'reinforcing' Hedge 5, on the southern boundary line. This is likely to impact adversely on lesser whitethroats which are summer breeding visitors to hedges along Brick House End adjacent to the Site and prefer gappy hedges to dense hedges. The BNG assessment makes no reference to this species.

90. The Applicant refers to two broadleaved woodland compartments on or adjacent to the Site being W1 (western parcel), within the Site boundary and W2 (eastern parcel), outside the application boundary but immediately adjacent to it. It then dismisses the importance of these habitats stating (at paragraph 7.57 of the ES) that:

“These woodland compartments are considered to be of low ecological value, of importance at the local level.

91. However, the eastern compartment is the site of an active badger sett and contains several trees with holes suitable for nesting bats. The western compartment also attracts bats, house martins and swifts in summer all of which feed above and around these trees.


F2: The data produced by the Applicant contains many errors and omissions and is out of date

92. An Advice note produced by the Chartered Institute of Ecology and Environmental Management (the leading professional membership body representing and supporting ecologists and environmental managers in the UK) entitled “The Lifespan of Ecological Reports & Surveys”⁷ confirms the importance of ensuring that:

“planning decisions are based on up-to-date ecological reports and survey data”.

93. Whilst not a comprehensive list, the following errors and omissions are evident following a review of the Applicant’s submission:

- Paragraph 3.9 of the BNG Assessment (which considers the subject of woodland) refers to blue, yellow and purple cells in Table 3.3. There are no blue or yellow cells in this table;
- Ponds and green corridors are identified from a 1:25000 OS map, but Easingwell Pond and Berden Hall Pond are not identified despite their proximity to the site. In fact, Easingwell Pond lies c. 200 m from the Site and the large pond/ornamental lake at Berden Hall, lies c. 100 m from the Site. The owners of Berden Hall have recorded great crested newt, grass snake, toad, kingfisher, deer, badger and bats visiting this pond, and frogs and toads frequent Easingwell Pond as do mallards and moorhens;
- Table 3.2 is not comprehensive – it omits many species of butterflies and other invertebrates and birds. It includes no data from 2021 or 2022;
- Table 3.3 assesses the eastern woodland as ‘Moderate’ whereas paragraph 7.2 of the BNG assessment concludes that the same woodland is ‘Good’ in terms of condition. However, as the eastern woodland is now outside the boundary line, why is it included in the BNG Assessment when other hedges outside the boundary line are excluded?
- Tables 3.4 and 3.5 are simply copied and pasted from policy documents;

- Appendix B misses some plant species e.g., Italian poplar in the western woodland and an invasive Lonicera in the eastern woodland and cannot, therefore, be relied upon;
- Whilst the ES acknowledges that the list of species is not comprehensive, arguing this would be impractical, the decision to use elderly data results in the failure to identify, or consider the impact of the Proposed Development on, a number of additional species which are known to be present on the Site (and have been recorded by local residents) including linnet, lesser whitethroat, yellowhammer, chiffchaff, wheatear, blackcap and spotted flycatcher. Many of these are farmland birds, a group in particularly steep decline over the last 25 years;
- In addition, there is no mention of buzzard, sparrow hawk, raven, jay, heron, greater spotted woodpecker, willow warbler, corn bunting, green woodpecker, stonechat, song thrush, golden plover, all of which have been observed on the Site between 2019 and 2023 – indeed only last week around 30 golden plover (another red list bird) were seen on the site by local residents.
- Butterflies observed on the Site during 2020-23 include: Brimstone, peacock, red admiral, small tortoiseshell, comma, painted lady, marbled white, common blue, wall, speckled wood, meadow brown, orange tip;
- 
- Single hares and occasionally groups of up to 6 are commonly observed in the Site in the evenings; the 2015 data set is not up to date;
- A roadkill harvest mouse was found within 30m of the site in May 2021. A fox was seen several times in the centre of the Site in September 2022, as was a stoat. A herd of roe deer regularly crosses the Site and is sometimes seen daily;
- There are significant numbers of bats that roost in the roof of Berden Hall and the tower of Berden Church, and that fly over the Site to feed. The reliance on old data (compiled in 2013) means that the Applicant fails to present an accurate picture of the diverse wildlife on or adjacent to the Site.

F3: The presence of Skylarks on the Site of the Proposed Development is a matter of serious concern

94. Uttlesford's Local Plan Policy GEN7 of states that:

'Development that would have a harmful effect on wildlife or geological features will not be permitted unless the need for the development outweighs the importance of the feature to nature conservation. Where the site includes protected species or habitats suitable for protected species, a nature conservation survey will be required. Measures to mitigate and/or compensate for the potential impacts of development, secured by planning obligation or condition, will be required. The enhancement of biodiversity through the creation of appropriate new habitats will be sought.'

95. Skylarks are classified as red list under the Birds of Conservation Concern 4 (2021) and are included in Section 41 of the Species of Principal Importance in England under the Natural Environment and Rural Communities (NERC) Act 2006. They are a UK BAP priority bird species.
96. Skylarks have been in steep decline in the UK since the early 1970s. Some authorities quote a 63% decline and the RSPB indicates that there was a 75% decline in skylark populations between 1972 and 1996⁸. On January 27 2023 Chris Packham highlighted the plight of red list farmland birds in the final episode of BBC2 *Winterwatch*, and made explicit reference to skylarks (and also tree sparrow and yellowhammer – the latter has also been observed on the proposed site).
97. Data provided by the BTO which is attached as **Appendix 5** confirms that skylarks have nested on open arable fields between Berden and Stocking Pelham since at least 1994. The fields include relatively few hedges or trees/manmade structures, so there is little risk to the skylarks from predators such as perching birds of prey. It has been suggested by a local resident (who is a keen amateur naturalist) that since Enclosure was very late for these fields, skylarks may well have nested here for hundreds of years.
98. In addition to data supplied by BTO (recording skylark as nesting here since at least 1994), Ray Murdoch (of the Stort Valley RSPB Group, Bishop’s Stortford) has also confirmed that he has recorded skylarks in this area for the past 30 years.

F4: The Applicant’s Skylark Mitigation Strategy is inadequate

99. In its original submission to the Planning Inspectorate, the Applicant, acknowledged the presence of the skylarks on the site of the Proposed Development but suggested that they would be able to nest between the solar arrays. The Planning Inspectorate challenged this suggestion and requested a more detailed mitigation plan as part of an Environmental Impact Assessment.
100. The Skylark Mitigation Strategy now submitted by the Applicant cannot be considered adequate compensation for the loss of skylark habitat and is highly concerning. The Strategy is based on a government policy AB4: Skylark plots⁹ designed to reward farmers for providing unsown nesting plots on, e.g., winter cereal fields, in order to encourage an increase in existing numbers of skylarks on such land. This policy is not designed to support the argument that skylarks can be “nudged” to move from their historic nesting sites to nest, instead, on small numbers of small plots up to a mile away.
101. One of the findings of a paper entitled “The Behaviour of Skylarks”¹⁰ written by Juan D. Delius (Professor Emeritus, Department of Psychology, University of Konstanz) and Julia A. M. Delius (Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin) is that skylarks have “high nest site fidelity” i.e. they like their existing territories. The paper cites a study in which around 100 Skylarks were observed over an average of three months within the breeding season – noting that only two birds

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9 <https://www.gov.uk/countryside-stewardship-grants/skylark-plots-ab4>

10

moved or switched their territory. The paper also observes that Syklarks which have been moved will return to their original territories (noting an experiment where Five larks - 3 males, 2 females - were transported up to about 1 km from their territories before being released – the five birds were “back in their territories within a few minutes”).

102. Two mitigation areas are now proposed by the Applicant, but neither are suitable:
- the first area (east behind The Street) is highly problematic as it is crossed by pylons;
 - the second mitigation area proposed for the skylark nesting plots (located some c. 2 kilometres away from the development site beyond Dewes Green) is too far from the site.
103. The Applicant proposes to offer 36 plots across these two sites each measuring 4 m x 4 m sq. The RSPB offers clear guidance¹¹ for the creation of skylark plots which includes the following text:

“[Farmers should] aim to create roughly two hundred skylark plots per square kilometre across the winter cereal area. Research suggests the skylark decline would be reversed if 20 per cent of winter cereals in the UK had two hundred plots per square kilometre.

104. The following text from Gavid Siriwardena of the BTO¹² suggests further reasons for concern:

“The Skylark’s decline led to widespread conservation concern and then to policy measures to allow recovery. To date, however, they have not worked. New management options have been introduced via agri-environment schemes, encouraging farmers to improve habitat quality for species like Skylark. Leaving stubbles unsprayed over winter – so enhancing weed seed availability, providing fallow land in spring for nesting and creating bare patches in crops to allow access for breeding birds are all supported by government funding.

So why has the decline continued? We do not yet know for sure, but there could be more than one reason. Firstly, many farmers do not like agri-environment management that interferes with crop production, so most tends to be along field edges – places that Skylarks avoid; fallows and bare patches are unpopular. Secondly, some options have not had the intended effects, perhaps concentrating birds and encouraging predators or diseases. Some recent changes in agri-environment schemes may not have taken effect yet, but a culture-shift amongst farmers about what makes “good farming” may be needed, along with more research into the reasons why some management is failing, without which fewer and fewer people will see and hear this icon of the British countryside in the future”.



F5: No material improvements have been made to the Landscape and Ecological and Management Plan (LEMP)

105. The only difference between the original LEMP and the LEMP submitted in conjunction with the ES is the addition of monitoring plans for BNG targets. The management plans appear generic, as are the new monitoring plans. The management plans, for example, include plans for Scrub, although there is no Scrub in the landscaping plan for the Site.

106. The following observations are also offered in relation to the revised LEMP;

- Skylark nesting plots have been removed from 4.3 but are still referenced in the Objectives.
- There is an attempt to suggest that sheep may be grazed under the arrays, although no details of this are given in either the original or the revised LEMP of plans which are proposed in relation to sheep grazing save that the original LEMP stated that the sheep would be allowed to graze when Skylarks were nesting.
- BRE's best practice Biodiversity guidance¹³ notes that a qualified ecologist should assist with the development of a conservation grazing regime that is suited to the site's characteristics and management objectives, and this regime should be incorporated into the biodiversity management plan. The Applicant's failure to do so demonstrates that it is merely playing lip service to the possibility of sheep grazing.
- It is unclear how Objective 1 'Retain habitats' is compatible with Strategy 6 (Skylark nesting plots on site) given that the Applicant no longer proposes to retain skylark nesting plots on site,
- Strategy 11, in both the original and the revised LEMP, conflates habitats with biodiversity; the habitats will be surveyed, although not very often, but only three ecological surveys are planned for the first 20 years after construction.

107. Lastly, it is highly unlikely that any planning condition imposed in relation to monitoring will be enforceable.

¹³ [REDACTED]

G TRANSPORT

G1: The revised transport route (via Manuden and Berden) is unsuitable for construction traffic and the Applicant has failed properly to assess the likely effects

108. Essex County Council Highways Department have stated (in their letter of 10 February 2023) that the impact of the Proposed Development is NOT acceptable to the Highway Authority from a highway and transportation perspective and, further, that the proposal is contrary to:

- the Highway Authority's Development Management Policies, adopted as County Council Supplementary Guidance in February 2011, and
- Uttlesford Local Plan Policy GEN1.:

109. The Highway Authority notes that:

"the revised Construction Traffic Management Plan (CTMP) Revision A....now introduces an alternative proposed construction traffic route using the highway network through Essex. There has been no prior engagement with Essex County Council regarding this proposed construction route and as a result the CTMP Revision A does not include any detailed assessment or proposals for managing constrained sections of the highway network through Essex".

The Highway Authority also highlights that "the following sections of the route are of concern":

a. The road through Berden at the western end has a narrow footpath on the northern side. Towards the centre of the village and on to the east the road narrows to approximately 3.5m and there is no footway. This section includes access to the village hall which residents may access on foot.

b. The junction of Berden Road with Manuden Road should be subject to swept path analysis and any required mitigation discussed with the highway authority.

c. There are sections of Manuden Road which exhibit verge damage where it is narrows. There are also sections just north of Manuden where the road narrows and has banks either side.

d. Through the village of Manuden there is a footway on one side of the road. There are sections where cars park on the road effectively narrowing it to one lane. There is also a primary school in this village.

e. Through the village of Hazelend there a no footways and some evidence of vehicles over running the verge.

110. As noted above, Protect the Pelhams has commissioned a further report from an experienced and independent Transport Consultant (Bruce Bamber) who was asked to consider the Applicant's proposals in relation to transport and highways matters. Mr Bamber's Report is attached to this document as **Appendix 6**.

111. The key points arising from Bamber's new Report (many of which are consistent with the points raised by the Highway Authority) are summarised below:

- Overall, it is impossible to judge whether the Proposed Development is acceptable in transport and highways terms owing to the failure to provide critical information and an absence of necessary assessments of highways impact. However, the high sensitivity of both Manuden and Berden to changes in traffic flows, particularly HGV movements, and the narrowness and sensitivity of sections of the construction route (referred to below), suggest that the proposals may well lead to a significant adverse highway safety impact during construction and that this impact is likely to be further exacerbated by cumulative development;
- The EIA Screening process fails to acknowledge that the proposed construction route through Hazel End, Manuden and Berden is highly sensitive to increases in HGV movements. The EIA screening process itself is therefore flawed, and as a consequence, there has been no assessment of the sensitivity of the proposed access route or the magnitude of transport environmental impact. In the absence of assessment, it is impossible to assess whether mitigation is necessary, or indeed, whether the proposals are acceptable in transport and highways terms;
- The construction access route now proposed by the Applicant passes through Manuden, a sensitive village with on-street parking, narrow and absent footways, tight bends with restricted forward visibility and a primary school associated with significant movement of vulnerable highway users during school opening and closing times;
- The route through Manuden has been deliberately avoided by the promoters of the Pelham Spring development because of the high sensitivity of the primary school. The transport work undertaken in relation to the Berden Hall Farm development does not even acknowledge the existence of the school;
- In Berden, the construction route passes the Village Hall that is accessible from the village only by walking along a narrow section of carriageway with no footways or verges with a blind bend at one end and a blind crest at the other.
- On other parts of the route there are sections so narrow that two light vehicles are able to pass only at very low speeds together with tight bends and areas used by equestrians;
- There have been 12 personal injury accidents along the route between the A120 and the site over the past 5 years. These and other concerns make the route highly sensitive yet the Applicant has entirely failed to present any assessment of impact or even acknowledge the existence of potential impacts;
- The EIA screening process has failed to acknowledge the fact that the proposals directly impact on a number of public rights of way. There has therefore been no work undertaken to demonstrate how the construction works can progress without putting members of the public at risk;

- Despite UDC's requirement for a Transport Statement, no such document has been prepared. This, and the errors and omissions in the Access Technical Note and CTMP have contributed towards a failure to undertake proper transport and transport environmental impact assessment;
- There has been no clear justification of the assumed level of HGV trip generation during construction. It appears that the assumption that has been adopted is likely to significantly underestimate HGV trip generation. Work undertaken in relation to the Pelham Spring proposals indicate that the HGV numbers predicted for the Berden Hall Farm development constitute a small proportion (likely to be significantly less than one third) of the number required in reality;
- Overall, it is impossible to judge whether the Proposed Development is acceptable in transport and highways terms owing to the failure to provide critical information and an absence of necessary assessments of highways impact. However, the high sensitivity of both Manuden and Berden to changes in traffic flows, particularly HGV movements, and the narrowness and sensitivity of sections of the construction route, suggest that the proposals may well lead to a significant adverse highway safety impact during construction and that this impact is likely to be further exacerbated by cumulative development.

H FLOODING

H1: The conclusions of the Flood Risk and Drainage assessment is based on an incomplete understanding of flooding in the locality

112. The ES proposes no additional flood prevention measures for rainwater run-off, and has taken no account of the recent history of flooding in Berden, the likely potential increase in this due to global warming, and the potential increase in run-off from the site due to kinetic energy from the panels and soil erosion.
113. Section 6.14 of the Applicant's Flood Risk and Drainage assessment (ES APP 1.4) states that:

"The records state that on 23 November 2014 the stream along the main road into Berden has burst its banks and flooded the road." which is taken from The Uttlesford SFRA published in May 2016. This data does not cover the last five years in which climate change has started to make these incidents more frequent. There have been incidents of flooding on 15/112020, 23/122020, and 26/12 2021, which were reported by Berden Parish Council in a submission on flooding to the Uttlesford Local Plan on 19th January 2022".

114. The Applicant's report shows (at Figure 3) that surface water from the site flows away from Berden and forms the stream referred to below. 6.10 erroneously states:

"One flow path appears to originate within the centre of the Site flowing from west to east, and eventually discharging into a culverted drain running under Berden."

"The stream through Berden is predominantly open, but does have some culverts, some of which have not had the capacity for recent rainwaters".

115. The Applicant's FRA concludes that its FRA demonstrates that:
- The Site is at low risk of flooding from fluvial and/or tidal flooding;
 - [the Proposed Development] would neither exacerbate existing flooding problems nor increase the risk of flooding on Site or elsewhere;
 - Surface water runoff will be mitigated by maintenance of a vegetation cover; and
 - With appropriate surface water and soil management measures there is negligible alteration to local drainage patterns direction within the Site.
116. The Applicant concludes that the Proposed Development is at 'Low' risk of flooding and with appropriate surface water and soil management measures would cause negligible effects on the hydrological regimes,
117. There is no mention of "appropriate surface water and soil management measures" in the Applicant's submission. The ES merely states (at paragraph 8.27) that:



“SuDS techniques will be incorporated into the design, when and where required, and will work in conjunction with existing field drainage to manage the discharge of any excess water from the Site”. The Surface Water and Soil Management Measures do not consider or allow for any measures, attenuation or otherwise, that would address increased run-off from the site”.

118. A paper entitled “The Hydrologic Response of Solar Farms”¹⁴ concludes that:

“the kinetic energy of the water draining from the solar panel could be as much as 10 times greater than that of rainfall. Thus, because the energy of the water draining from the panels is much higher, it is very possible that soil below the base of the solar panel could erode owing to the concentrated flow of water off the panel..” and

“if the land underneath and surrounding the panels is not correctly managed (such as due to compaction via use of machinery) then the runoff is likely to be “..increased significantly and the peak discharge increased by approximately 100%.” This means the solar panels may increase flooding and soil erosion depending on the soil and how it is managed.”

119. Flooding in Berden is usually caused at two points:

- Where the water running through a ditch from the proposed site meets The Street, evidenced by video 
- Where the stream goes through a culvert at the centre of the village (under “The Green”), evidenced by video 

120. When these incidents occur, flooding has also happened on Ginns Road by Field House, on one occasion making the road impassable. It is also understood that the effects of flooding at these times were more substantial in Manuden.

121. The majority of the rainwater run-off from the site therefore flows into Berden, along The Street and between houses at the bottom of Chapel Hill. It is therefore highly likely that the Proposed Development will result in additional flood risk in Berden.

¹⁴ (Lauren M. Cook, S.M.ASCE; and Richard H. McCuen, M.ASCE, J. Hydrol. Eng., 2013)