

Westhide Solar Power Proposal: Site Selection & Land Use

October 2022

1. Introduction

- 1.1 This document has been prepared by the applicant to support the planning application for a solar power scheme at Westhide (P214619/F).
- 1.2 The proposed development consists of "the installation of ground mounted solar photovoltaic arrays, together with associated infrastructure, security fencing, CCTV, landscaping, onsite biodiversity net gain and permissive rights of way".
- 1.3 The proposed development area currently comprises three arable fields.
- 1.4 Over the course of its development, the site at Westhide has undergone an extensive site selection and refinement process, pertaining not just to the exploration of alternative locations, but also to the assessment of the entire Westhide landholding, and then the refinement and reduction of the site boundary through consultation with statutory and non-statutory consultees.
- 1.5 The proposal is also supported by an Agricultural Land Classification (ALC) report, which was prepared for the application by Askew Land & Soil (November 2021), a suitably qualified expert in this field.
- 1.6 A Framework Soil Management Plan (FSMP) has also been prepared to support the application by Askew Land & Soil (October 2022).

PART A – SITE SELECTION

2. Alternative locations

2.1 During the early stages of site finding and engaging with local landowners in the county, Westhide was one of 11 locations in Herefordshire that was explored for its potential to host solar. This review process commenced in 2014 and carried on for several years. Factors such as proximity to properties and environmental designations, land grade, potential for visual impact and access were considered.

2.2 With respect to alternative sites located within the relative vicinity of Westhide, two potential site locations in particular were assessed in 2020, both located within a 3km radius of the final Westhide site (distances have been omitted due to commercial confidentiality):

 Location A – X distance south-east of the Westhide site; circa 170 acres assessed; discounted due to a very high proportion of higher-grade land and potential for visual impact on third-party properties and footpaths. Location B – X distance north-west of the Westhide site; circa 485 acres assessed in total; discounted due to a very high proportion of higher-grade land and potential for visual impact on thirdparty properties and footpaths.

2.3 Due to the presence of significant amounts of grade 3 land on the Westhide Estate, it was decided that this would be the most suitable location for finding a viable site.

3. Westhide Estate

3.1 In the feasibility stages of working with Westhide Estate during 2020 TEKSS undertook an assessment of the entire landholding (circa 960 acres in total) with the view to identifying viable site locations.



3.2 A significant part of the estate consists of managed woodland and was discounted from any further assessment. The woodland forms a large part of the grade 3 component of the estate.

3.3 Many fields that were physically suitable for hosting solar were discounted due to the presence of only higher-grade land (grade 2 and above), as well as having a high visual impact potential on nearby properties.

3.4 There are two significant locations of grade 3 land on the estate – one to the north-west of the estate (where the Westhide site is located) and one to the south-west of the estate (please refer to the map above). The latter area was discounted due to the topography of the land and its elevated and angled nature in relation to nearby residential properties and views from further afield. It was considered that this would have substantial visual impact on the area.

3.5 The area comprising the site was therefore selected for further investigation due to this part of the estate being effectively hidden from view by topography and existing planting, the site being well contained within the landscape, as well as the prevalence of lower grade land in this location. Several adjoining fields with higher grade land were subsequently included in the final site boundary as they satisfied all other impact criteria (minimal visual impact and low flood risk in particular).

4. Westhide site

4.1 As with all sites in the early stages of development, the largest possible site boundary was initially selected for the site, incorporating a range of environmental and technical considerations, with the view to refining and reducing the boundary as environmental and technical assessments were carried out, and as consultation engagement took place and feedback was obtained from local stakeholders.

4.2 A grid connection for the site was secured at Dormington substation in January 2021, which supplies the county of Herefordshire.

4.3 Fairly early on, after early landscape & visual impact assessments, the southern boundaries of fields G & H were moved significantly further north (to the top of the crest running across those fields) to avoid visual impact on Westhide village.

4.4 Subsequently, the substation location was also changed in response to consultation with local residents and councillors and a field (field B) was dropped from the plan.

4.5 During the formal consultation period with the LPA, further comments were obtained from relevant local authority officers as well as statutory consultees. A concern with respect to the use of Best and Most Versatile (BMV) land onsite emerged over the latter stages of the consultation period. As a result, the applicant removed fields A, D, E, H & I from the development proposal, in order to remove BMV land from the proposal.

PART B – LAND USE

5. Current context

5.1 The UK is facing concurrent critical pressures on multiple fronts, both nationally and globally.

5.2 The global climate crisis requires that the UK transforms its energy sector, by moving away from fossil fuels and towards an ever-larger incorporation of a range of renewable sources and technologies. The UK has a range of renewable energy targets in order to decarbonise the UK, including significant increases in UK solar deployment (see 5.3).

5.3 Incorporation of renewable energy sources also has a significant role to play in energy security, by ensuring an increasing proportion of locally-produced reliable energy supplies and decreasing the UK's reliance on energy imports. Within the current context of the war in Ukraine, the associated energy sanctions and significant disruptions to gas supplies from Russia to Europe, this is particularly pertinent. In April 2022, the UK Government unveiled its Energy Security white paper, stating that it expects "a five-fold increase in deployment by 2035."¹

5.4 The UK is also facing a cost-of-living crisis, with inflation affecting food and energy prices in particular. Renewable energy, and solar in particular, also have a role to play in tackling this. Electricity generated by solar PV is currently the cheapest form of electricity production both in the UK² and globally³. As more solar is incorporated into the make-up of the UK's energy supplies, the UK's reliance on increasingly-expensive imported gas will reduce.

5.5 Finally, the disruption caused in the global food supply chain by both Covid and the war in Ukraine has shown the fragility of food security. Energy security and food security have sometimes been mistakenly presented as opposing priorities; however, these two concerns are two sides of the same coin and solar PV has a significant role to play in both. Affordable and reliable energy is required for the production and distribution of food, and UK farmers face an increasingly challenging operational environment.

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911817/electricity-generation-cost-report-2020.pdf

¹ https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

³ https://www.iea.org/reports/world-energy-outlook-2020

6. Solar & food security

6.1 It is clear that national energy security is improved by increasing the amount of electricity solar PV generated in the UK.

6.2 With regards to food security, it is important that the UK generates a significant amount of domesticallyproduced crops, not just for domestic consumption but also for export. With substantial price rises in energy, fertiliser and the impact of Brexit on the supply of agricultural staff, UK farmers are currently operating in a very challenging environment.

6.3 Many are looking to diversify their income streams in order to make their farming businesses financially sustainable in order to be able to continue farming and grow crops and/or produce livestock. Some are looking to host solar farms on their landholding as part of this strategy.

6.4 Solar PV, therefore, plays a role in supporting UK farmers and in supporting the UK's food security.

6.5 It should also be noted that whilst around 70% of the land in the UK is agricultural, **only 0.08% is currently used for solar PV**.⁴ To put this in context, data from a European Environment Agency project which provides a satellite-based inventory of land cover in Europe shows that this is significantly less than the land currently used for golf courses in the UK.⁵

6.6 Allowing UK farmers to host well-designed and environmentally-sensitive solar sites on a part of their landholding is therefore not detrimental to food security.

7. ALC

7.1 An Agricultural Land Classification (ALC) study was carried out by Askew Land & Soil Ltd on the Westhide site, with a final report produced in November 2021.

7.2 A physical survey was carried out to assess the quality of the soil in the eight fields initially included as part of the planning application, with the findings showing the following grade breakdown percentages:

- Grade 1 (Excellent) 19.5% of the site
- Grade 2 (Very good) 18.6% of the site
- Grade 3a (Good) 6.5% of the site
- Grade 3b (Moderate) 47.0% of the site
- Other/non-agr 8.4% of the site

7.3 The study showed that whilst some high-quality land was present onsite, the site was primarily formed of grade 3b land. In total, 55.4% of the site was non-BMV land, with 44.6% BMV.

7.4 The report went on to state that when viewing the site data in the context of Herefordshire county, the presence of high-grade land at the site is unsurprising, as it is widespread and dominant in the area. Herefordshire has a significant prevalence of high-grade land (grades 1 & 2), when viewed both regionally and nationally.

7.5 However, the high proportion of Subgrade 3b at the site indicates that it is some of the poorest quality land within Herefordshire.

7.6 The Westhide site therefore comprises an unusual opportunity to develop a significant solar power scheme primarily located on grade 3b land set within an area of predominantly high-grade land, where the site also fulfils other necessary criteria that would make other sites unviable – low landscape and visual

⁴ https://solarenergyuk.org/wp-content/uploads/2022/03/Briefing-Fact-Checker-1.pdf

⁵ https://www.eea.europa.eu/publications/COR0-landcover

impact, secured connection to grid, high ecological net benefit potential and technical viability (access to site etc).

7.7 The Draft National Policy Statement for Renewable Energy Infrastructure (EN3) (September 2021) states that [added emphasis]:

"Where possible, ground mounted Solar PV projects should utilise previously developed land, brownfield land, contaminated land, industrial land, or agricultural land preferably of classification 3b, 4, and 5 (avoiding the use of "Best and Most Versatile" cropland where possible). However, land type should not be a predominating factor in determining the suitability of the site location."

7.8 The ALC study carried out for the Westhide site showed that the site sought to utilise predominantly lower-grade land in an area of high-grade land.

7.9 The full planning application and its supporting documents demonstrate that a wide range of factors have been examined and assessed in order to establish the suitability of the site, including landscape & visual impact, access, flood risk, noise, cultural heritage etc.

7.10 During the formal consultation period with the LPA, further comments were obtained from relevant local authority officers as well as statutory consultees. A concern with respect to the use of Best and Most Versatile (BMV) land onsite emerged over the latter stages of the consultation period. As a result, the applicant removed fields A, D, E, H & I from the development proposal, in order to remove BMV land from the proposal.

7.11 This reduced the extent of BMV land in the development area significantly to the following distribution:

- Grade 1 (Excellent) 0% of the site
- Grade 2 (Very good) 0% of the site
- Grade 3a (Good) 4% of the site
- Grade 3b (Moderate) 96% of the site
- Other/non-agr 0% of the site

7.12 As a result, 96% of the development area is now non-BMV land, with a substantially reduced 4% of BMV.

7.13 A Framework Soil Management Plan (FSMP) has also been prepared to support the application by Askew Land & Soil (October 2022). It demonstrates the commitment by the applicant to follow best practice methods during the construction period (as per Defra's *Code of Practice for the Sustainable User of Soil on Construction Sites* and the Institute of Quarrying's *Good Practice Guide for Handling Soils in Mineral Workings*) and sets out a methodology for identifying and safeguarding the soil resources (topsoil and subsoil) on land required for the construction, operation and decommissioning of the proposed solar farm.

8. Land use at the site

8.1 The site is now comprised of three fields (field B was dropped due to the amended substation location and its relocation to field C; and fields A, D, E, H & I were dropped to reduce the amount of BMV land used for the proposal).

8.2 The table in Appendix 1 shows crop rotation data for fields in question between 2007-2021.

8.3 The fields comprising the site are currently used for a mixture of food (wheat, potatoes, rape and oats) and energy crops (maize).

8.4 Looking at the last 10 years of data, it can be seen that one of the fields (field G) has been used to grow energy crops (maize) for 10% of the time, as part of crop rotation.

8.5 There is nothing precluding the land in the scheme from continuing to participate in agricultural production, for example with grazing, subject to relevant assessments being carried out and approvals obtained.

8.6 The 2015 update on the Government's Planning Practice Guidance (PPG) states that "where a proposal involves greenfield land, [it needs to be considered] whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays."

8.7 The site selection process undertaken for the Westhide site, as well as the final selection of fields (where land grade was viewed in conjunction with landscape & visual impact, ecology benefits, flood risk etc), show that the development boundary reflects the aim of maximising benefits from the scheme, whilst minimising impacts, and that the site has sought to use lower-grade land as much as possible in preference to higher-grade land.

8.8 With respect to continued agricultural use, whilst sheep grazing hasn't been proposed as part of the current planning application, this is a viable future option for continued agricultural use, subject to relevant assessments being carried out and permissions obtained.

8.9 The scheme would bring a significant boost in local biodiversity, by creating circa 25 hectares of species-rich grassland under the panels, along with a total of 0.38 km of native species-rich hedgerow, and 0.79 km of native species-rich hedgerows with trees.

8.10 An updated Biodiversity Net Gain (BNG) calculation has been produced for the amended scheme (October 2022), showing that the above measures would result in a 69% gain of additional habitat and 59% gain on hedgerows.

9. Conclusion

9.1 This document has documented the long-term process undertaken with respect to selecting the site in question, as well as the ongoing refinement of the site boundaries in response to assessments and consultation feedback.

9.3 The applicant has sought to utilise primarily lower-grade land for the site.

9.3 The proposal is also in line with planning guidance:

- 1. The proposed use of the agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality; and
- 2. The proposal encourages significant biodiversity improvements around arrays.