

CHAPTER 4 - EXISTING CONDITIONS

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INTRODUCTION

4.1 This chapter sets out the existing physical environment of the development site boundary (as shown at **Figure 1.1**, **Figure 1.2** and **Figure 1.3**, **ES Volume 3**) and its setting in the wider context, together with a summary of the solar energy developments in the area.

SITE LOCATION

- 4.2 The proposed development is located to the west of Sellindge, in Kent. The village of Aldington is approximately 1.3km south-west of the development boundary, and the village of Smeeth is approximately 400m to the north-west.
- 4.3 The majority of the site is located in Aldington Parish Council, with the northern land parcel falling under Smeeth Parish Council. The location of the site within a wider area is illustrated in **Figure 1.1**, **Volume 3** of this Environmental Statement. The proposal is entirely within the jurisdiction of Ashford Borough Council.
- 4.4 Other than the nearest settlements noted in **Paragraph 4.2**, in the wider area around the proposed solar farm site there is Brabourne Lees, Lilyvale, and Mersham.
- 4.5 Dispersed dwellings and farms are situated alongside the minor roads surrounding the site.
- 4.6 There are seven dwellings, within 500m of the boundary of the proposed solar farm. The closest dwellings to the proposal (within approximately

1.0km of the array boundary) and their approximate distance to the closest point of the development are listed in **Table 4.1 on page 60**.

Table 4.1 - Dwellings closest to the proposed solar farm boundary

| | Dwelling | Private or involved-landowner owned | Distance from nearest row of solar panels (to nearest 5m) | Direction to the nearest row of solar panels |
|----|--------------------------------------|-------------------------------------|---|--|
| 1 | Partridge Farm | Involved | 100m | W |
| 2 | Bested House | Private | 150m | N |
| 3 | The Paddock | Private | 150m | N |
| 4 | Apple Barn | Private | 280m | SW |
| 5 | Forehead | Private | 300m | N |
| 6 | Hogben Farm | Private | 330m | N |
| 7 | Unnamed property by Lower Park Farm | Private | 430m | N |
| 8 | Lower Park Farm | Private | 450m | N |
| 9 | Evegate Manor | Private | 550m | E |
| 10 | Forehead Farm | Private | 640m | N |
| 11 | Unnamed property by Forehead Farm | Private | 680m | N |
| 12 | Harringe Court and nearby properties | Private | 670-770m | NW |
| 13 | Woodleas Farm | Private | 770m | E |
| 14 | Unnamed property by Middle Park Farm | Private | 830m | N |
| 15 | Middle Park Farm | Private | 890m | N |
| 16 | Little Goldwell Farm | Private | 850m | NE |
| 17 | Symnell and nearby properties | Private | 890m - 1.01km | NE |

PAST, PRESENT AND FUTURE LAND USE

Existing Land Use

- 4.7 The solar farm is proposed on farmland to the west and south of Sellindge Converter Station and the existing Sellindge Solar Farm. The site itself is primarily used as arable agricultural land. Within the site boundary, the fields range between medium and large scale, and are often bounded by established hedges.
- 4.8 Land surrounding the proposed East Stour Solar Farm is also mainly utilised for agricultural purposes and comprises mostly arable land. There are several small woodland blocks in the area, including Backhouse Wood, to the west of Bested Hill. In addition, field boundaries are generally well vegetated with established hedgerows and hedgerow trees.
- 4.9 A range of transport and energy crosses and adjoins the proposed site: Church Lane runs north/south between the southern land parcel at Bested Hill and the eastern land parcel around Partridge Plantation; the HS1

and local railway lines travel east/west across the site separating the northern development area from the rest of the site. The M20 forms the northern boundary of the northern parcels of land.

4.10 The land is also crossed by overhead electricity lines on wooden poles (33kV) and pylons (400kV) connecting to the Sellindge Converter Station. A sewage works is located to the immediate east of the Converter Station. Infrastructure on the site is discussed further from **Paragraph 4.61 on page 71**.

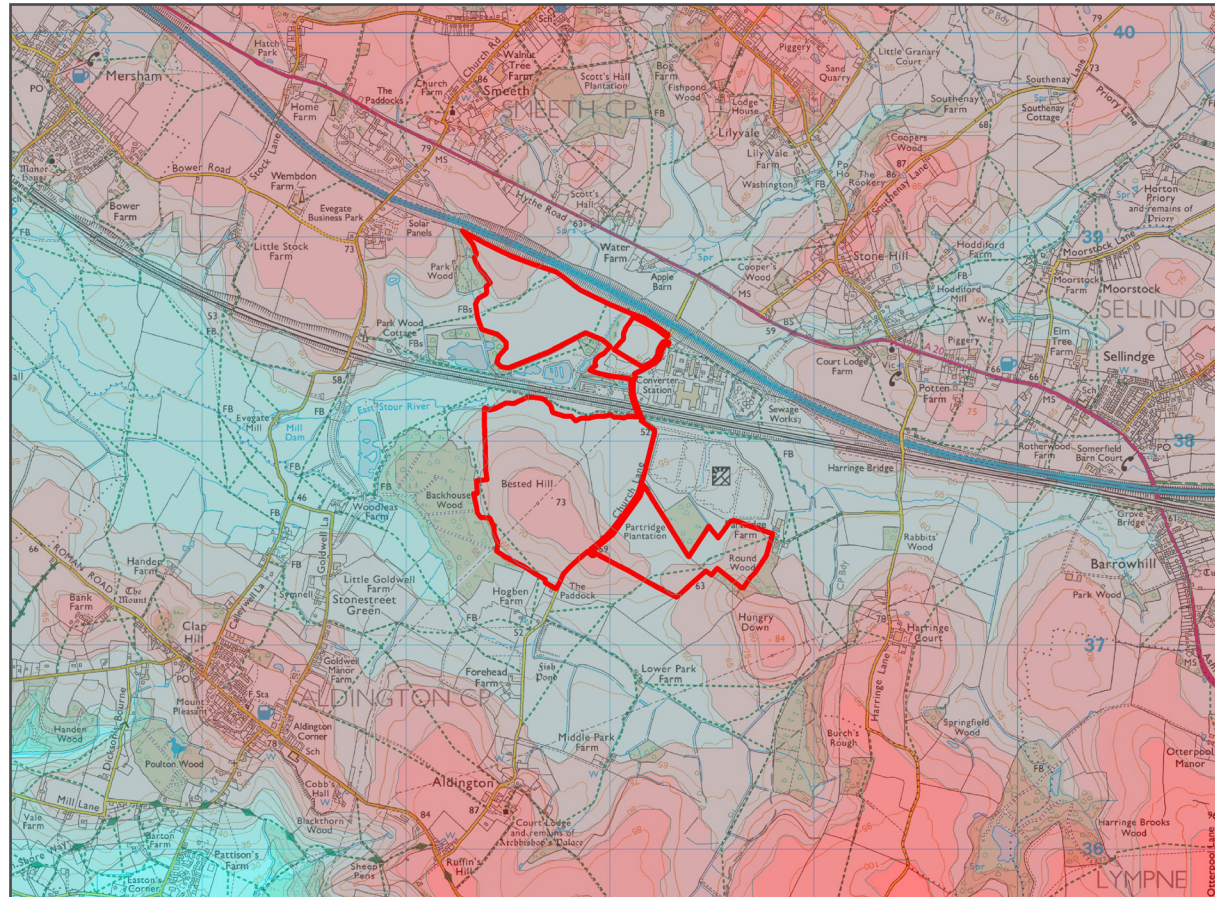
4.11 In the northern land parcel the terrain slopes gently from approximately 70m AOD in the north-western corner to 50m AOD along the southern and eastern areas. The southern section of the site includes Bested Hill, which peaks at approximately 72m AOD and then slopes down, reaching a low of approximately 50m in the north-eastern corner of the land parcel. In the eastern section of the site around Partridge Plantation, the terrain varies between 65m and 55m AOD, with the highest areas located on the south and east.

4.12 A digital terrain model is provided at **Plate 4.1** to visually assist with

appreciation of the topography within and surrounding the proposed site.

4.13 **Chapter 11 - LVIA** provides a full description and appraisal of the landscape character. A selection of

photographs to set the context of the development site are shown in **Plate 4.2 on page 62**, panoramic visualisations accompany the LVIA as presented in **ES Volume 4, Visualisations**.



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Plate 4.1 - Digital Terrain Model (DTM) Showing Topography Across the Site (outlined in red) and Surrounding Area

EAST STOUR SOLAR FARM



1. View south from footpath north of East Stour River south across Bested Hill. 2. View north from Church Lane over Bested Hill towards Converter Station & Sellindge Solar Farm. 3. View north-north-east from the approach to St Martin's Church, Aldington. 4. View north from Public Footpath east from St Martin's Church and Court Lodge Farm. 5. View west from Harringe Lane over Sellindge Solar Farm towards Bested Hill. 6. View south between HS1 Railway and M20 across northern site field towards Aldington.

Plate 4.2 - *Photos of Existing Site Environment*

Geology and Hydrology

- 4.14 The site is underlain by three main types of sedimentary bedrock:
- Weald clay formation (mudstone), formed c. 126 to 134 million years ago in the Cretaceous period;
 - Atherfield clay formation (mudstone, sandy), formed c. 113 to 126 million years ago in the Cretaceous period; and
 - Hythe formation (interbedded sandstone and limestone), formed c. 113 to 126 million years ago in the Cretaceous period (British Geological Survey, 2021).
- 4.15 An area of Atherfield clay formation along the northern land parcel is covered by superficial Alluvium deposits of clay, silt, sand and gravel. No superficial deposits have been recorded for other parts of the proposed site (British Geological Survey, 2021).
- 4.16 The proposed site comprises slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils (UKSO, 2021). Further discussion is contained within **Chapter 9 - Hydrology and Flood**

Risk Assessment and accompanying appendices.

- 4.17 As described further in **Chapter 9**, the Environment Agency Flood Map indicates that the development site lies predominately within Flood Zone 1. Some sections of the site boundary extend in to Flood Zone 2.
- 4.18 Flood Zone 1 is defined as an area with a low probability of flooding, where the annual probability of flooding from river or sea is less than 0.1%. The parts of the site located within Flood Zone 2 have an annual probability of flooding between 0.1 and 1% (Medium Probability; Low Risk).
- 4.19 A small section of the site falls under the 'Flood Storage Area' category. This is classed as High Risk, with an annual probability of flooding greater than 3.3%.

Agricultural Land Classification

Agricultural Land Survey Introduction and Policy Guidance

- 4.20 An Agricultural Land Classification Assessment has been prepared by Daniel Baird Soil Consultancy Ltd. It provides an assessment of the quality

and versatility of agricultural land at the proposed development site.

- 4.21 When surveyed in August 2021 agricultural land at the site was in a mix of arable cultivation and pasture grazed by sheep.
- 4.22 The appraisal of agricultural land quality is consistent with the direction given by the National Planning Policy Framework (NPPF) (MHCLG, 2021). Paragraph 174 states: -

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

- d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.'*
- 4.23 The glossary of the NPPF gives the following definition.
'Best and most versatile agricultural land: Land in grades 1, 2 and 3a of the Agricultural Land Classification'.
- 4.24 Accordingly a detailed assessment of the site was undertaken in August 2021 using the Ministry of Agriculture, Fisheries and Food (MAFF) revised guidelines and criteria for Agricultural Land Classification (ALC) published in October 1988.
- 4.25 Use of the ALC methodology is also supported by Natural England Technical Advice Note 049 (TIN049) revised in 2012.
- 4.26 To supplement the NPPF the Ministry of Housing, Communities and Local Government also provides an online library of planning practice guidance. Planning Practice Guidance for Renewable and Low Carbon Energy (PPG), Paragraph 013 identifies particular planning considerations that relate to the development of large scale ground mounted solar PV sites. Regarding agricultural land, this paragraph states:
'Where a proposal involves greenfield land, 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'.
- 4.27 Paragraph 013 of the PPG makes reference to a speech by the then Minister for Energy and Climate Change in April 2013 in which they state that:
'Where solar farms are not on brownfield land, you must be looking at low grade agricultural land which works with farmers to allow grazing in parallel with generation (...).'
- 4.28 Paragraph 013 also references a written ministerial statement of 25th March 2015 which states:
'In light of these concerns we want it to be clear that any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence. Of course, planning is a quasi-judicial process, and every application needs to be considered on its individual merits, with due process, in light of the relevant material considerations'.
- 4.29 Local planning policy for Ashford Borough Council is given in the Ashford Local Plan 2030 (adopted in February 2019). The local plan has no policy that makes specific reference to conserving the resource of best and most versatile land. Policy ENV10 – Renewable and Low Carbon Energy seeks to avoid

significant adverse impacts on ‘natural assets’ but does not provide any examples of such natural assets.

Methodology

4.30 The Ministry of Agriculture, Fisheries and Food (MAFF) ALC system of grading land quality for use in land use planning purposes divides farmland into five grades according to the degree of limitation imposed upon land use by the inherent physical characteristics of climate, site and soils. Grade 1 land is of an excellent quality, whilst Grade 5 land has very severe limitations for agricultural use. The ALC system is designed to be independent of land management so that there is no incentive for poor management of land to obtain development consent. Best and most versatile agricultural land that through sustained arable cropping has become exhausted, with diminished organic matter degrading the structural stability of the topsoil, is not downgraded in the ALC system.

4.31 The MAFF revised guidelines and criteria for ALC of October 1988 require that the following factors be investigated:

- Climate - Average Annual Rainfall (AAR) and Accumulated Temperature above 0°C between January and June (AT0);
- Site - Gradient, Micro Relief and Flooding;
- Soils - Texture, Structure, Depth, Stoniness, and Chemical Toxicity; and
- Interactive factors - Soil Wetness, Soil Droughtiness and Liability to Erosion.

Assessment

CLIMATE

4.32 Climatological data for ALC are provided for 5km intersections of the National Grid by the Meteorological Office, in collaboration with the National Soil Resources Institute. The data from these points can be interpolated providing climate data for specific sites. Interpolated data for two points within the site were obtained to capture any significant variation in climate factors between the 25m change in elevation across the proposed site. The data is given in **Table 4.2**.

4.33 As can be seen there is little difference between the interpolated data for the two points, with the lower point being slightly warmer.

Table 4.2 - East Stour Solar Farm Agricultural Land Classification Climate Data

| Reference Point: | TR 076 377 | TR 076 386 |
|---|---------------|---------------|
| Altitude (m) | 70 | 55 |
| Average Annual Rainfall (AAR) (mm) | 759 | 760 |
| Accumulated Temperature AT0 (day degrees) | 1428 | 1445 |
| Moisture Deficit for wheat (mm) | 115 | 116 |
| Moisture Deficit for potatoes (mm) | 110 | 112 |
| Field Capacity Duration (days) | 157 | 158 |

4.34 The main parameters used in the assessment of an overall climatic limitation are AAR as a measure of rainfall, and AT0 as a measure of warmth in the growing season.

4.35 Climate does not impose an overall limitation on ALC grade at this site.

Climate does however have an important influence on the interactive limitations, soil wetness and soil droughtiness. As the site is relatively warm and dry, soil droughtiness limitations are enhanced and soil wetness limitations are reduced.

THE SITE

- 4.36 The site lies to the west of Sellindge and is broken up into three parcels by the rail line running east west, and south of the rail line, Church Lane running north south.
- 4.37 Land drains toward the rail line with a water course (East Stour River) running alongside it. Large parts of the site are shown as Flood Zone 2 (the middle category of the three zone system) on the Environment Agency Flood map, with a smaller area around the East Stour River designated a water storage area. Flood risk, including the deliberate storage of water to attenuate flooding downstream, may impose a minor limitation on overall land grade, but is exceeded by other constraints present at the site.

SOILS AND PARENT MATERIALS

- 4.38 The British Geological Survey Geology of Britain Viewer shows the site to be

underlain the Weald Clay Formation mudstone on the lower lying ground, changing to the Atherfield Formation mudstone and Hythe Formation sandstone and limestone respectively rising upslope to the higher ground. Some superficial cover of Alluvium is present in the East Stour River corridor but any encroachment into the site area is marginal.

- 4.39 Field survey work found soils consistent with the solid geology of mudstones with interbedded limestone and sandstone on the higher ground. Typical soil profiles are clayey with areas on the upper slopes of calcareous soils incorporating intermittent areas of olive coloured clay loam subsoil similar to that found on a Green Sand geology.

INTERACTIVE FACTORS

- 4.40 Two basic soil profiles are found within the site. The most prolific has a heavy textured topsoil and subsoil. Drainage is impeded by the subsoil and the high clay content of the topsoil increases the severity of soil structural damage when disturbed in a wet and plastic consistence, giving rise to a soil wetness and workability limitation to ALC Grade.

- 4.41 The second soil type has a medium texture with a lower clay content. Drainage is better and the topsoil is less vulnerable to prolonged structural damage when disturbed in a plastic consistence. Soil droughtiness is the dominant limitation to ALC Grade.

Agricultural Land Classification of Land at East Stour Solar Farm

- 4.42 Detailed ALC survey of the site found agricultural land in ALC Grades 3a and 3b. **Plate 4.3 on page 67** shows the ALC grade distribution within the surveyed area, with area estimates given in **Table 4.3**.

Table 4.3 - ALC Grade Distribution within Surveyed Area

| ALC Grade | Area (ha) | % |
|-----------|-----------|-------|
| 3a | 14.9 | 14.6 |
| 3b | 87.0 | 85.4 |
| Total | 101.9 | 100.0 |

- 4.43 Grade 3a land is found in two narrow bands running across the hillslope, covering approximately 14.9ha of the surveyed area. Soil profiles have a medium sandy loam to medium clay loam topsoil texture, and a subsoil

that is medium sandy loam to heavy clay loam. Where the heavy clay loam subsoil occurs it is a slowly permeable lower subsoil, restricting drainage. Profiles are rarely wet (wetness class I) or occasionally wet (wetness class III) where the heavy lower subsoil occurs.

4.44 Soil droughtiness is the dominant limiting factor restricting this land to ALC Grade 3a, with isolated pockets of wetness class III land that have a soil wetness limitation to Grade 3a.

4.45 Grade 3b land makes up the majority of the site area, approximately 87.0ha of the surveyed area. Soils comprise a heavy silty clay loam topsoil and subsoil over a clay lower subsoil, with both upper and lower subsoil displaying evidence of regular waterlogging (gley mottles) and an inspection pit confirming a high packing density from the upper subsoil to depth, impeding drainage. As a result the land is in Wetness Class IV (waterlogged for long periods in winter) and limited to ALC Grade 3b by soil wetness.



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Plate 4.3 - Agricultural Land Classification Survey Results

LAND QUALITY AND THE PROPOSED DEVELOPMENT.

- 4.46 As discussed above, the NPPF seeks to conserve the national resource of the best and most versatile agricultural land. Agricultural land and the soil associated with it is, for all practical intents and purposes, a non-renewable resource. Development of building foundations and infrastructure such as roads and rail lines effectively sterilise any further agricultural production from that land area. The soil resource associated with that land can be retained and beneficially reused, but an area of best and most versatile land cannot be effectively translocated. Agricultural land quality is dependent upon characteristics of the location, not just the soil in isolation.
- 4.47 Solar PV development differs from built development in that the consent is temporary, is easily reversed and agricultural production can be maintained (though constrained) during the Solar PV consent. At the time of survey a significant part of the assessment area was being used to graze sheep. Sheep could also be seen grazing between and below the solar PV panels on the adjacent solar farm.
- 4.48 Planning Practice Guidance (MHCLG, 2020) introduces the desirability of maintaining agricultural production and/or enhancing biodiversity on farmland for the duration of any consent for large scale Solar PV. In most instances the transition from combinable crops to a permanent green cover for 40 years should confer tangible biodiversity benefits, regardless of the presence of the solar PV development. Such biodiversity effects are however beyond the scope of this assessment.
- 4.49 When considering a Solar PV development proposal, the conservation of the agricultural land resource and quality is of greater importance than the maintenance of the current agricultural production. This is as the agricultural land resource is non-renewable. Land use is transient, with productive use of agricultural land varying in response to drivers such as commodity prices, occupancy, diversification opportunities (such as livery) and not least, the current agricultural and environmental policy framework. For instance, in a shorter period than the proposed solar PV planning consent, Common Agricultural Policy transitioned from direct price support for commodities such as wheat, to area payments for crops in conjunction with 'set-aside' (the requirement to take a proportion of arable land out of any productive use including grazing), through to targeted payments for 'arable reversion' – payment made to a farm business to cease arable production in favour of biodiverse grassland management for an extended period of time. The future of farm support in England is at present highly uncertain but speeches by ministers have emphasised the need to maintain a transition towards rewarding land management for environmental services rather than agricultural production.
- 4.50 Grassland below a solar PV installation should be managed by grazing or cutting to control grass and shrub growth that could shade panels and impede access for maintenance. For the East Stour Solar Farm proposal, the developer intends to manage the grass through grazing with livestock, as per the practice at the existing adjoining solar farm. This livestock grazing will maintain the land in

agricultural production while the solar PV generation is in place.

- 4.51 Therefore, the development proposed does not result in loss of agricultural land resource and agricultural production, though restricted, can continue through the duration of the solar PV development.

AGRICULTURAL BENEFITS OF SOLAR PV

- 4.52 As noted above, the temporary consent for solar PV does not result in the permanent loss of agricultural land resource or the degradation of its ALC grade. The land can remain in agricultural production, grazing sheep, while providing an additional diversified income to the farm business. At the end of the temporary consent, decommissioning returns the land back to its prior agricultural function with no loss of extent or capability.

- 4.53 However, the presence of the solar PV confers benefits to arable land through an extended fallow period. The organic matter content of UK arable soils is in long term decline. Cultivation promotes rapid breakdown of organic matter, the soil organic matter content declining to a lower equilibrium. A change

of management with no cultivation under the solar PV will enable a return towards a higher equilibrium of soil organic matter. Benefits of this change will be land that is more fertile, easier to cultivate and permits more rapid infiltration of rainfall.

- 4.54 Compared to annual arable cropping, perennial crop cover will have time develop a root network that extends further down and through the subsoil, accelerating the drying process that helps aggregate soil into structures that allow improved drainage and further root exploitation of the soil. Although the ALC system deliberately omits soil characteristics that are sensitive to land management (avoiding any incentive to manage land badly to assist planning success), a long term fallow period will enhance the soil's functional capacity for supporting agricultural production.

ENVIRONMENTAL STEWARDSHIP

- 4.55 Land within the proposed site boundary is covered by an Agri-Environmental Scheme. There is an Environmental Stewardship Agreement for Entry Level plus Higher Level Stewardship across

the majority of the proposed site. There is no Countryside Stewardship Agreement over the land.

- 4.56 The Environmental Stewardship Agreement (ESA) covers the central and eastern parts of the proposed site around Bested Hill and Partridge Plantation, as well as additional land in the wider area. However, the land parcel north of the railway line is not covered by the Agri-Environmental Scheme.

- 4.57 There are many options for land management that can fall within the ESA (Natural England, 2013a). These are:

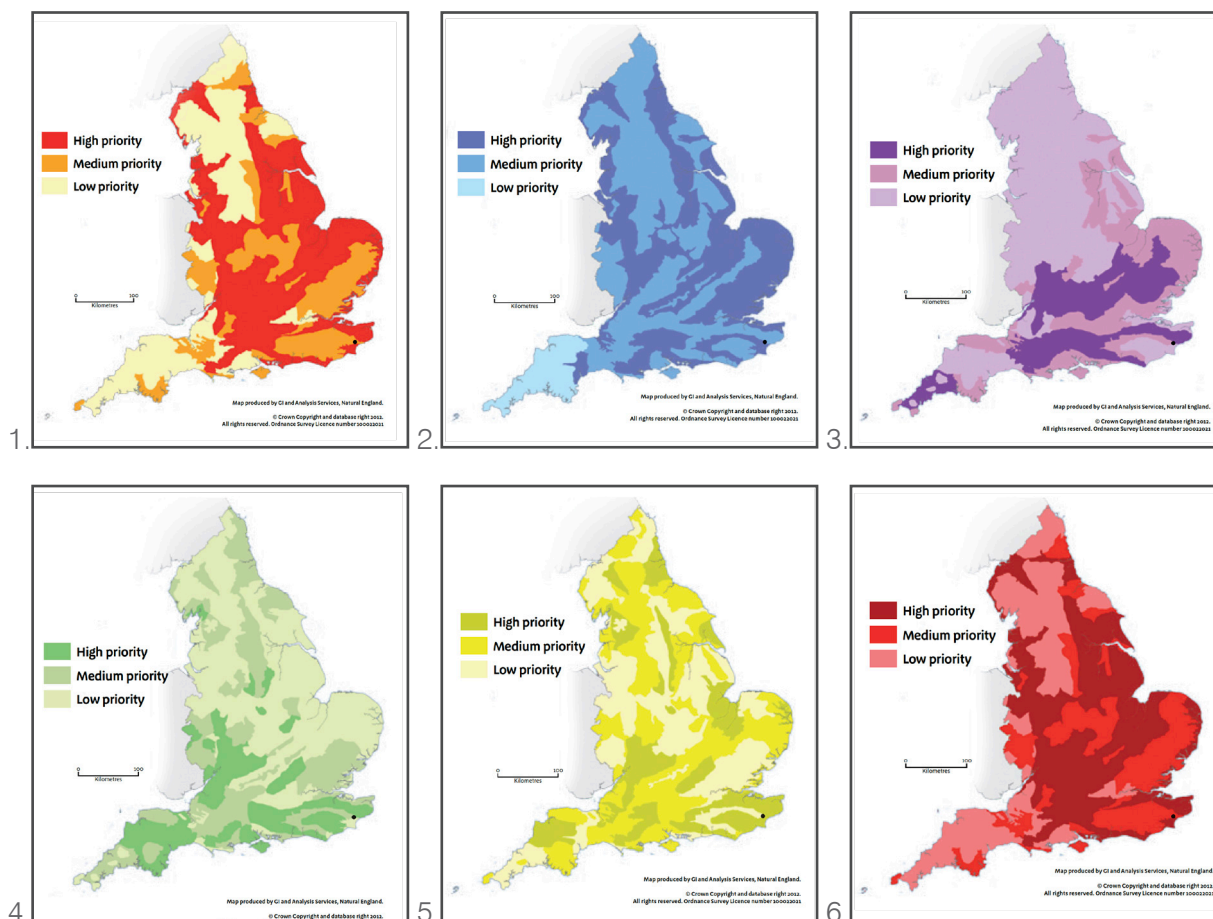
- maintenance, if land is already in a good condition;
- restoration, if features are present but not in a good condition; and
- creation, where there are opportunities for new habitat creation.

- 4.58 Measures appropriate for the land are determined through identifying the environmental objectives of the land and then these will be translated into a Farm Environment Plan (FEP). **Plate 4.4 on page 70** shows the priority of

the various environmental objectives at the site.

- 4.59 At the proposed site there is:
- medium priority for farmland birds;
 - high priority for water voles, dragonflies, newts and toads;
 - medium priority for arable plants;
 - medium priority for bats and dormouse;
 - low priority for butterflies, bees and vulnerable grassland; and
 - medium priority for brown hare.

4.60 The objectives of the existing Environmental Stewardship Scheme at the proposed site will be incorporated into a Landscape and Environmental Management Plan (LEMP), as introduced at **Chapter 10 - Ecology**.



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1. Priority areas for farmland birds. 2. Priority areas for water vole, dragon flies, newts and toads. 3. Priority areas for arable plants. 4. Priority areas for bats and dormice. 5. Priority areas for butterflies, bees and vulnerable grassland. 6. Priority areas for brown hare.

Plate 4.4 - Environmental Stewardship Objectives. Approximate site location marked by a black dot



CONTEXTUAL INFRASTRUCTURE

- 4.61 The M20 motorway travels parallel to the northern boundary of the northern section of the proposed site. The A20 is a further 250m to the north of the M20.
- 4.62 Church Lane provides access to the proposed site, as described in **Chapter 8 - Traffic and Access**, and separates the southern (Bested Hill) and eastern (Partridge Farm) sections of the site. Further local roads in the wider area include Goldwell Lane and Station Road to the west, Roman Road to the south, and Harringe Lane to the east.
- 4.63 The HS 1 and South Eastern Mainline railway lines runs between the northern and southern land parcels of the proposed site. The nearest train station for South Eastern services is Westenhanger, approximately 4.7km south-east. High speed services travel between Ashford (7.4km north-west of the site along the railway line) and the channel tunnel (14.0km south-east of the site along the railway line) and so trains pass the site at high speed. The line is also used by international freight trains.

1. Overhead electricity transmission lines on pylons and distribution lines on wooden poles crossing the site. 2. Existing Sellindge (Partridge Farm) Solar Array 3. Church Lane travelling under HS1 and South Eastern railway lines, adjacent to the central section of the proposed site. 4. Sellindge Converter Station.

Plate 4.5 - Existing Local Energy and Transport Infrastructure Features

4.64 The operating Sellindge Solar Farm (also referred to as Partridge Farm Solar Farm) is located to the east of Church Lane, adjacent to the eastern section of the proposed development. It is an independent installation unrelated to EDF-R. Other cumulative solar energy developments surrounding the proposed site are discussed further from **Paragraph 4.87 on page 76**.

4.65 At present, the site is regularly traversed by agricultural vehicles for the daily farming operations. West of Church Lane, within the northern land parcel, there is an area of hardstanding.

Past and Future Land Use

4.66 The proposed site has been in agricultural use for many decades. With changing demands on food, feed and energy crop production and movement to more sustainable agriculture, farmers are seeking ways to secure the future of their farms. This is discussed further with respect to carbon reduction and farm diversification at **Chapter 15 - Socio Economics and Sustainability**.

4.67 Further details of the historic environment on and around the

site are contained in **Chapter 12 - Archaeology and Cultural Heritage**, with historic mapping for the site area contained at the associated **Appendix 12.1**.

4.68 During the operational phase of the solar farm the use of the land will become a mix of agriculture with biodiversity improvement and renewable energy generation. Wild flower/grass meadow will be sown under, between and around the solar panels. These areas will be available for light sheep grazing (panels are suitably raised above the ground to ensure safe sheep grazing) and invertebrate habitat to continue agricultural production from the land and encourage native bee species.

4.69 Following decommissioning of the solar farm (discussed further in **Chapter 7 - Construction, Operation and Decommissioning**) the land will be fully restored for continued agricultural use, the soils having benefited from resting during the 40 year operational life.

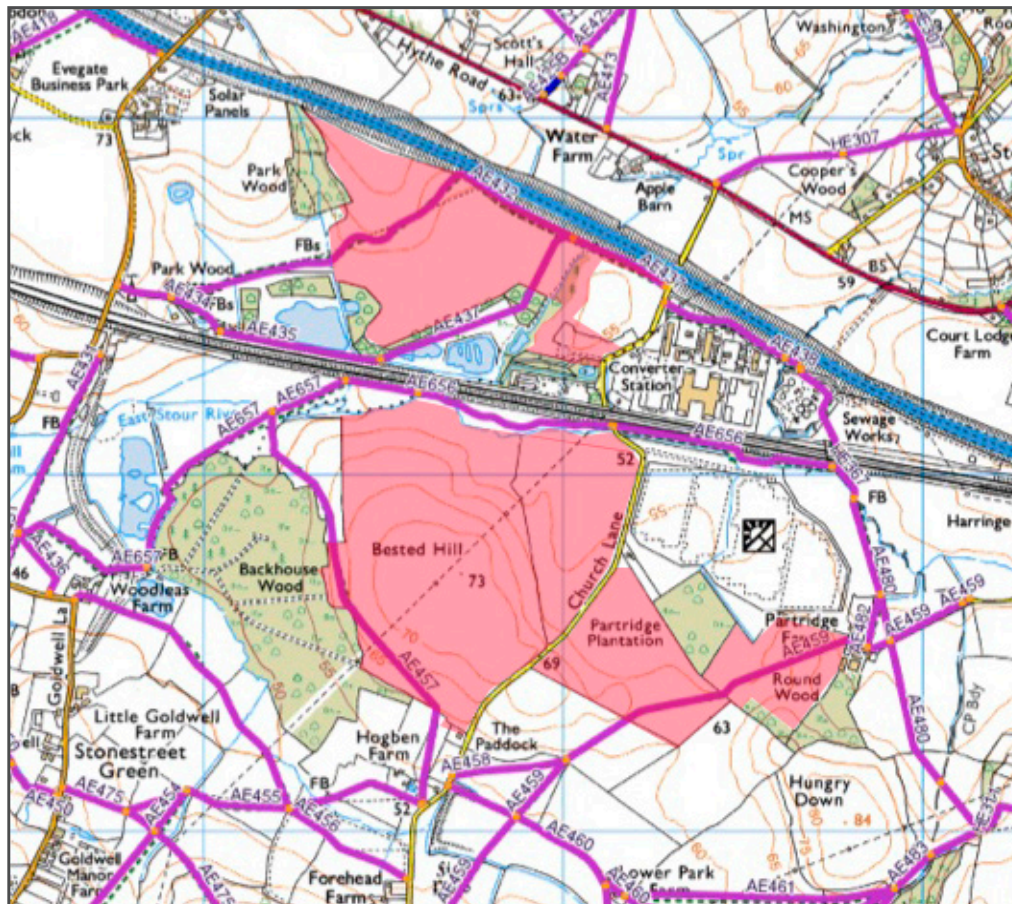
Public Rights of Way

4.70 There are four Public Rights of Way (PRoW) crossing through the proposed site area. These are:

- footpath AE437, travelling west from Church Lane along the northern field boundary of the northern land parcel, then heading south across the site and continuing south-west;
- footpath AE432, which continues west from footpath AE437 along the northern field boundary before crossing the site in a south-westerly direction;
- footpath AE457, which crosses the southern land parcel along the south-western corner of Bested Hill; and
- footpath AE459, which crosses the eastern part of the proposed development, from Partridge Farm across Partridge Plantation.

4.71 Adjacent to the central section of the proposed development, footpaths AE656 and AE657 follow the northern and north-western field boundaries of Bested Hill. In the wider area there is a network of additional public footpaths.

- 4.72 An annotated copy of Kent Council's Public Rights of Way Map for the area, showing those PRow listed at **Paragraph 4.70** and additional footpaths surrounding the proposed East Stour Solar Farm, is contained in **Plate 4.6** (and also provided in **Figure 11.7** of **Volume 3 - Figures**).
- 4.73 There is no Open Access or Common Land within the proposed development area or its surrounds.
- 4.74 Impacts on users of the Public Rights of Way through and surrounding the site are assessed within **Chapter 11 - LVIA**.



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Plate 4.6 - Extract from Kent Council's Public Rights of Way Map Viewer (purple lines - public footpaths; red shading - proposed development area)

DESIGNATIONS

- 4.75 As noted in **Chapter 3 - Site Selection and Design**, National and local designations were identified to shape the site selection and design process. The results of the designations search via 'MAGIC' are shown in **Plate 4.7 on page 75** and listed in full at **Appendix 4.1**.
- 4.76 There are no designations in the proposed site area. Within 2km of the approximate site boundary there are 118 Listed Buildings. These comprise of four Grade I, six Grade II* and 108 Grade II.
- 4.77 There is one Area of Outstanding Natural Beauty (AONB), one Local Nature Reserve (LNR), one Site of Special Scientific Interest (SSSI), one Registered Parks and Gardens (RPG), two Scheduled Monuments and 23 parcels of Ancient Woodland within 2km of the proposal.
- 4.78 There are no National Nature Reserves (NNR), National Parks, Ramsar sites, Special Protection Areas (SPA), Registered Battlefields, Special Areas of Conservation (SAC) or World Heritage Sites within 2km of the site.

- 4.79 The ecological, landscape and heritage designations surrounding the proposed site are listed below and discussed in greater detail within **Chapter 10 - Ecology**, **Chapter 11 - LVIA** and **Chapter 12 - Archaeology and Cultural Heritage**, and their accompanying Figures and Appendices.

Areas of Outstanding Natural Beauty

- 4.80 Kent Downs AONB is approximately 1.3km south of the proposed site.

Local Nature Reserves

- 4.81 Poulton Wood LNR in Aldington is approximately 1.8km south-west of the site boundary.

Sites of Special Scientific Interest

- 4.82 Hatch Park SSSI is approximately 1.3km north-west of the proposed site.

Ancient Woodlands

- 4.83 There are 23 Ancient and Semi-Natural Woodland and four Ancient Replanted Woodland areas within the study area. Three of those are adjacent to the proposed site boundary (IDs. 1484498 - Round Wood, 1484628 and 1484476 - Backhouse Wood).

Scheduled Ancient Monuments

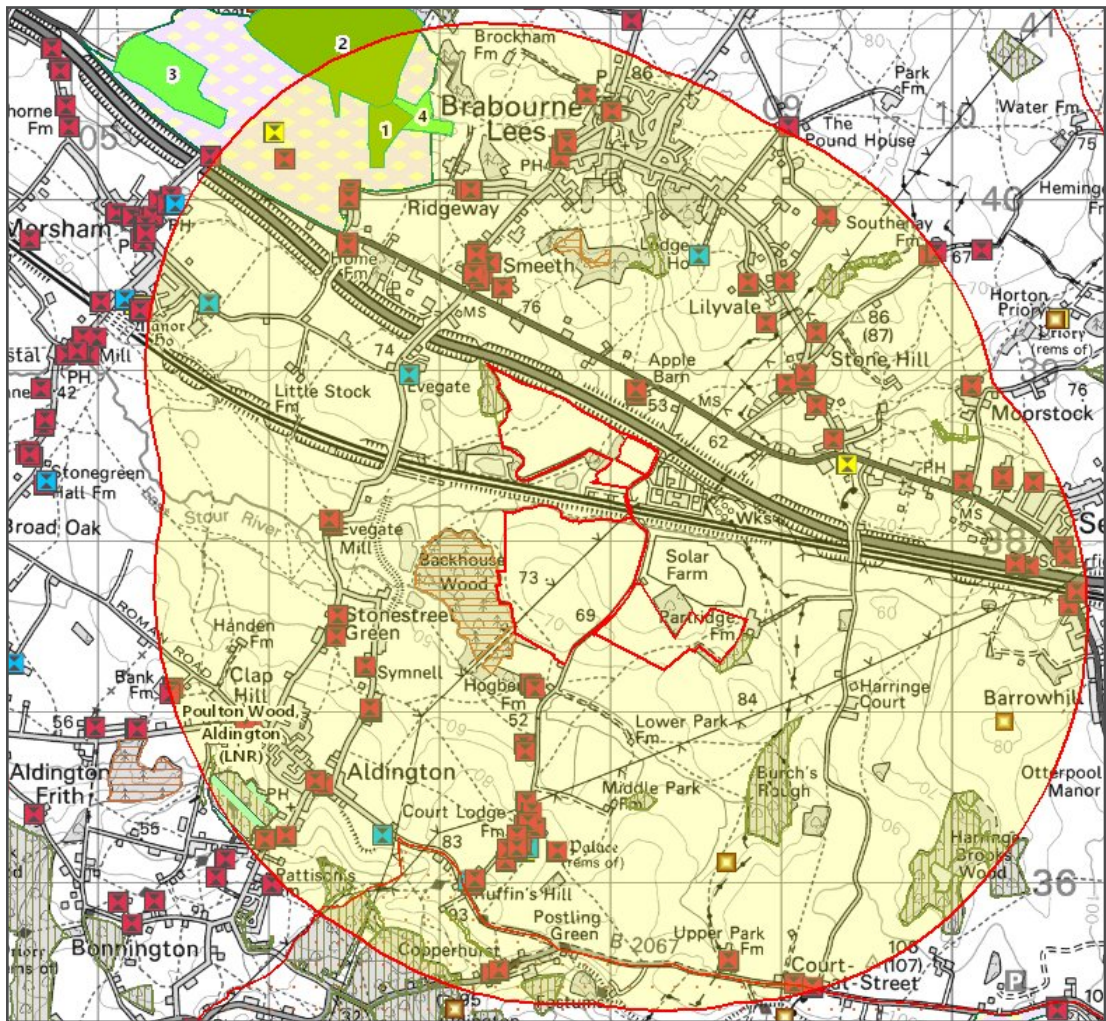
- 4.84 The following Scheduled Ancient Monuments are within approximately 2km of the site boundary:
- Romano-British building south of Burch's Rough, c. 1.0km south of the proposed site; and
 - Barrow cemetery to the south-west of Barrowhill, c. 1.7km east of the site boundary.

Registered Parks and Gardens

- 4.85 Hatch Park consists of a mid 18th Century landscape park accompanying a country house by architect Robert Adam. It is situated approximately 1.2km north-west of the proposed site.

Listed Buildings

- 4.86 The highest graded assets within the 2km search area are:
- Church of St Mary (Grade I) in Smeeth, c. 650m north-west;
 - Church of St Mary (Grade I) in Sellindge, c. 1.1km north-east; Church of St Martin (Grade I), c. 1.1km south;
 - Mersham Le Hatch (Grade I), c. 1.9km north-west;



- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland
- Local Nature Reserves (LNR)
- National Nature Reserves (NNR)
- Ramsar sites
- Sites of Special Scientific Interest (SSSI);
- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA);
- Areas of Outstanding Natural Beauty (AONB);
- National Parks;
- Scheduled Monuments;
- Listed Buildings (Grade I, II, and II*);
- World Heritage Sites;
- Registered Battlefields; and
- Registered Parks and Gardens.

Note: Search included all designations in the key, but not all types of designation are present in the study area.

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Plate 4.7 - Designation Search via MAGIC with 2km Buffer Around Site (marked by red line)

- Evegate Manor (Grade II*), c. 550m west;
- Court Lodge Farmhouse (Grade II*), c. 1.1km south;
- Lodge House (Grade II*), c. 1.1km north;
- Ruffyn's Hill Farmhouse and walls projecting (Grade II*), c. 1.4km south;
- Cobb's Hall (Grade II*), c. 1.4km south-west; and
- Bower Farmhouse (Grade II*), c. 1.7km north-west.

EXISTING AND PROPOSED RENEWABLE ENERGY DEVELOPMENTS

- 4.87 Inspection of Ordnance Survey mapping, 'renewables-map' and planning records were used to establish the cumulative baseline for the proposed East Stour Solar Farm.
- 4.88 The 'snapshot' of the cumulative solar schemes around East Stour Solar Farm is set out below, as identified in January 2022.

4.89 A 5km study area has been considered for the purposes of the Landscape and Visual Impact Assessment (**Chapter 11 - LVIA**). A single existing solar energy development has been identified, the location of which is shown at **Plate 4.8 on page 77**.

4.90 Measurements presented in the following section with respect to other solar farms are taken as the crow flies between the nearest boundaries of East Stour Solar Farm and the cumulative development. All measurements are rounded to the nearest 100m (0.1km).

Operating Commercial Scale Solar Energy Developments

4.91 As noted at **Paragraph 4.7 on page 60**, there is one operating commercial scale solar array adjacent to the proposed East Stour Solar Farm: Sellindge (Partridge Farm) Solar Farm is located south of the Sellindge Converter Station, on land adjacent to the north and east of the proposed development areas on Partridge Plantation and Bested Hill. It is a 10.6MW solar array covering approximately 16ha and was built by Eco Energy Power Solutions in 2016.

4.92 There are no other operational commercial scale solar farms within approximately 5.0km of the proposed site.

Consented Solar Energy Developments

4.93 A development involving the construction of a solar array, four sound-attenuating bunds and haulage tracks (Ref. Y12/0093/SH) was approved by Folkstone and Hythe District Council in 2012. The proposal is north of Westenhanger Castle, approximately 3.0km east of the East Stour Solar Farm, but has not been constructed to date and is not considered further.

Proposed Solar Energy Developments

4.94 Screening requests were submitted by Pegasus Planning (Ref. 13/0014, dated 2013) and Hive Energy (Ref. 14/0010 dated 2014) for the erection of a c. 18MW solar farm at Bank Farm, approximately 2.0km west of the proposed site. No further details and/or information differentiating the two proposals is available. Ashford Borough Council determined that

EIA would not be required for these proposals.

4.95 A screening request was also issued for a 1.1MW solar array on land at Park Farm, Brabourne (Ref. 13/0021, dated 2013) approximately 2.7km north of the proposed East Stour Solar Farm. Ashford Borough Council determined that an EIA would not be required for the proposed development.

4.96 Given no applications have been forthcoming and the intervening time, these proposals are not considered any further.

4.97 A proposal for a 165MW solar site to the immediate east of the East Stour proposal was announced in November 2021. As of January 2022, the proposals have yet to enter the planning system although an Inception Meeting is recorded on the Planning Inspectorate website with Inspectorate reporting that:

the application is expected to be submitted to the Planning Inspectorate Q4 2022.

After receipt of the application, there will be 28 days for the Planning Inspectorate to review the application and decide whether or not to accept it for examination.



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Plate 4.8 - Location of operational (blue shading) the proposed East Stour Solar Farm (red shading)

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