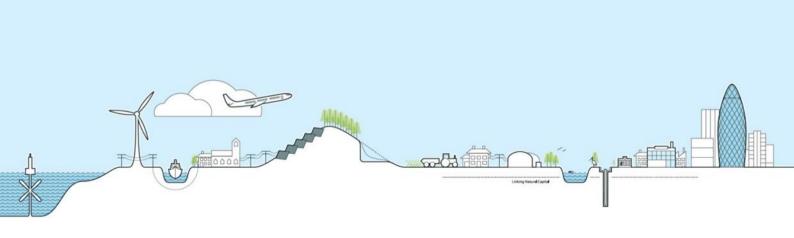
Installation and operation of a grid connected solar park with an export capacity of c. 49.5MW at North Dairy Farm, Pulham, Dorchester, DT2 7EA

# REQUEST FOR ENVIRONMENTAL IMPACT ASSESSMENT SCREENING OPINION

September 2020

**Prepared By** 





## **Project Quality Control Sheet**

ORIGINAL	Author	Checked by	Approved by
Signature	RMM	Lga	RMu
Date	02 September 2020	02 September 2020	02 September 2020
Company	Aardvark EM Ltd	Aardvark EM Ltd	Aardvark EM Ltd

**Location:** North Dairy Farm, Pulham, Dorchester, DT2 7EA

Grid Reference: ST 729080

Project Manager: Nick Leaney BSc Hons MRICS

Report Author: Rachel Ness BSc Hons

Kirsty Lodge BSc Hons AssocRTPI

Report Number: 1972-R001

Report Status: FINAL

**Copyright:** All copyright in this document is reserved.

Liability: This document contains information and may contain conclusions and

recommendations. Every effort has been made to ensure that the information is accurate and that the opinions expressed are sound. However, Aardvark EM Limited cannot be made liable for any errors or omissions or for any losses or consequential losses resulting from decisions based on the information.

#### **Report Written and Produced By**

Aardvark EM Limited, Higher Ford, Wiveliscombe, Taunton, Somerset, TA4 2RL

Telephone: 01984 624989, Facsimile: 01984 623912

Email: <a href="mailto:environment@aardvarkem.co.uk">environment@aardvarkem.co.uk</a>, Web: <a href="mailto:www.aardvarkem.co.uk">www.aardvarkem.co.uk</a>,

## Contents

1	Introduction	1
2	Site Location and Description	3
	The Proposed Development	
	EIA Screening Process	
	Potential Effects on the Environment	
	Conclusion	
	Appendices	
•	**PP	• •

## 1 Introduction

- 1.0 Aardvark EM Ltd has been instructed by British Solar Renewables (BSR) ('the applicant'), to formally request an Environmental Impact Assessment (EIA) Screening Opinion from Dorset Council (DC) with regards to the proposed development of a solar photovoltaic (PV) generating station on land at North Dairy Farm, Pulham, Dorchester, DT2 7EA ('the site').
- **1.1** This request is made under Regulations 6 (1) and 15 (1) of the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 ('the EIA Regulations').
- **1.2** The proposed development comprises the following;

'Installation and operation of a grid connected solar park with an export capacity of c. 49.5MW and battery storage facility area'

- **1.3** The proposed development does not fall within Schedule 1 of the EIA Regulations.
- **1.4** In line with requirements of Regulation 6(2) of the Regulations, this request contains the following information to assist DC in adopting an EIA Screening Opinion:
  - · A plan sufficient to identify the land;
  - · A description of the nature and purpose of the proposed development; and
  - A description of the aspects of the environment likely to be affected by the proposed development and the likely significant effects, taking into account:
    - a. Schedules 2 and 3 of the EIA Regulations;
    - **b.** The characteristics of the proposed development; and
    - **c.** The location of the proposed development and its surrounds.
- 1.5 Based on the preliminary assessments undertaken and shared in this report, it is considered that the proposed solar park is unlikely to require EIA due to the low potential for significant effects arising individually and cumulatively from its development.
- 1.6 Without prejudice to a decision in respect of the requirement for an EIA, and in the event the Council determine that an EIA should be provided with any planning application, it is requested that the required scope of the Environmental Statement is identified as part of the EIA Screening Opinion.



## The Applicant

- 1.7 BSR is a leading renewable energy developer and provider of expert services to the renewable energy industry. The company was founded in 2010 from when it has grown into one of the largest integrated developers in the UK with over 350MW of ground mounted solar PV parks successfully installed to date. Its portfolio includes building the four largest solar sites in the UK:
  - Bradenstoke in Wiltshire (69.8MW on an 86ha site);
  - Owls Hatch at Herne Bay in Kent (51.9MW on an 80ha site);
  - Shotwick in Flintshire (72.2MW on a 101ha site and is the largest solar park in the UK);
     and
  - Swindon in Wiltshire (60.2MW on a 70ha site).
- 1.8 BSR is based in Somerset and as a company is founded on the fundamentals of land management and quality British engineering practices. In addition to building solar parks, BSR are responsible for the operation of 390MW of solar.



## 2 Site Location and Description

2.0 The proposed site is located within Blackmore Vale between the villages of Pulham (to the west) and Hazelbury Bryan (to the east). It is shown by the redline on the plan at Appendix 7.1 which is also presented as Figure 1 below. The Ordnance Survey grid reference at the approximate centre of the site is ST 729080.

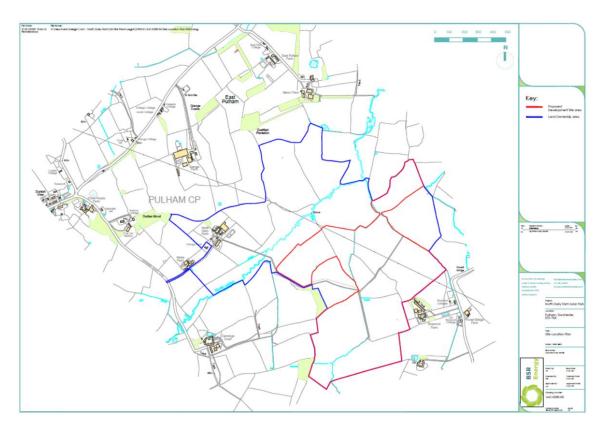


Figure 1: Site Location Plan showing extent of North Dairy Farm and Proposed Solar Park Site

- 2.1 The site comprises an area of mixed rotation farmland consisting of cereal crops (predominantly maize) on its southern half and improved ley grassland on its northern half. It covers an area of c. 76ha and its fields are bounded by hedgerows and streams, the latter draining into the River Lydden to the north of the site. The agricultural land value is Subgrade 3b (moderate) and Grade 4 (poor) and forms part of the wider 168ha North Dairy Farm land holding.
- 2.2 The majority of the site is located within the Parish of Mappowder, with the site access (Cannings Court Lane) and northern extent of the proposed solar farm located in the Parish of Pulham.



- 2.3 It is proposed that access to the site would be provided using the existing access road to North Dairy Farm, namely Cannings Court Lane. There are a number of Public Rights of Way (PRoW) in close proximity to the site (N49/4; N46/19; N46/21; N46/28) as well as one crossing through the site (N46/20). There will be no requests to close any PRoW as part of the proposed development.
- 2.4 The wider landscape consists of mixed farmland similar to that found at North Dairy Farm, and also includes small blocks of broadleaf woodland set in an undulating and rolling landscape with scattered farmsteads. The Dorset AONB is located to the south east, south and south west of the site and is at its closest approximately 1.25km away.
- 2.5 The Environment Agency's flood map for planning indicates that the majority of the site is located within Flood Zone 1 (low risk) with limited areas along parts of the northern boundary adjacent to the River Lydden within Flood Zones 2 and 3 (medium and high risk, respectively). The proposed development avoids Flood Zones 2 and 3.
- **2.6** The area surrounding the site has been assessed for the presence of key statutory designations within 2km of its boundary. The results are summarised below.

Area of Outstanding Natural Beauty (AONB)	Dorset AONB 1.25km at its closest to the site	
National Nature Reserves (NNR)	None Identified	
National Parks	None Identified	
Ramsar Sites	None Identified	
Sites of Special Scientific Interest (SSSI)	Blackmoor Vale Commons and Moors 1.3km north east of site	
Special Areas of Conservation (SAC)	Rooksmoor SAC 1.9km north east of site	
Special Protection Area (SPA)	None Identified	
Plantation on Ancient Woodland Site (PAWS)	Adjacent to west boundary of the site (Humber Wood). Woodland cleared and now an improved grassland field with some retained oak trees along a farm track	
Sites of Nature Conservation Interest (SNCI)	6 sites within 2km of the site identified for their habitats	
Conservation Areas	2 Conservation Areas. Hazelbury Bryan c.750m to the south and Mappowder c. 1.3km to south east.	
World Heritage Site	None Identified	



Scheduled Monument (outside the 2km radius)	2 Scheduled Monuments. Both hillforts at	
	Dungeon Hill 3.2km to south-west and	
	Rawlsbury Camp 3.8km south east of the site	
Registered Parks and Gardens	None Identified	
Listed Buildings	C. 50 Listed Buildings (predominately Grade II)	

#### Site Selection

- 2.7 One of the key considerations when proposing a renewable energy scheme is where and how to gain access to the grid distribution network. Proximity to an overhead power line is key for successful unsubsidised solar energy generation, avoiding the substantial costs, impacts and inefficiencies of laying lengthy sections of underground cable.
- 2.8 The SSE network has a 132kV overhead line passing through North Dairy Farm. The applicant has accepted the grid offer from SSE and secured the export capacity required for the project. The grid offer accepted can only be used for North Dairy Farm and is non transferrable to any other site.
- 2.9 Having established an acceptable point of grid connection, the proposed 76ha site was identified following a comprehensive preliminary planning and environmental appraisal of the entire North Dairy Farm landholding covering c. 168ha of fields (see blueline area on Figure 1 above). The preliminary impact assessments identified where constraints and opportunities were located on and outside of the land holding relative to the development of a proposed solar park (see Figure 2 below):
  - Proximity to sensitive human receptors: the need to protect nearby residential
    dwellings from noise and construction traffic impacts has been a key consideration.
    This included introducing a ~250m buffer from the closest noise sensitive properties
    within which no inverters or transformers would be located. This led to modifications
    to the Concept Design (Figure 3 below).



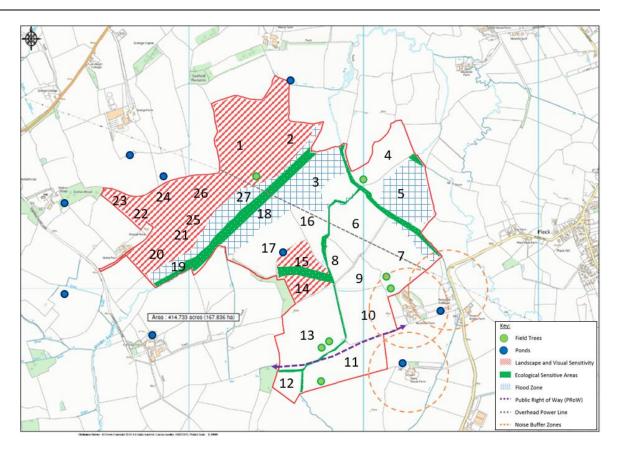


Figure 2: Constraints and Opportunities Identified by Preliminary Environmental Appraisal (168ha)

- Heritage: the need to avoid where possible impacting designated heritage assets and archaeological remains both within and adjoining the site. The review of heritage assets which may be affected by the proposed development contributed to the redline selection process, leading to mitigation through design. This included the identification and retention of the hedgerows along some of the field boundaries which may be of historic interest, and the avoidance of fields for use by solar that would affect the setting of listed assets e.g. the Grade II\* Listed Church of St Thomas a Becket and The Old Rectory 1km west of the site.
- Landscape and visual considerations: this identified fields with a high landscape and visual sensitivity relative to their setting with views from the farmstead, cottages and PRoW, together with those fields which have a strong landscape character and intervisibility to the surrounding landscape and farmsteads. These fields (14-15 and 19-27 on Figure 2) were accordingly removed from consideration for solar panel development.
- **Ecology and biodiversity:** the preliminary ecological appraisal identified the need to protect all hedgerows, streams, tall ruderal/grass margins, a pond and field trees as



habitats having elevated ecological interest. These have all been retained in the Concept Design and appropriate (5m) ecological buffer zones provided that take into account the farming practices employed on the land.

- Access and traffic: a suitable access for construction vehicles is essential for the
  development of a solar farm. The existing farm access was identified as part of the
  preliminary assessment as being suitable for this purpose (and subsequent
  operational management purposes) thereby avoiding the need to create a new
  access.
- Flood risk: as an "in principle" approach inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. Flood Zones 2 and 3 have been avoided in the Concept Design, with all solar panels located in Flood Zone 1 (low risk). Furthermore, areas of medium and high surface water flood risk have also been avoided.
- Agricultural land: Ground mounted solar parks are temporary structures and as such they do not lead to the sterilisation of agricultural land. National policy seeks to minimise impact on the best and most versatile (BMV) agricultural land except where this would be inconsistent with other sustainability considerations. Desk based assessment of North Dairy Farm originally identified the potential for Grade 3a land (BMV) within the farm land holding. To inform the choice of solar development area a semi detailed agricultural land classification survey was undertaken to identify any Grade 3a land with a view to avoiding its development if possible. The survey identified that, in fact, none of the land was Grade 3a so this was discounted as a constraint to solar development.
- 2.10 In addition to the above outlined considerations, there are also a range of technical and commercial factors which must also be taken into account when considering site selection for solar parks:
  - Solar irradiation levels and shading: this is a key consideration for solar site selection, and North Dairy Farm offers good levels of irradiance and large open fields.
  - **Topography:** the preference is for fields with southerly aspects and generally flat such as those found at North Dairy Farm.



- Land availability: this is key as without a land agreement being in place with the landowner, delivery of the renewable energy project is not possible. In this case commercial terms have been agreed with the landowner of North Dairy Farm.
- **2.11** All of these factors informed an iterative design approach and led to the proposed Concept Design (see Figure 3 below).

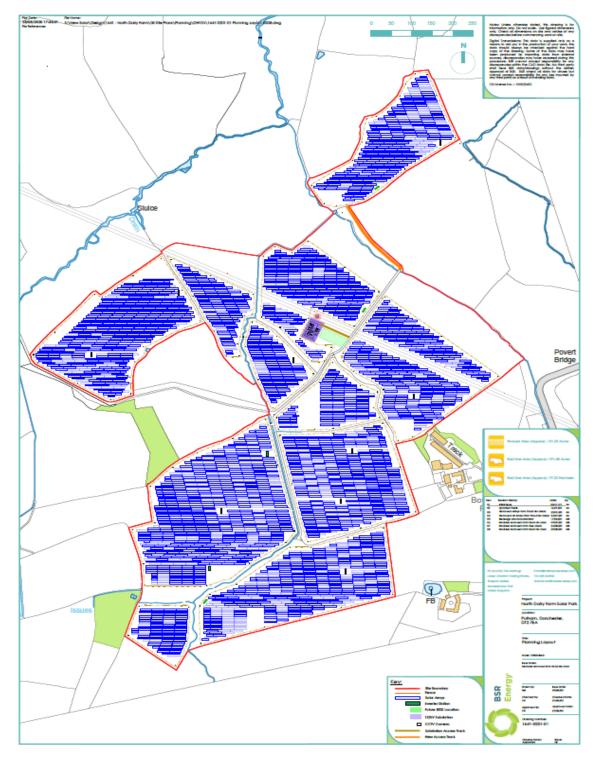


Figure 3: Proposed Concept Design Layout (76ha)



## 3 The Proposed Development

## **Description**

- **3.0** The proposed development comprises the construction, operation, management of a solar park for a temporary period of 35 years from the date of the first exportation of electricity from the site. After the 35 year period the solar park would be decommissioned.
- 3.1 The solar park would have an approximate design capacity of 49.5MW and would generate an estimated 49,500MWh of clean, renewable and sustainable electricity per year. This is equivalent to the annual electrical needs of approx. 13,000 family homes. The anticipated CO<sub>2</sub> displacement is around 13,000 tonnes per annum. This is equivalent to removing 5,841 conventional cars from the road each year.
- **3.2** The proposed planning application will seek full planning permission for a ground-mounted solar PV park including battery storage.
- **3.3** Full details of the Concept Design are provided at Figure 3 and includes the following components estimation which are explained in more detail in Boxes 1 − 8 below:
  - Solar photovoltaic (PV) panels, ground mounted to a railing sub structure;
  - 14 inverter stations distributed evenly across the solar park;
  - 14 transformers;
  - Compacted internal crushed stone tracks (constructed on a sub layer of geogrid membrane) to allow vehicular access between fields;
  - Fencing 2.2m high and gates enclosing the panels within each field and allowing sheep to graze securely;
  - Security and monitoring CCTV mounted on 3m high fence posts within each field;
  - Underground cabling to connect the panels to the proposed substation;
  - A security-fenced enclosed substation compound for both the Developer and SSE as the DNO, including associated services which will connect to the existing overhead power line; and
  - A substation access track with a cement based top layer (a statutory requirement of SSE) which already exists.

## **Box 1: Solar PV panels**

Solar panels would be laid out in rows with gaps of approximately 2-6m between each
row depending on the topography of particular fields. Panels are mounted on a frame
made of galvanized steel or aluminium. The arrays would be static.



- Panels would be mounted in an optimised configuration for absorbing year-round solar irradiation, typically in straight arrays set at an angle of c.22 degrees from east to west across field enclosures. At their lower edge panels would be approximately 0.8m from the ground and up to approximately 2.6m at their higher edge.
- The positioning of the arrays respond to existing physical features such as ditches, ponds, trees and hedgerows with panels set back appropriate buffer distances as informed by relevant guidance.

#### **Box 2: Inverter Stations and Transformers**

- Approximately fourteen inverter stations will be located throughout the site. The
  inverters sit inside metal cabinets that will be finished in green/white and positioned on
  a hardcore or concrete slab base. The cabinets are relatively low in height, up to 3.4
  metres
- The transformers are located next to the inverters and are relatively low in height,
   2.5m.

#### **Box 3: Access**

- The site would be accessed via the existing lane to North Dairy Farm off Canning Court Road. These lanes are already utilised by large farm vehicles. This access route would be used both during construction and the remainder of the solar park's duration.
- Compacted internal tracks would be utilised to facilitate vehicle movement around the site for construction and maintenance purposes. Where possible tracks will make use of existing agricultural routes. Any additional routing would be constructed on a sub layer of geogrid membrane with crushed stone on top.

#### **Box 4: Fencing and Security**

- Fencing 2.2m high comprising wooden deer fence poles and galvanised fence with gates to enclose the panels within each field and allow sheep to graze securely.
- The perimeter of the site would be protected by a system of CCTV and/or infra-red cameras, which would provide full 24-hour surveillance around the internal perimeter.
   An intelligent sensor management system would manage the cameras. Cameras would be inward facing on poles of up to approximately 2.5-3m high, spaced at approximately 50m intervals along the fence. There would be no lighting within the site at night-time.

#### **Box 5: Cabling**

- Cabling will be required to connect the proposed development to the Point of Connection (POC) to the energy transmission network via the new proposed substation
- The route of the cabling will not require works outside the site
- The cables linking all the arrays to the inverter/transformer stations and the substation would be underground



#### **Box 6: Substation**

- There would be one substation measuring approximately 50m x 40m at the centre of the site adjacent to an existing 132kV pylon/overhead lines. This existing pylon provides the point of connection to the local electricity network.
- It would be located within a security-fenced concrete-based compound.
- The 132kV overhead wires would provide the POC from the substation to the 132kV pylon from where the electricity will be exported to the National Grid network.
- The substation would receive electricity from the inverters and batteries before transferring it to the National Grid network. Solar arrays, inverters, batteries and substation would be connected by underground electrical cables.
- A 10m high single pole communications antenna may be required at the substation.

#### **Box 7: Batteries**

- A potential future battery storage area, comprising a hardcore or slab base measuring 50m by 50m.
- Batteries would be housed within shipping containers or similar, with each unit
  measuring approx. 12m x 3m x 3m. It will be positioned in the central area of the
  development

#### **Box 8: Environmental Mitigation and Enhancement**

- Land between and beneath the panels would be used for sheep grazing and managed to deliver biodiversity enhancements
- Appropriate environmental mitigation and enhancement will be identified as part of the assessment work undertaken to inform the planning application

#### Construction

**3.4** A Construction Environmental Management Plan (CEMP) would be implemented to control construction related impacts.







Temporary access tracks similar to those to be used (Left), excavating trenches for cabled (Middle), HV, DC and communications cables in a trench.

Figure 4: Images of Typical Construction Works for Solar Park



- **3.5** The main construction groundwork involves trenching for the installation of the underground cables to connect the solar arrays to the substation.
- 3.6 Top soil would be stripped (stored in a small bund) to create a 'working lane' approximately 10m wide. A trench is dug in the subsoil and excavated material is stored in another onsite bund. The deepest trench would be approximately 1.2m deep for the high voltage cables, for which a medium sized mechanical excavator would be used. Approximately 4km of this trench type would be required.
- **3.7** Approximately 7km of low voltage 0.6 m deep cable trenching would be required and possibly a further 1km of 0.6m deep communications cable trenching.
- 3.8 The cable would be laid or winched into the open trench and the trench backfilled with the excavated subsoil. Generally, cable is installed in 500m lengths with a joint pit or bay at each end to allow a mechanical joint to be applied to each length of cable. A joint bay is excavated 3m long x 2m wide x 1.5m deep to allow an engineer to install the joints. The joint pit is backfilled as per the trench. The area of the site which would be disturbed through trenching for cables is expected to be 1% of the total site area.
- 3.9 Where the cable alignment crosses through hedges, routine practice would be to create a small opening approximately 3m wide providing sufficient space for an excavator and dumper towing the cable trailer through, thereby allowing the cable to be installed as a continuous length. Where ditches need to be crossed, cables would make use of existing bridges, culverts or crossings between fields. If this is not possible then cables would be placed under the invert level of the ditch so as not to obstruct the drainage channels.
- 3.10 A railing sub structure would be piled into the ground, frames attached and then the solar panels would be mounted to the frames. The railings are pile-driven (like a fence post) approximately 1.5m below ground level which means that no concrete is needed to secure the system and the posts can be easily removed with no permanent impact at the end of the development's temporary consenting period.
- 3.11 The area for the base of the substation would be excavated prior to the hardstanding plinth concrete pour, after which the associated substation infrastructure would be installed. Constructing the panel support piling and substation base would disturb a further 1% of the solar park area.





Panel supports (Left), Frames ready for solar panels to be fitted (Right).

Figure 5: Images of solar panel support railings during construction

- 3.12 During construction one construction compound would serve the site and this will be located adjacent to the farm, thus reducing the distance delivery vehicles will need to travel after reaching the site's entrance. The temporary compound would likely include:
  - Temporary portable buildings to be used for offices, welfare and toilet facilities;
  - Containerised storage areas;
  - Parking for construction vehicles and workers vehicles;
  - · Temporary hardstanding;
  - Temporary gated compound; and
  - Wheel washing facilities and road sweeper if ground conditions require, preventing mud and loose material being transferred onto the local highway network.
- 3.13 The construction phase is expected to take around 4 months, and it is proposed that works will be undertaken between 0700 1800hrs Monday to Saturday and 0900 1700hrs on Sunday.
- **3.14** Around 940 two-way vehicle movements would occur during this period associated with the arrival and departure of a variety of construction vehicles. This equates to some 8-10 two-way vehicle movements per day. There would be no abnormal loads.

## Operation

**3.15** Solar panels convert sunlight to electrical energy. They generate direct current (DC) that is converted by the inverter stations to alternating current (AC) that would then be exported to the National Grid network.



- 3.16 PV systems are rated for capacity in watts (or kW or MW) with the designation 'peak' (e.g. kWp, MWp). The peak capacity of individual panels is established by measuring their performance under internationally recognised standard conditions that include temperature and wavelength of sunlight. The actual output of a system will be determined by latitude, local weather and site conditions. The solar park would have an estimated design peak capacity of 49.5 MWp of renewable electricity.
- 3.17 During the operational phase, the activities on site would amount to servicing of plant and equipment and vegetation management. A Landscape and Ecological Management Plan (LEMP) would set out how the land would be managed throughout the operational phase of development. Minimal maintenance generates one vehicle movement per week.



Solar PV Panel (Left), inverter station (Right)

Figure 6: Images of typical solar panel and inverter station

## **Decommissioning**

- **3.18** The solar park would export renewable energy to the grid for 35 years following which it would be decommissioned.
- **3.19** Overall, if decommissioning of the solar arrays and any battery storage area runs concurrently it is expected to take 14 weeks, generating 80 vehicle movements per week.
- 3.20 A Decommissioning Statement will be included with the planning application to provide an outline for removal and reinstatement at the end of the scheme's temporary occupation of the site.



## 4 EIA Screening Process

## Determining the need for an EIA

- **4.0** A requirement for Environmental Impact Assessment considers the scale, nature and location of proposed development and the likelihood of significant environmental effects arising as a result.
- **4.1** Schedules 1 and 2 of the Regulations provide descriptions of that which could be EIA development. For a type included under Schedule 1, EIA is mandatory. Where development falls under Schedule 2, the need for EIA is determined based on set criteria, which are:
  - Development falls within one of the classes of development stated in Schedule 2; AND
  - EITHER exceeds the size threshold for that class of development; OR is in a sensitive area as defined by the EIA Regulations; AND
  - It is likely to have significant environmental effects due to factors such as nature, size or location.
- **4.2** The exceedance of a Schedule 2 category threshold triggers the need to consider whether the proposed development is EIA Development with reference to the following criteria set out in Schedule 3 of the EIA Regulations:
  - Characteristics of the proposed development (e.g. size, cumulative effects with existing/approved development, use of natural resources, production of waste, pollution, nuisance, risk of accidents, and risk to human health);
  - Location of the proposed development (e.g. environmental sensitivity of the area); and
  - Types and characteristics of the potential effects of the proposed development (with particular regard to the extent, nature, magnitude and complexity, probability and duration, frequency and reversibility of the effect, including the likelihood for transboundary effects).



## **Review against EIA Regulations**

- 4.3 The proposed development is not a Schedule 1 development and does not automatically require an EIA. However, it does constitute a project under category 3(a) of Schedule 2 of the Regulations as an industrial installation for the production of electricity whereby the applicable threshold to undertake screening is when the site area exceeds 0.5 hectares.
- **4.4** As the proposed development will cover an area c. 76ha it is appropriate to seek an EIA screening opinion from Dorset Council (DC) as the relevant local planning authority (LPA).

## **Planning Practice Guidance**

- **4.5** Planning Practice Guidance (PPG) provides guidance on EIA screening and how to assess whether a development is likely to give rise to significant environmental effects, such as to require an EIA. PPG 018 (Ref ID: 4-018-20170728)<sup>1</sup> states, 'only a very small proportion of Schedule 2 development will require an Environmental Impact Assessment'.
- **4.6** In order to assist LPAs to determine whether a project is likely to require an assessment a set of indicative thresholds and criteria have been prepared and presented as a tabulated annex to the PPG (Paragraph 058 Reference ID:4-058-20150326).

Development Type	Schedule 2 criteria and threshold	Indicative criteria and threshold	Key issues to consider
3(a) Industrial installation for the production of electricity.	The area of the development exceeds 0.5 hectare.	Thermal output of more than 50 MW. Small stations using novel forms of generation should be considered carefully.	Level of emissions to air, arrangements for the transport of fuel and any visual impact.

https://www.gov.uk/guidance/environmental-impact-assessment#Screening-Schedule-2-projects



-

#### 5 Potential Effects on the Environment

- **5.0** For this EIA screening report the characteristics of the proposed development together with its location and potential effects have been assessed against the following considerations:
  - Environmental Health (air quality, land contamination, noise and vibration);
  - Cultural Heritage;
  - Landscape and Visual;
  - Ecology;
  - Traffic and Transport;
  - Flood Risk;
  - · Agricultural Land Quality and Soil; and
  - Cumulative Impacts.

#### **Environmental Health**

#### 5.1 Air Quality

- The site is not located within any air quality management zones.
- Control measures for air quality (and other environmental management matters) will be set out in a Construction Management Statement (CMS) accompanying the planning application. These would be implemented via a Construction and Environmental Management Plan (CEMP) to effectively control and minimise environmental effects associated with the construction works.
- The CEMP would be a detailed plan and method statement for a construction-ready scheme and is anticipated to be required by DC as a pre-commencement submission in the event permission was granted. This will include best practice measures relating to appropriate working methods to minimise dust generation and ensuring that all plant and machinery is operated responsibly and complies with relevant emissions standards.
- Following implementation of the specified mitigation, no significant effects on air quality are considered likely.

#### 5.2 Land Contamination

 The site has been in agricultural use since at least the late 1800s with no known contamination and has a low risk of undetected ground contamination. A Contaminated Land Risk Analysis has been undertaken. It identifies that there are no on-site sources of contamination and no off-site sources within 100m.



- The superficial hydrogeology underlying the site is classified as Secondary (A) Aquifer (deposits with moderate permeability), which also forms the bedrock hydrogeology along with an Unproductive Stratum (deposits of negligible permeability).
- The site does not lie within a groundwater Source Protection Zone (SPZ). There is one general farming and domestic ground water abstraction licence within 500m of the farm landholding, and there are no eco-receptors identified within that radius.
- It is concluded that there are no significant contamination linkages identified and accordingly soil and groundwater liabilities are unlikely to occur.
- Development will be subject to relevant HSE and site-management environmental obligations to protect against risk of causing ground contamination in-construction.

#### **5.3** Noise and Vibration

- A preliminary noise assessment report is attached as Appendix 7.2. It details the baseline
  noise survey, preliminary noise emissions from the operational development, and an
  outline of relevant assessment methodologies for the construction phase.
- The baseline noise survey indicates that the site has a quiescent ambient sound climate, representative of a typical rural location with farming activities. The baseline noise survey results indicate that night time levels are lower than those measured during day and are reasonably consistent at all nearest noise-sensitive receptors.
- The preliminary operational noise calculations indicate that that the development will give
  rise to rating noise levels that are typically below the measured day and night time
  background sound levels in the area. The results identify that the operation of the
  scheme, as proposed, can occur without affecting the amenity of the closest residential
  receptors to the site,
- Construction works have the potential to result in noise and vibration impacts due to
  activities associated with plant use and construction vehicle movements. Controls for
  noise and vibration will be outlined in the CMS and implemented via the CEMP.
- Preliminary construction noise levels have been predicted at the closest identified noisesensitive receptors based on the likely construction methodologies and programme, in accordance with BS 5228. Based on guidance and having regard to the baseline noise survey the construction sound levels comply with the requirements, thus causing no significant impact.
- Following implementation of appropriate mitigation during the construction phase, and appropriately designed and selected plant during the operational phase, no significant effects on noise and vibration are considered likely.



## **Cultural Heritage Impacts**

- 5.4 A preliminary archaeology and heritage appraisal has been undertaken by Cotswold Archaeology (Appendix 7.3) in order to inform this EIA Screening Request. The appraisal has been informed by Historic England's National Heritage List for England (for designated heritage assets), Dorset Historic Environment Record and historic Ordnance Survey maps in order to identify potential archaeology and heritage constraints which should be considered as part of the planning process.
- 5.5 There are no designated heritage assets within the site. There are over 50 designated heritage assets within a 2km buffer around the site, including Listed Buildings and two Conservation Areas, in Hazelbury Bryan and Mappowder. In addition, two Scheduled hillforts, Dungeon Hill and Rawlsbury Camp, are situated in the wider landscape (see Figure 7).

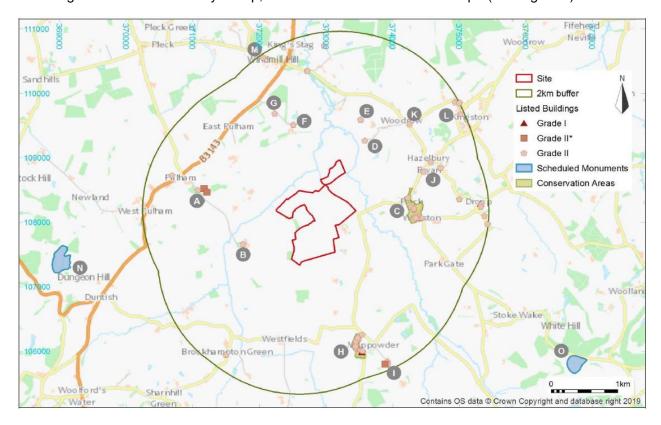


Figure 7: Designated Heritage Assets

5.6 Through the appraisal and site selection process it has been established that the proposed development would be unlikely to affect the majority of these designated assets in any way. However, a small number of designated heritage assets which may be potentially susceptible to development have been identified and these should be appropriately considered as part of the planning process. These include:



- Grade II\* Listed Church of St Thomas a Becket and The Old Rectory (with associated Grade II gate piers), c. 1km west of the site;
- Grade II Listed Cannings Court Farmhouse, c. 750m to the south;
- Grade II Listed Old Boywood Farm c. 480m to the north-east;
- Grade II Listed Little Whitemoor Farm, located c. 700m to the north-east;
- Grade II Listed Manor Farmhouse, c. 880m to the north-east; and
- Grade II East Pulham Farmhouse, c. 1.2km to the north.
- 5.7 The appraisal has identified the potential for the presence of archaeological remains within the site, largely associated with medieval agricultural land-use, but remains from other periods cannot be entirely ruled out (see Figure 8). Based on the current understanding the site is unlikely to contain any archaeological remains of the highest significance that would constrain or prevent development. It is therefore considered that the development at the site can be accommodated without significant environmental effects on the archaeological resource, but this will need to be appropriately considered (potentially by making provision for recording) as part of the planning application process.
- 5.8 A Heritage Desk-Based Assessment (DBA), incorporating archaeological assessment, heritage settings assessment and impact assessment, will be submitted with the planning application. This will be undertaken by Cotswold Archaeology, a Registered Organisation with the Chartered Institute for Archaeologists (CIfA). The DBA will be undertaken in accordance with the provisions of the National Planning Policy Framework (2019) and other relevant key statute, policy, guidance and professional standards including the Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-Based Assessment and Historic England's Historic Environment Good Practice Advice in Planning Note 3: the Setting of Heritage Assets (Second Edition 2017).
- 5.9 The settings assessment as part of the DBA will consider the potentially susceptible designated heritage assets so that the contribution of the wider landscape to their significance is fully understood. The potential for the development to affect additional assets will also be appropriately explored. This will allow for the potential development effects upon that significance, i.e. as a result of change within the setting of those assets, to be assessed. The detailed design of the proposed development will consider the settings assessment and appropriate measures will be implemented to avoid and/or mitigate any adverse impacts.



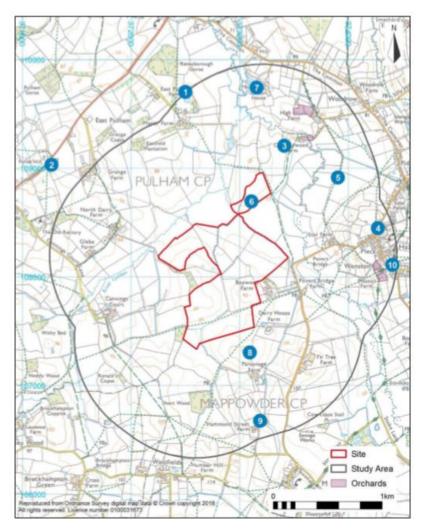


Figure 8: Designated Heritage Assets

- 5.10 The DBA will also consider the potential for the development to affect the buried archaeological remains within the site. Typically, impacts associated with the installation of the solar array include metal piles supporting the solar modules, excavation of underground cable trenches, and stripping for access tracks, temporary compound and any foundations for inverter stations and substation. Where necessary, appropriate measures will be implemented to ensure no significant effects as a results of the proposed development, which could include mitigation by design or archaeological recording at an appropriate stage in the development process.
- 5.11 In summary, whilst the proposed development could affect the archaeological resource within the site and designated heritage assets in the wider landscape, it is considered that this development could be accommodated without significant effects. This will be achieved through appropriate assessment and mitigation measures. A DBA will be prepared to inform the planning application and discussions with the archaeological advisor to the LPA regarding the need for and scope of any further investigations which may be required to inform the planning decision or as mitigation.



## Landscape and Visual

- 5.12 A Landscape and Visual Impact Assessment (LVIA) will accompany the planning application and be undertaken by Tyler Grange. Its primary purpose will be to assess the effect of the proposed solar park on key landscape resources and visual receptors. Tyler Grange is a Registered Practice of the Landscape Institute who have considerable experience in assessing landscape, townscape and visual impacts for a wide variety of schemes. The methodology and guidelines to be used in the preparation of the assessment have been developed from the following, which relies on professional judgement:
  - An Approach to Landscape Character Assessment, Natural England, Second Version, March 2018; and
  - Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, LI and IEMA, 2013.
- **5.13** A preliminary landscape and visual impact appraisal has been undertaken by Tyler Grange (Appendix 7.4) in order to inform this EIA Screening Request.
- 5.14 The site is not covered by any national, regional or local level landscape designation. It is approximately 1.25km at the closest point to Dorset AONB, which lies to the south east, south and south west of the site. Intervening landform and vegetation greatly reduce the intervisibility of the site and AONB with direct views of the site being limited to long distance views (>3km) from only two locations where there are only partial views of the site that form a small part of the panoramic views.
- 5.15 It is approximately 0.7km at the closest point to Hazelbury Bryan Conservation Area and approximately 1.3km at the closest point to Mappowder Conservation Area. There is no intervisibility between the site and the village of Mappowder Conservation Area. Views within Hazelbury Bryan are contained within the village with very limited opportunities for views of the site from upper storey windows of dwellings that are orientated towards the site off The Orchard and De Briane Close on the western edge of the village.
- 5.16 The site falls within the National Character Area 133: Blackmore Vale and Vale of Wardour. On a local county level, it falls within the transitional area between the South Blackmore Rolling Vales Landscape Character Area (Rolling Vales Landscape Character Type) and Blackmore Vale Landscape Character Area (Clay Vale Landscape Character Type). It is an undulating, rolling, mainly pastoral landscape characterised by medium sized irregularly shaped fields sub-divided by thick but often trimmed hedgerows, twisting hedge lined lanes with narrow verges, settlements are often situated at the foot of the escarpment or on elevated slopes with numerous scattered farmsteads. The landscape is dissected by the



River Lydden and the many small tributaries snaking through the fields which are 'dotted' with distinctive mature hedgerow Oaks. The site is typical of the local area although it is comprised primarily of large arable fields rather than pasture.

- 5.17 Following in-field verification the Visual Envelope of the site is far smaller than the Zone of Theoretical Visibility (ZTV). This is due to the nature of the topography and the strong landscape structure within the Vale, which limits views to higher vantage points that offer cross-valley views between ridgelines.
- 5.18 In terms of visual receptors, the potential effects would be limited to properties closest to the site and users of adjoining PRoW. On the whole vegetation screens low-level views from the ground floor rooms and gardens of these properties with limited visibility from some upperstorey rooms. There are several PRoW near the Site (N49/4; N46/19; N46/21; N46/28) as well as one crossing through the Site (N46/20). The proposals will not alter the right of access but will alter the visual amenity. This will be very limited in extent due to intervening landform and vegetation. Direct close-views of the proposals will be limited to N46/20 and N46/21 and direct medium-range views of the proposals limited to short sections of N41/9 and N41/10. The potential effect on road users would be very minimal and limited to a very short section to the front of Fir Tree Farm where the hedges are lower.
- 5.19 As a first principle the applicant has sought to avoid sensitive landscape areas identified in the early stages of the project where the whole of North Dairy Farm was assessed for its suitability for solar. The proposed Concept Design has also sought to minimise any loss or changes to the landscape structure of the site. However, changes to the landscape character and how it is perceived is inevitable as there will be a change to the land use and the introduction of solar panels in a rigid geometric pattern that contrasts with the existing landscape pattern. It is important to note that this will be fully reversible once decommissioned. There will be very minimal loss to the landscape structure with stream corridors, hedges, trees and field patterns retained and buffered. The existing concrete track will be used for access and there may be an opportunity to strengthen field boundaries with new hedges (if required for mitigation) providing long-term ecological enhancement.
- 5.20 The conclusions of the preliminary LVIA confirm that the likely impacts of the proposals, in terms of the wider landscape context, are not deemed significant in EIA terms due to the limited geographical extent of the change in views, limited impact to the landscape structure and the reversibility of the impact to landscape character.
- 5.21 The application will include detailed consideration of impact on the PRoW network via the Design and Access Statement alongside the LVIA. Furthermore, a Glint & Glare



**Assessment** will provide reassurance of there being no significant potential glint and glare impacts for road users and surrounding residents.

## **Ecology**

- 5.22 A Preliminary Ecological Appraisal (PEA) was undertaken by SWE Ltd (SWE Ltd. 2020. Preliminary Ecological Appraisal. North Dairy Farm. Ref: SWE 176). This is attached at Appendix 7.5. The appraisal consisted of a Phase 1 Habitat Survey and historical biodiversity data obtained from Dorset Environmental Records Centre (DERC). The PEA was used to inform the iterative design process leading to final site selection, to describe and map habitats, and to consider the need for protected species surveys.
- 5.23 There are no sites designated for nature conservation within the farm holding land or redline area. Rooksmoor Special Area of Conservation (SAC), and Blackmoor Vale Commons and Moors Site of Special Scientific Interest (SSSI) are located 1.9 km and 1.3 km from the site respectively. These are designated for their habitats and associated Lepidoptera species. Alners Gorse Butterfly Conservation Reserve (BCR) is located 1.1 km from the site and is also designated for Lepidoptera (principally marsh fritillary butterfly). There is a Plantation on Ancient Woodland Site (PAWS) located adjacent to the site. The PAWS site has been historically cleared but retained some mature oak trees. There are also six Sites of Nature Conservation Interest (SNCI) within 2km of the site, all of which are designated for their habitats.
- **5.24** The DERC data included five species of bat, European otter, Eurasian badger, brown hare, West European hedgehog, farmland birds, raptors, great crested newt, and a diverse range of Lepidoptera.
- 5.25 The site consists of mixed arable and grass ley fields which are farmed on a rotation. The fields are bounded by hedgerows and a small stream, both of which include tall ruderal/ grass margins. There is also a pond and four mature oak trees within the fields. See Figure 9 below.



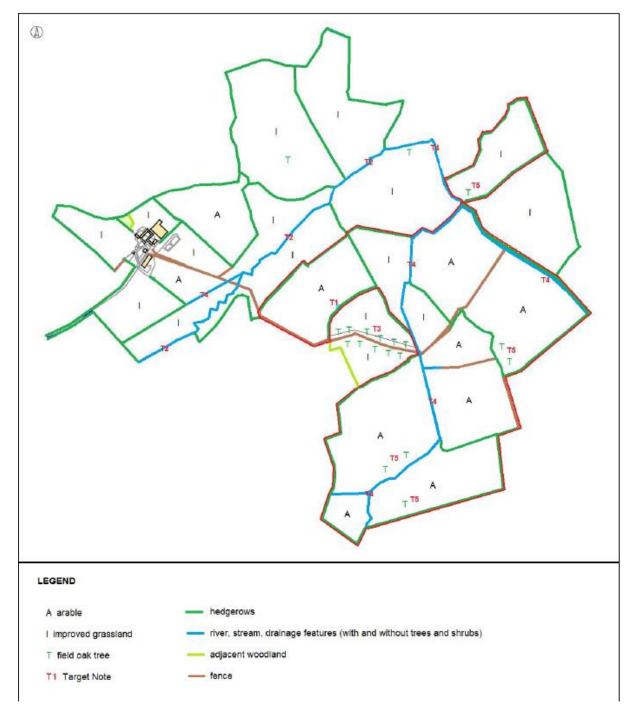


Figure 9: Habitat Plan

- **5.26** The iterative design process has accounted for the hedgerows, streams, tall ruderal/ grass margins, pond, and field trees. These features are to be retained and appropriately buffered from the proposed development.
- **5.27** The only habitats to be impacted by the proposed development are arable and grass ley, both of which are of low ecological value. As such there will be no significant impacts on habitats.



- 5.28 The potential impact on species would be through the loss of arable and grass ley habitats.
  Potential impacts consist of loss of feeding habitat for wintering birds, loss of foraging habitat for bats, and loss of terrestrial habitat for great crested newt
- **5.29** Further to the PEA, surveys for bat activity, wintering and breeding birds, and great crested newt have also be undertaken. The full survey results are provided within Appendix 7.5 and will inform the detailed design, and ecological mitigation and compensation measures, where required.
- 5.30 The land beneath and surrounding the solar arrays will remain vegetated, and in the case of the arable fields sown with a grass mix. Preliminary enhancement recommendations have been made within the PEA report, including wildflower and wild bird seed grasslands, the hedgerows being managed for wildlife, and a range of breeding boxes erected for bats and birds. Consequently, there will not be a significant negative impact on bat activity, birds, or on suitable habitat for great crested newt, with a strong likelihood, based on other solar farms in southern UK, that there will be a significant positive benefit to biodiversity overall.
- 5.31 Given that: the habitats of elevated ecological interest will be retained in their entirety within the site; the only habitats to be impacted are of low ecological value and these will be remain vegetated or sown with a grass mix; there are substantial opportunities for creating species-rich grasslands; the hedgerows will be managed for wildlife; mitigation measures will be put in place for protected species where required; and other solar farms in southern UK have demonstrated a marked increase in biodiversity value, the impacts of the proposed solar park on ecology are likely to be significant-positive.
- **5.32** The planning application will include an **Ecological Impact Assessment (EcIA)** upon completion of the species surveys.
- **5.33** The application will include a **Landscape and Ecological Management Plan (LEMP).** The LEMP will be based on the EcIA, and will include:
  - Aims and objectives for biodiversity enhancements and management at the site;
  - Details of locations and measures to be put in place to achieve biodiversity objectives;
  - A 10-year management programme for landscape and ecological features accounting for primary function and biodiversity; and
  - Details of monitoring and measures to ensure objectives are achieved and maintained.
- **5.34** The application will include a **Biodiversity Net Gain Assessment** in accordance with best practice:



- Baseline biodiversity units will be calculated using the Defra Biodiversity Metric v2.0.
   This calculation will consist of the habitats currently within the site prior to development;
   and
- A report will detail the baseline and provide recommendations for habitat enhancement and creation, which will achieve net biodiversity unit gain.

## **Traffic and Transport**

- **5.35** A Preliminary Traffic and Access Assessment has been undertaken by Hydrock to inform this EIA Screening Report. This is attached at Appendix 7.7.
- **5.36** The proposals will utilise the existing access road, Cannings Court Lane which is c. 900m in length and on average c. 3.0m wide. Cannings Court Lane meets the B3143 at a priority junction some 1.3km west of the proposed site entrance.
- 5.37 The planning application will include a Construction Traffic Routing Review and would be agreed with DC in its role as the Highway Authority. The major principle access routes for HGVs approaching/departing the site would be:
  - via the A30, A352 and A3030 from Yeovil/Sherbourne to the north; and
  - via A35 and B3143 form Dorchester to the south of the site.
- **5.38** Both routes are single carriageway in width and do not have any weight, width or height restrictions. There would be no abnormal loads arriving to site.
- 5.39 During the construction phase the arrivals and departures of HGVs will be managed to avoid road network peak periods as well as minimise any potential conflict with existing highway users on Cannings Court Lane. There are a number of highway lay-bys suitable for HGV parking on both approaches to the site from the A3030 to the north and B3143 to the south to allow for phased deliveries.
- 5.40 Cannings Court Lane is on average some 3.0m in width and therefore suitable to accommodate HGVs. The construction traffic movements will be set out within a Construction Management Statement accompanying the planning application. These will set out the strategies to manage the arrivals and departures of vehicles during the temporary construction phase period and can be controlled through the CEMP.
- **5.41** The most traffic intensive period associated with the installation of the solar park is the construction phase. This period will last for 4 months. Some 940 two-way vehicle movements would occur during this period, equating to some 8-10 two-way vehicle movements per day.



- **5.42** Typically, during the construction phase the type of vehicles to be used would include:
  - Tippers/Excavators during the initial ground works stage. Only 1-2 vehicle types would be envisaged to be on site throughout this phase of construction.
  - HGVs (Heavy Goods Vehicles) for the delivery of materials as well as plant used for installation.
  - LGVs (Light Goods Vehicles) for staff/contractors on site typically associated with the installation and final fit stage of the build.
- 5.43 Suitable measures would be put in place to limit the disturbance to the local highway network, including wheel wash facilities, banksmen, stop and go, radio-coms and construction hour restrictions.
- 5.44 Following the completion of the construction phase minimal vehicle movements would occur. These vehicle movements are associated with collecting data and general maintenance, which would typical take place once a week.
- **5.45** In light of the existing access to the site and the good road network and connections in the vicinity, it is not considered that there will be any significant impacts on traffic and transport arising through construction, operation or decommissioning of the proposed development.

#### Flood Risk and Water

- **5.46** A Flood Risk Screening Report has been prepared to assess all flood risks (from river, the sea, surface water, reservoirs, sewers and groundwater) to and from the development and proposed mitigation measures (see Appendix 7.7).
- **5.47** A number of ordinary watercourses<sup>2</sup> are located within and surrounding the site which generally flow in a northerly direction into the River Lydden. An appropriate buffer (c.6m) has been provided in the Concept Design from the top of the bank of the watercourses to ensure access for maintenance.
- **5.48** The Environment Agency's flood map for planning indicates that the majority of the site is located within Flood Zone 1 (low risk) with limited areas along parts of the northern boundary within Flood Zones 2 and 3 (medium and high risk, respectively). It is proposed to locate all

<sup>&</sup>lt;sup>2</sup>Ordinary watercourse is defined by the EA as any watercourse including every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows and which does not form part of a main river.



\_

- of the solar panel arrays in Flood Zone 1 and, therefore, the proposed development would not be adversely affected by fluvial flooding or increase the risk of flooding elsewhere.
- 5.49 1.4. The majority of the site has a very low surface water flood risk with some areas of up to a high surface water flood risk associated with watercourses and isolated ponding. It is proposed to avoid the areas of medium and high surface water flood risk associated with the watercourses where possible. However, the solar panels would be elevated on framework significantly above ground level, and, therefore, would not impede any surface water flow paths or displace any ponding of surface water.
- 5.50 The North Dorset District Council Level 1 Strategic Flood Risk Assessment identifies that the site has the 'potential for groundwater flooding to occur at surface' which is related to the River Lydden and its tributaries. However, any groundwater flooding is likely to be shallow and would not adversely affect the proposed development.
- **5.51** It is not considered necessary to provide SuDS for the proposed solar panel arrays as solar panels do not have a significant effect on runoff volumes, peaks or time to peak if grass cover is well maintained underneath panels and between rows. Therefore, it is proposed to maintain the grass cover to prevent areas of bare ground and erosion occurring.
- 5.52 An impermeable substation access track is required as a statutory requirement of the Distribution Network Operator and, therefore, as infiltration testing has not yet been undertaken, a swale will be located adjacent to the track to provide sufficient storage for all events up to and including the 1 in 100 year event with climate change. The swale will discharge into one of the ordinary watercourses within the site at greenfield rates.
- 5.53 The inverter buildings will be located in storage containers above a 300 mm sub-base formed of permeable material (i.e. gravel) or on a concrete base which would be surrounded by a gravel trench. The permeable sub-base or gravel trench would receive surface water runoff from the containers or cabins and would promote infiltration to the ground.
- **5.54** It is understood that the sub-station is formed by a gravel base which will promote infiltration and will also mimic the existing greenfield surface water runoff arising from the Site.
- **5.55** A **Flood Risk Assessment (FRA)** will be prepared by RMA Environmental and submitted alongside the planning application for the scheme. The FRA will be undertaken to ensure that the proposed development is safe and that is will not increase flood risk elsewhere.
- **5.56** Following the implementation of mitigation measures identified through the FRA there are not expected to be any residual significant effects from the proposed development.



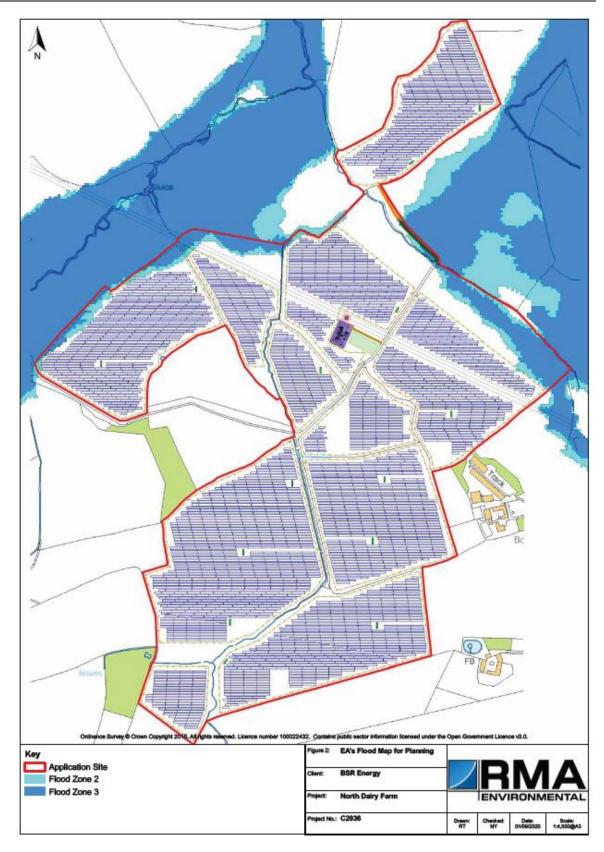


Figure 10: EA's Flood Map and Proposed Concept Design



## **Agricultural Land Quality and Soil**

- 5.57 A semi-detailed Agricultural Land Classification (ALC) survey has been undertaken on the 168ha land holding, and the results set out in the report produced by Askew Land & Soil Ltd at Appendix 7.8.
- 5.58 The survey was carried out by a Chartered Soil Scientist (CSci) and Fellow (F. I. Soil Sci) of the British Society of Soil Science (BSSS) on the 18<sup>th</sup> December 2019. It involved examination of the soil's physical properties at 42 locations located on a 200m by 200m grid, i.e. at a density of approximately 1 auger bore per 4 ha of land surveyed. The soil profile was examined at each sample location to a maximum depth of approximately 1.2 m by hand with the use of a 5 cm diameter Dutch (Edleman) soil auger. Two soil pits were hand dug with a spade to examine certain soil physical properties, such as soil structure and stone content, more closely.
- **5.59** A sample of topsoil was collected at six auger bore locations and all samples were sent to an accredited laboratory for particle size analysis, i.e. the proportions of sand, silt and clay. The results have determined that the quality of agricultural land at the site is limited mainly by soil wetness to Subgrade 3b and Grade 4 (see Figure 11).
- 5.60 In a climate area with 199 FCD, soil profiles with medium clay loam topsoil and slowly permeable clay subsoil which is waterlogged for a long period over the winter (i.e. Wetness Class IV) are limited by soil wetness to Subgrade 3b, i.e. 25.0 ha or 15% of the land holding.
- 5.61 Where the topsoil is heavy clay loam or clay overlying slowly permeable clay subsoil which is waterlogged for a long period over the winter (i.e. Wetness Class IV), the profiles are limited by soil wetness to Grade 4 in this climate area (i.e. 199 FCD). The area of Grade 4 measures 136.5 ha, which is 81% of the land holding.
- **5.62** The farm buildings, roads and areas of hardstanding at North Dairy Farm are classed as non-agricultural / other land, i.e. 6.5 ha or 4% of the land holding.
- 5.63 Following the approach of the Environmental Impact Assessment (EIA) Handbook (Third Edition, December 2020, ICE Publications), the magnitude of the change on agricultural land is assessed as being of medium magnitude (i.e. Development is 5 ha or more and temporary (< 25 years), or potentially 'reversible' such as soft uses that could be returned relatively easily back to agricultural land. Some adverse on-site impacts anticipated e.g. reduced yields, increased management inputs but recovery predicted in the short to medium term (within 5-10 years) following end of use without permanent reduction in ALC grade provided appropriate mitigation is in place).</p>



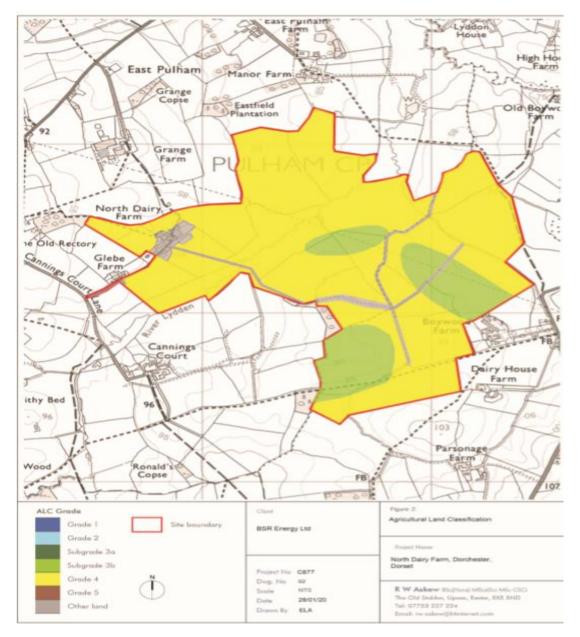


Figure 11: North Dairy Farm Agricultural Land Classification

- **5.64** The sensitivity of Subgrade 3b agricultural land is moderate, and Grade 4 is low.
- 5.65 Therefore, the significance of the effect of developing a reversible solar park on Subgrade 3b and Grade 4 agricultural land at North Dairy Farm, Pulham, is assessed as being temporary, minor adverse which is not significant. Once renewable electricity generation has ceased, and the solar panels are removed, the agricultural land would be returned to its former quality and productivity.



## **Cumulative Impacts**

**5.66** From a review of the DC planning application portal it is not considered that there are any consented or proposed uses on or close to the site that require the consideration of cumulative environmental impacts.



## 6 Conclusion

- 6.0 This EIA Screening Request provides a description of the proposed development and anticipated likely significant effects on the environment in line with requirements of Regulation 6(2) and Schedule 3 of the EIA Regulations.
- 6.1 Taking into consideration the nature of the location and purpose of the development, whilst there will be some effects upon the environment as a consequence of the scheme, none of these are deemed to constitute 'significant effects' upon the environment as set out in the relevant guidance. Accordingly, it is considered that the proposed development does not constitute 'EIA development'.
- **6.2** It is proposed that the planning application would include the following supporting assessments relevant to environmental impact considerations:
  - Planning Statement;
  - · Design and Access Statement;
  - Landscape and Visual Impact Assessment (LVIA);
  - Glint & Glare Assessment
  - Ecological Impact Assessment (EcIA);
  - Landscape and Ecological Management Plan (LEMP);
  - Biodiversity NET Gain Assessment;
  - Heritage Desk-Based Assessment (including archaeological assessment);
  - Flood Risk Assessment;
  - Noise Assessment:
  - Construction Management Statement;
  - Decommissioning Statement; and
  - Transport Statement (if required).
- 6.3 Any additional surveys e.g. ecological will also be undertaken pre-submission in order to provide a comprehensive evidence-backed application that fully assesses and addresses actual or potential environmental impacts.



## 7 Appendices

Appendix 7.1	Site Location Plan
Appendix 7.2	Preliminary Noise Assessment
Appendix 7.3	Preliminary Heritage Assessment
Appendix 7.4	Preliminary Landscape and Visual Impact Assessment
Appendix 7.5	Preliminary Ecological Assessment
Appendix 7.6	Preliminary Traffic and Access Assessment
Appendix 7.7	Preliminary Flood Risk Assessment
Appendix 7.8	Preliminary Agricultural Land Classification Assessment

