

**The Town and Country Planning (Environmental Impact Assessment) Regulations 2017
Screening Matrix for Bolney Solar and Battery Energy Storage System**

CASE DETAILS	
Brief description of the project / development	Installation and operation of a proposed 30MW solar photovoltaic (PV) array and co - located 50MW Battery Energy Storage System (BESS) ('the Proposed Development') on c.48 hectare (ha) of land at land southwest of Picts Lane, Bolney ('the Site'). The Proposed Development will comprise the following elements: Solar Photovoltaic Panels (PV); Inverters; Battery Storage Units; DNO Substation; Customer Switchgear Unit; General Storage Unit; Perimeter security fencing; CCTV Security Cameras; Access; and, Landscaping. The Proposed Development will connect into Bolney National Grid Substation located to the south via grid connection cabling which forms part of the Proposed Development.
EIA DETAILS	
Is the project Schedule 1 development according to Schedule 1 of the EIA Regulations?	No
Is the project Schedule 2 development under the EIA Regulations?	Yes
If YES, under which description of development in Column 1 and Column 2?	The Site comprises an area of c.48ha, and as such the Proposed Development is considered to fall within Schedule 2 - Category 3 - Energy Industry, in sub-category (a) Industrial Installations for the production of electricity, steam and hot water (Unless included in Schedule 1) where the area of development exceeds 0.5 hectares.
Is the development within, partly within, or near a 'sensitive area' as defined by Regulation 2 of the EIA Regulations?	Yes The Site is not located within any of the sensitive areas as defined by the EIA Regulations. The Site is adjacent to the High Weald National Landscape.
If YES, which area?	To the north of the site is the High Weald National Landscape.
Are the applicable thresholds/criteria in Column 2 exceeded/met?	Yes
If yes, which applicable threshold/criteria?	The area of development exceeds 0.5 ha.



Screening Criteria Question	Response to the Screening Criteria Question in Column A	Is a Significant Effect Likely?
Natural Resources		
<i>Will construction, operation or decommissioning of the project involve actions which will cause physical changes in the topography of the area?</i>	The Site comprises predominantly of agricultural land which is divided over several fields which are separated by woodland and hedges. Landscaping mitigation will be incorporated into the design to ensure there are no effects that would be considered significant in EIA terms.	No.
<i>Will construction or operation of the project use natural resources above or below ground such as land, soil, water, materials/minerals or energy which are non-renewable or in short supply?</i>	The Proposed Development lies in an area of land that is currently being used for agriculture and the Site area covers land classified largely as Grade 3 (good to moderate) Agricultural Land with elements of Grade 4 (moderate to poor) Agricultural Land according to DEFRA's interactive mapping. Whilst DEFRA's interactive mapping is unable to categorise land further into Grade 3a and Grade 3b, Agricultural Land Classification Surveys (ALC) of the fields will be undertaken and submitted with any forthcoming planning application. The Proposed Development will have an anticipated lifespan of approximately 40 years and would require limited maintenance. The proposed construction phase of the development will use resources in terms of land, water and energy, but the operational phase would comprise converting sunlight to energy and storing energy, therefore not resulting in the depletion of this natural resource. Solar development has a minimal impact on the land and soil resources and a soil management plan can be put in place to mitigate any potential effects.	No.
<i>Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, e.g. forestry, agriculture, water/coastal, fisheries, minerals?</i>	Horse Wood Ancient Woodland is situated adjacent to the south of the Site. A buffer of 15m will be incorporated into the design to ensure that there would be no impact on the ancient woodland. A tree survey will be undertaken and will accompany any forthcoming planning application and Tree Protection measures will be implemented. There will be no tree loss within the Ancient Woodland as a result of the proposals. The Site lies within a Mineral Safeguarding Area for Building Stone and Brick Clay. Notwithstanding this, the Proposed Development relates to a temporary use of the land	No.



	and will not sterilize the resource and compromise any future mineral working or exploration in the area should such activities be proposed in the future.	
Waste		
<i>Will the project produce solid wastes during construction or operation or decommissioning?</i>	The Proposed Development will not produce any waste during operation and any waste during construction will be minimal and can be managed through suitable management plans. No significant effects are anticipated.	No.
Pollution and Nuisances		
<i>Will the project release pollutants or any hazardous, toxic or noxious substances to air?</i>	No	No.
<i>Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?</i>	During the construction phase there would be a potential for pollution/temporary nuisance consistent with construction works i.e. noise from plant, dust and noise from vehicles and construction processes, lighting of works on shorter days, and surface water run-off from bare earth/stockpiles. However, the adoption of best practice measures will ensure that any impacts during construction are minimised and will be of a temporary nature for the duration of construction works. Best practice methods during construction will be set out in a CEMP which would be secured by way of a planning condition. During the operation phase of the Proposed Development, there will be some noise produced from moving parts in the machinery such as inverter fans, however this would be low level and unlikely to impact on any sensitive receptors in the area. No electromagnetic radiation would be produced during the construction or operational phases of the Proposed Development.	No.
<i>Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?</i>	Any construction activities will be carried out in accordance with a CEMP. Any subsequent planning application will be accompanied by a Flood Risk Assessment and Drainage Strategy which will set out the pollution prevention principles to ensure contaminated water is retained onsite and cannot be released into soils or surrounding water bodies.	No.
<i>Are there any areas on or around the location which are already subject to pollution or environmental damage, e.g.</i>	There is no known environmental damage where existing legal standards are or could be exceeded.	No.



where existing legal environmental standards are exceeded, which could be affected by the project?		
Population and Human Health		
<i>Will there be any risk of major accidents (including those caused by climate change, in accordance with scientific knowledge) during construction, operation or decommissioning?</i>	There are no known risks of major accidents anticipated, and this is considered unlikely for solar and BESS development. The potential for any construction accidents would be managed by the Principal Contractor and all construction undertaken in accordance with the CEMP. The Proposed Development will be designed to comply with the latest safety guidance for BESS including, but not limited to: in-built battery management systems which will ensure batteries operate within safe limits and a linked 24/7 EMS system, suppression systems; no double stacking; appropriate setbacks between battery containers from the Site boundary and any occupied buildings; and, vegetation clearance within the fenced compound area. It is considered that the risk of major accidents during operation will be low and not significant in EIA terms.	No.
<i>Will the project present a risk to the population (having regard to population density) and their human health during construction, operation or decommissioning? (for example, due to water contamination or air pollution).</i>	The Proposed Development will not create pollution or cause hazardous/toxic/noxious substances to be released to the air during the construction and operation of the Proposed Development. Best practice methods during construction will be set out as embedded mitigation in a CEMP which will be secured by way of planning condition.	No.
Water Resources		
<i>Are there any water resources including surface waters, e.g. rivers, lakes/ponds, coastal or underground waters on or around the location which could be affected by the project, particularly in terms of their volume and flood risk?</i>	Cowfold Stream flows centrally through the Site. A CEMP will control and ensure against release of pollutants into the watercourse during construction. Furthermore, any subsequent planning application will be accompanied by a Flood Risk Assessment and Drainage Strategy which will ensure that drainage across the Site does not increase flood risk elsewhere and will also factor in climate change to drainage calculations.	No.

Biodiversity (Species and Habitats)		
Are there any protected areas which are designated or classified for their terrestrial, avian and marine ecological value, or any non-designated / non-classified areas which are important or sensitive for reasons of their terrestrial, avian and marine ecological value, located on or around the location and which could be affected by the project? (e.g. wetlands, watercourses or other water-bodies, the coastal zone, mountains, forests or woodlands, undesignated nature reserves or parks. (Where designated indicate level of designation (international, national, regional or local))).	The Site does not lie within any statutory ecology designations, such as Special Protection Areas (SPA), Special Areas of Conservation (SAC), or RAMSAR. The Site lies adjacent to Horse Wood Ancient Woodland, however as previously mentioned a minimum 15m buffer between the built infrastructure and the Ancient Woodland will be incorporated into the design which will ensure no impact. There are no other ecological designations within 1km of the Site. Ecological assessments will be undertaken and embedded mitigation put in place to ensure that there are no significant adverse effects on sensitive habitats and protected species due to the Proposed Development. Any vegetation clearance will occur outside the breeding bird season or following pre-commencement checks if this is not possible. An assessment of individual trees within the Site and immediate surroundings will be undertaken during a Habitat Assessment and Preliminary protected species survey. The Proposed Development does not fall under any BNG exemptions and a 10% BNG on the baseline value of the Site will be achieved through a suite of biodiversity enhancements detailed in a Biodiversity Net Gain Assessment	No.
Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, e.g. for breeding, nesting, foraging, resting, over-wintering, or migration, be affected by the project?	An assessment of the flora and fauna, including individual trees and woodland within the Site and immediate surroundings will be undertaken during a Habitat Assessment and Preliminary protected species survey. Should any sensitive species be found, further detailed surveys will be undertaken, and if necessary, additional mitigation included to ensure no significant adverse impacts.	No.
Landscape and Visual		
Are there any areas or features on or around the location which are protected for their landscape and scenic value, and/or any non-designated / non-classified areas or features of high landscape or scenic value on or around the location which could be affected by the project? Where	The boundary of the High Weald National Landscape (HWNL) follows the route of Picts Lane and would therefore be adjacent to the Site's northern boundary. However, the extent of visibility within the HWNL indicated by the ZTV is limited. Current views southwards towards the Site, from within this limited extent of the HWNL, are such that much of the Site would not be visible and where the Proposed Development would be discernible, it would be experienced in the context of large agricultural outbuildings and high voltage electricity transmission cables and pylons which cross the landscape.	No.



<i>designated indicate level of designation (international, national, regional or local).</i>	Cognisant of the proximity to the HWNL, the Proposed Development layout has undergone several revisions and buffers have been created to ensure that infrastructure is set back from the Site's northern boundary and Picts Lane. Proposed mitigation measures along field boundaries adjacent to Picts Lane include infill of existing hedgerows, creation of new species rich hedgerows and planting of hedgerow trees which following establishment would filter views from within the HWNL. The planning application for the Proposed Development will be supported by a Landscape and Visual Appraisal (LVA). The LVA will include an assessment of key viewpoints within a 3km radius of the Site which is considered sufficient to provide a proportionate assessment of the visual effects of the Proposed Development on key receptors.	
<i>Is the project in a location where it is likely to be highly visible to many people? (If so, from where, what direction, and what distance?)</i>	The Site is well screened by existing woodland, and bordered by existing woodland to the northwest and south. Whilst a number of PRoW cross and are in close proximity to the Site, the Preliminary ZTV demonstrates that the majority of visibility of the Proposed Development would be localised. The closest settlement to the Site is Cowfold, which is adjacent to the Site to the southwest. The field closest to the village will not be developed and will not accommodate any built infrastructure. There are existing treelines that screen the settlement from the village, and visibility is expected from the open fields to the south of the Site, and not the residences themselves, as confirmed by the Preliminary ZTV.	No.
Cultural Heritage/Archaeology		
<i>Are there any areas or features which are protected for their cultural heritage or archaeological value, or any non-designated / classified areas and/or features of cultural heritage or archaeological importance on or around the location which could be affected by the project (including potential impacts on setting, and views to, from and within)? Where designated indicate level of designation (international, national, regional or local).</i>	The Site does not contain any designated heritage assets or non-designated heritage assets. The closest Listed Buildings are Picts Cottages (Grade II) and the barn to the west of Picts Cottage (Grade II), which are situated to the north west of the Site. The heritage significance of these designated heritage assets derives principally from their physical fabric and from their mutual association to each other, which will not be altered by Proposed Development. The buildings sit within their own grounds consisting of a small garden plot and surrounding vegetation, and this is considered to be the key element of their setting. The buildings also sit at a lower level than the Site which means that views of the Site are only	No.



	likely to be possible from the upper elevations of the Cottages, and not from the Barn at all. As a result, the immediate and key setting of the assets, which includes their enclosed grounds and the garden plot, would not be affected by the Proposed Development. Notwithstanding this, the Proposed Layout has included a circa 70m landscaping buffer in the northwestern parcel of the Site from the shared boundary which has meant that there would no inter-visibility between the built infrastructure and the Listed Buildings. It is therefore concluded that there will be no impact on the heritage significance of these Listed Buildings. Further afield, but within 1km of the Site boundary, there are a number of other Listed Buildings. Given the distances between these other Listed Buildings and the intervening vegetation, there will be no impacts on the significance of these designated heritage assets. The Site does not lie within a Conservation Area, with the nearest being Cowfold Conservation Area located c.0.4km southwest of the Site. There are no Scheduled Monuments within 1km of the Site, with the nearest Scheduled Monument located c.4km southwest. The nearest Registered Park and Garden [Grade I – Leonardslee] is located c.1.4km north of the Site. Due to the intervening and proposed screening, the Proposed Development is unlikely to cause any significant adverse impacts to the setting of these heritage assets. A Historic Environment Assessment will accompany any forthcoming planning application to consider the potential impact on the nearby heritage assets and to inform mitigation if required, however it is considered that given the separation distance and/or intervening landscape features, and proposed screening, the impact to these designations would not be significant in EIA terms.	
Transport and Access		
<i>Are there any routes on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?</i>	A number of Public Rights of Way (PRoW) cross and come into close proximity to the Site. The construction phase of the Proposed Development is anticipated to be 12 months however during that time the PRoW will remain open for public use.	No.



	Once operational, the PRoW will form part of a carefully considered landscape design and the impact to these PRoWs will be assessed within an LVA which will accompany any forthcoming planning application. The Proposed Development is therefore not predicted to give rise to any significant effects on routes or facilities used by the public for recreation or other activities.	
<i>Are there any transport routes on or around the location which are susceptible to congestion, or which cause environmental problems, which could be affected by the project?</i>	Cowfold is subject to an Air Quality Management Area. During the construction phase of the Proposed Development, which is anticipated to be 12 months, traffic movements will be controlled to limit disruption, particularly within Cowfold itself. This will be achieved through the agreement of a suitable construction route with the local planning authority which is anticipated to approach the Site from the A23 to the east to avoid any traffic traveling through Cowfold itself. Following construction, visits to the Site will be limited to carrying out any planned monitoring and maintenance processes. Access to undertake these tasks will be done using cars or small vans. A small parking area will be created, likely near to the BESS compound. As such, the operation of the Proposed Development is not predicted to give rise to any significant effects on transport routes on or around locations susceptible to congestion. A Transport Statement will, however, be prepared to accompany the planning application.	No.
Land Use		
<i>Are there existing land uses or community facilities on or around the location which could be affected by the project? E.g. housing, densely populated areas, industry / commerce, farm/agricultural holdings, forestry, tourism, mining, quarrying, facilities relating to health, education, places of worship, leisure /sports / recreation.</i>	The Proposed Development is in a largely agricultural setting, with a number of residential properties surrounding the Site. Cowfold Village is also located to the south west of the Site. The Proposed Development will be designed to provide appropriate buffers to the surrounding land uses and the ZTV illustrates that visibility beyond the Site would be limited. The construction phase of the Proposed Development will create normal low-level impacts relating to transport, noise and visual impacts. These are controllable and short-term. The adopted CEMP will ensure there are no significant adverse effects during this time. The surrounding land use is unlikely to be impacted outside of the construction period of the Proposed Development, which will briefly utilise roads to transport and deliver necessary components.	No.



Are there any plans for future land uses on or around the location which could be affected by the project?	No	No.
Land Stability and Climate		
Is the location susceptible to earthquakes, subsidence, landslides, erosion, or extreme /adverse climatic conditions, e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	The Site is not known to be susceptible to earthquakes, landslides, erosion or extreme/adverse climatic conditions.	No.
Cumulative Effects		
Could this project together with existing and/or approved development result in cumulation of impacts together during the construction/operation phase?	The LVA that will accompany the planning application will assess cumulative impact with other energy production applications in the area, primarily planning permission DC/23/2172 for a solar farm west of Cowfold. The distance between the sites is however circa 2km at its closest point and as shown in the ZTV there will be limited visibility, if any, between them. The cumulative impacts are likely to be limited to traffic only if the construction phases cross over, and this can be effectively managed to ensure no significant effects.	No.
Transboundary Effects		
Is the project likely to lead to transboundary effects?	The majority of the Site will be located within the administrative boundary of Horsham District Council, although a small element of the proposed connection route to Bolney Substation will also be located within Mid Sussex District Council. The proposed works for the installation of the cable are limited so there would be no transboundary effects.	No.