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Land North of Little Cheveney Farm, Sheephurst Lane, Marden, Kent

Reference: 22/501335/FULL

Planning permission was refused on 22nd October 2022 for the proposed solar farm at Sheepwash Solar Farm, Marden, Kent in part under Reason (4) within the planning decision notice: *'The proposal would cause harm to biodiversity by detrimentally impacting on ecology and physical habitats including badger and skylark habitat and potential harm from new permissive footpaths to Ancient Woodland and the Lesser Teise and is thereby contrary to the NPPF and policies DM3 and DM24 of the Maidstone Borough Local Plan 2017.'*

The following report aims to respond to the planning officer's comments to highlight where there are contradictions in the comments and demonstrate that the proposed solar development does meet the relevant ecological criteria of policies within National Planning Policy Framework (NPPF) and policies DM3 and DM24 of Maidstone Borough Council's Local Plan.

Badgers

The Ecological Impact Assessment highlighted the potential for impacts to badgers including the disruption to dispersal of the security fencing. The introduction of badger tunnels and gates within the exterior fencing was recommended as mitigation to allow badgers (and other wildlife) to continue using the site for foraging and to maintain connectivity across the landscape. KCC have accepted this recommendation, but also maintained their objection on this basis.

It is notable that the expert ecological advice provided by Kent County Council Ecological Advice Service to Maidstone Borough Council dated 6th September 2023 does not raise any concerns relating to badgers and as such it is unclear where this objection originates as professional ecological advice from both KCC and Riverdale Ecology Ltd concluded that impacts are unlikely assuming the continued accessibility across the solar farm site.

Maidstone Borough Council have maintained a holding objection relating to badgers despite being in agreement with the mitigation proposal in the Ecological Impact Assessment for badger gates and tunnels within the security fencing to maintain the permeability of the landscape for the movement of badgers.

The proposed mitigation for badgers is considered effective and adequate to mitigate any detrimental effects on the free movement of badgers locally.

Skylark

Maidstone Borough Council raised concerns relating to loss of skylark habitat within the development area although they agreed with the EclA that the loss of habitat could be mitigated by advance creation of skylark plots within the surrounding area.

The independent advice from Kent County Council Ecological Advice Service commented that *'The information has detailed that there is evidence of skylark being recorded within solar farms but until conclusive proof has been provided that solar farms do support breeding skylarks in similar numbers recorded in an arable field of the same size we advise that it needs to be assumed the breeding habitat will be lost.'* This is not considered a reasonable presumption as published research recorded skylark using land within solar arrays for both foraging and possibly for nesting. A study lead by *Clarkson et al.* (2016)¹ identified skylarks using land within solar arrays for foraging during the summer months, at comparative (and sometimes higher) levels to that of control sites. Similar findings have also been reported by the RSPB (Shotton, R. 2018-2020).

The average density of skylark on lowland arable farmland is actually very low at approximately 0.1 pairs per hectare in winter cereal up to 0.3 per hectare in set aside. The provision of skylark plots is considered the standard mitigation for loss of nesting habitat, but it must be acknowledged that the density of skylark within this farmland was low, and research has shown that solar farms do retain nesting skylark in cases where the panels are spaced adequately. Based on the panel spacing proposed within the array, it is reasonable to predict that skylarks will continue to nest within the solar array and will certainly benefit from the adjacent areas of habitat creation. The extent of any offsite mitigation can be agreed through conditions but must consider the wider biodiversity net gain of the habitat creation measures within the solar farm which include the provision of 17.5 hectares of species-rich neutral wildflower grassland meadows which will provide higher value nesting habitat for skylark than arable and support higher nesting density. Surveys of solar farms in Norfolk (Pers Comm. Riverdale Ecology Limited – Scottow Moor Solar Farm) recorded densities of between 0.3 and 0.5 per hectare in areas of mitigation grassland alongside nesting densities within the solar array itself of up to 0.2 per hectare, densities which far exceeded those recorded in arable fields used for offsite skylark mitigation.

The change from intensive arable farmland to meadows and other grassland areas will have significant local benefit to skylark and other farmland bird species, increasing the availability of invertebrate prey items, at very least from the cessation of spraying cropland with chemical insecticide. This will lead to widespread local beneficial effects on skylark nesting in the arable fields in proximity to the solar farm, more so than providing skylark plots.

However, skylark plots can be provided if necessary to secure planning for the solar farm. Skylark plots can be installed within arable fields adjacent to the site where suitable winter cereal crops are to be grown. The field immediately to the south of the solar array is five hectares in area and could accommodate enough plots to mitigate at least half the loss of nesting territories within the solar array based on standard mitigation requirements of two plots per territory lost.

Ancient Woodland

1 H. Montag, G Parker & T. Clarkson. 2016. The Effects of Solar Farms on Local Biodiversity; A Comparative Study. Clarkson and Woods and Wychwood Biodiversity

The potential harm to Ancient Woodland suggested in the refusal notice is not based on any reasonable risk of potential impacts to the integrity of the Ancient Woodland habitat or designation or indeed individual trees within the woodland.

The two key elements in the NPPF relating to Ancient Woodlands are paragraph 118 and paragraph 180 (c):

118: *'planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.'*

180(c) *'Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons² and a suitable compensation strategy exists'.*

The solar farm itself is quite clearly positioned away from the Ancient Woodland at a distance where direct impacts will not occur. There will be no loss of any trees, no development within the Root Protection Zones of the associated trees and no hydrological impacts from the proposed solar farm. As such the solar farm is fully compliant with statutory Government advice³ relating to ancient woodland and implementation of buffer zone between developments and areas of ancient woodland:

For ancient or veteran trees (including those on the woodland boundary), the buffer zone should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5 metres from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter. This will create a minimum root protection area. British Standard BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction calculates a maximum RPZ of 15m for all trees above 1250mm stem diameter.

The solar farm security fencing is located approximately 25m from the edge of the woodland which is an additional 10m from the maximum RPZ of any mature trees on the woodland edge. The solar panel array is then situated another 3-5m from the security fencing. The buffer zone between the solar farm and the ancient woodland will be planted with wildflower grassland and maintained as a wildlife corridor significantly contributing to wider ecological networks and forming an integral part of the green infrastructure in the area. Furthermore, the proposals include an extensive area of woodland planting to the north and south of the existing block of ancient woodland effectively doubling it in size.

The only element of the proposals which has been flagged by Maidstone Borough Council as having potential to affect the ancient woodland is the suggestion of a permitted footpath within the buffer zone, adjacent to the ancient woodland. On the submitted plans the permitted footpath is indicatively shown adjacent to the woodland and is therefore within the RPA of the mature trees within the woodland. This was intentional as the benefits of woodland are well documented: A 2020 website content report by the Woodland Trust⁴ highlighted the benefits of walking in woods including improvements to physical health, stimulating the brain and boosting wellbeing, and aiding sleep and creativity.

2 For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

3 <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

4 <https://www.woodlandtrust.org.uk/blog/2020/08/walking-in-woods/>

The position of the proposed footpath, despite being in the RPA of trees edging the ancient woodland, will not significantly impact the integrity of the woodland. The footpath is a rural permissive footpath located in a sparsely populated area where usage of the existing public footpath network is evidently low. There is no intention to install any sort of engineered path, merely a marked or mown route through the wildflower meadow buffer. The footpath has negligible risk of any impacts to the adjacent woodland resulting from trampling as traffic along the footpath is anticipated to be very low. The location of the footpath adjacent to the woodland is actually along an existing farm access track, which is clearly evident when on site and on aerial photographs of the site. Any compaction of roots within the RPA of the woodland is already occurring from farm traffic, which has not affected the integrity of the woodland, and its use as a pedestrian permitted footpath would most likely reduce the risk of compaction. In addition, existing farming activities are occurring within the RPA of the woodland, with this field regularly ploughed up to within 5m of the woodland edge; as such it is reasonable to conclude that any tree roots in the top 50cm of the soil are subject to regular damage and disturbance from cropping.

The fundamental presumption that the integrity of ancient woodlands is at risk from permissive access is questionable in itself. In this case there is no permitted access into the woodland itself and so there is no risk to the ground flora, which would be susceptible to damage from trampling. The land around the perimeter of the woodland is fairly unremarkable, with negligible ecological value, comprising a rough grassland and tall herb field margin used as farm access track. Impacts from trampling of this vegetation would not affect the integrity of the woodland as a whole and is unlikely to impact individual trees. The anticipated foot traffic along the permitted footpath is not considered to cause significant compaction to soil in the RPA of the woodland trees and any areas of compaction would be so localised that it would never amount to a significant impact to the entire woodland

It is also simply not credible to raise objections to a footpath adjacent to an area of ancient woodland when other equivalent ancient woodlands, including those owned and managed by Kent Wildlife Trust and Maidstone Borough Council themselves, contain extensive permitted and public footpaths within them and are actively encouraging visitation and recreational use. This is quite apart from the existing public footpath network which extends through and around many privately owned ancient woodlands in Kent and the UK as a whole. Surely if pedestrian access to ancient woodlands is likely to result in significant impacts to the integrity of that woodland, then it is necessary to remove all access to such sites. In many cases these ancient woodland sites have statutory designations as well so have higher ecological importance and as such are more vulnerable to recreational effects:

Boxley Warren Local Nature Reserve (LNR) owned and managed by Maidstone Borough Council – Ancient woodland and part of North Downs Woodlands Special Area of Conservation (SAC) and Wouldham to Detling Escarpment Site of Special Scientific Interest (SSSI).

Vinters Valley LNR owned by Maidstone Borough Council – Ancient woodland site managed for wildlife and recreation.

Kent Wildlife Trust ancient woodland Reserves:

Brenchley Wood, Collingwood, Cromers Wood, East Blean Wood and National Nature Reserve (NNR), Foal Hurst Wood LNR, Kiln Wood, Parsonage Wood and SSSI, Quarry Wood, Sladden Wood, South Blean Wood, Spong Wood, Spuckles and Kennelling Woods, Stone Wood, The Gill, Wattle Wood, West Blean and Thornden Woods, Westfield Wood LNR, Yockletts Bank.

The holding objection by the Council to the positioning of the permitted footpath makes no sense when compared to the active encouragement of recreational visitation to ancient woodlands managed by Maidstone Borough Council. The accusation of potential impacts to the ancient woodland within the Sheepwash Application Site boundary seems completely unfounded and based on a different set of standards to Maidstone Borough Council's own actions. Therefore, potential impacts to the integrity of the ancient woodland should be rightly dismissed as a negligible concern.

However, there is no specific requirement for the permitted footpath to be located directly adjacent to the ancient woodland and it could ultimately be re-sited to follow the edge of the solar farm security fence which would move it outside of the woodland RPA and include an additional buffer. This would completely eliminate any remaining argument that the footpath could affect the woodland habitat.

The final point to make is that the proposed development includes a sizeable area of woodland creation to the north and south of the existing 2.1 hectare block providing an additional 1.8 hectares of broadleaved woodland, almost doubling the size of the ancient woodland area. This will result in significant long-term benefits to the integrity of the woodland and the local green infrastructure which far outweigh any minor impact from the introduction of a permitted footpath in the vicinity.

Lesser Teise

Two responses were received from the Environment Agency in relation to the proposed development on 28th June 2022 and 22nd September 2022.

The response dated 28th June 2022 highlighted a need to consider the potential presence of nesting kingfishers and recommended a plan to ensure any potential disturbance to kingfisher nest sites is avoided during development, and post development is included as a condition on the site to include the following elements:

- Details of annual nesting bird surveys
- Sufficient buffer zones around any suspected nest sites
- Any works within 10m of known nesting sites must be overseen by a suitable qualified and experienced Ecological Clerk of Works (ECoW)
- A long-term monitoring program of the nesting birds utilising the site.

The inclusion of this condition would be acceptable. However, there is no construction, excavation or fencing within 10m of the Lesser Teise resulting from the solar array and therefore no risk to kingfisher nests or associated habitat from the construction of the solar farm at the site.

The response dated 22nd September highlighted possible risk to the ecology of the Lesser Teise from a public footpath adjacent to the river:

The submitted planning application and associated documents indicate that the creation of a public footpath is proposed within eight metres of the Main River, the Lesser Teise, as part of this development. Based on the information submitted with this application, there is a significant risk that the development may cause deterioration of water body status through preventing achievement of good ecological potential by increasing disturbance, the likelihood of plastic waste entering the watercourse and the modification of naturally occurring riparian habitats and species, and therefore, may not meet the

requirements of the Water Framework Directive unless the provisions of Article 4.7 of the Water Framework Directive can be met.

There are no new public footpaths proposed within this development. Works to public footpaths are limited entirely to a realignment of the public footpath on the northern edge of the site. There are presently two existing footpaths which both cross the Lesser Teise at Ordnance Survey Grid Reference TQ 73174 44687 and TQ 72916 44013. The proposal within the planning application was simply for a permissive connection between these two crossing points which would be loosely defined within the 20m strip between the riverbank and the solar farm security fence. There is no intention to create a constructed footpath or even define the specific walkway, it is merely a recognition of a right to roam which is already in existence along this section of riverbank, defined in part by a worn path that can be clearly seen from both aerial photography and ground investigation. Official recognition of this route will not result in any potential increase in visitor numbers or any increase of plastic waste entering the river. The existing footpath network already crosses the river at two locations and the change to permitted access is certainly not likely to affect the physical habitat of the Lesser Teise and will not result in any significant *'modification of naturally occurring riparian habitats.'* It is considered highly unlikely to increase the volume of recreational use to a level where it may risk significant increases in disturbance to the local wildlife.

The cessation of arable farming activity within the proposed site would in fact lead to significant benefits to the water quality of the river as there would be a large reduction in the quantities of agricultural chemicals used on the fields directly adjacent to the Lesser Teise, which undoubtedly enter the water body as runoff when leached out of the soil. In addition, the permanent grassland within the solar farm will stabilise soil, preventing erosion and inevitable runoff of soil from the arable fields adjacent to the river. As such this development will result in benefits to the water quality of the Lesser Teise and will have a favourable effect on the River Beult SSSI approximately 4.5km downstream by reducing the nutrient loading and silting.

This section of the Lesser Teise is very straight and appears historically to have been artificially straightened and the profile of this section has very steep banks making it quite inaccessible. Any permitted access adjacent to this stretch of the river is unlikely to affect the habitats and species which presently frequent the Lesser Teise. In the winter period and periods of high rainfall the water level is very high and fast moving, and so this stretch of the river is not particularly accessible for recreational use.

It should also be noted that the statutory consultation response from Natural England on 20th July 2022 lists environmental gains recommending opportunities for enhancement including *'Providing a new footpath through the new development to link into existing rights of way'* and later in the response letter: *'Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links.'*

Favourable support of the permissive footpaths was also received from Maidstone Borough Council's Public Right of Way officer on 14th June 2022.

We consider that there are simply no grounds for refusal on the basis of the supposed impacts to the Lesser Teise from a permissive footpath. The inclusion of the permissive footpath in the design is not essential to the design or operation of the solar farm and the advice from Maidstone Borough Council and other statutory consultees has been contradictory. The contentious opinion on this footpath proposal and the intention to refuse planning on this basis should have been clearly



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presented by Maidstone Borough Council with adequate notice to permit an option to remove this feature from the design prior to the decision.

Yours sincerely,

Danny Thomas CEng MCIEEM

Principal Ecologist