

Planning Ref: 2460156

05 April 2024

Dear Sir/Madam

Re: 2460156: a 10 year planning permission for development consisting of the construction of a solar PV development on a c129 ha site consisting of: - The erection of solar panels on ground-mounted galvanised steel frames, string inverters attached to selected ground-mounted galvanised steel frames, 16 no. transformer units, underground cabling, security fencing, CCTV system with pole mounted cameras and landscaping; - 6 no. site entrances with access gates utilizing existing farm field entrances which will be upgraded and internal accesses; - the installation of underground cables, including cables under public roads; - 2 no. temporary construction compounds; and all associated ancillary development works. The operational lifespan of the solar PV development will be 40 years. A Natura Impact Statement will accompany the planning application

The Heritage Council was established in 1995 as a statutory body under the Heritage Act 1995 with a Council (the Board of the body) appointed by the Minister. The Heritage Council is a prescribed body under the provisions of the Planning and Development Acts 2000-2010 and S.I. No. 600/2001 of the Planning and Development Regulations, section 28 inter alia, in accordance with its functions under Section 6 of the Heritage Act, 1995. We seek to provide submissions on forward planning, development control and strategic infrastructure developments as they relate to Ireland's heritage, namely built, cultural and natural heritage.

GENERAL

The Heritage Council support efforts to increase renewable energy rollout in Ireland. Increased global temperatures and changing climate patterns will pose risks to natural ecosystems and habitats. Therefore, we acknowledge the need to roll out renewable energy schemes, to reduce the country's carbon emissions.

It is also important to note that this is a relatively new frontier in the Irish land use planning landscape. The number of applications for solar farms are increasing and the Heritage Council wish to contribute constructively to how these developments interact with our natural and built heritage.

Due the scale of some of the solar farms being proposed, and their specific locations, presumably south facing aspects, there will inevitably be a land use impact with archaeology, given the prevalence of ringforts (*dun*, *lios or rath*), as well as other archaeological sites, in the Irish countryside. In addition, there is a need to ensure that solar farm development does not undermine biodiversity ambitions.

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The solar farm complex as proposed in this application is divided into five parcels. We have studied the application documentation, with particular emphasis on the Environmental Report (including the Biodiversity Management Plan) and the Natura Impact Assessment. Our comments are therefore confined primarily to archaeology and the biodiversity aspects of the scheme. They are divided as per the following:

- 1. Built/Cultural Heritage
 - Archaeology
- 2. Natural Heritage
 - Ecology and Habitats

Built and Cultural Heritage

Archaeology

There are a relatively large number of archaeological sites both around the development sites and within several of the sites. Apart from Parcel 2, all the parcels have archaeological features that are listed on the SMR (sites and monuments record/Historic Environment Viewer). The Environmental Report includes a chapter on cultural heritage which details the archaeological features on site. They are as follows:

- Parcel 1 Enclosure (TS061-029)
- Parcel 3 ringfort (TS061-037),
- Parcel 4 ringfort (TS061-018)
- Parcel 5 -ringfort (TS053-072)
- Parcel 5 ringfort (TS053- 094)

In addition, several other archaeological features and protected structures that are listed on the National Inventory of Architectural Heritage (NIAH) are in close proximity to the parcels.

Archaeological heritage features as identified in each parcel should be avoided in terms of the installations of panels. This should comprise an archaeological buffer exclusion zone based on the zone of notification for all monuments. We note that only one of the 5 features with an intact circumference surface expression is excluded from the development, based on a 60-metre diameter, while 4No. recorded monuments, without surface expression will have a non-intrusive mechanism for supporting the panels. This includes TS061-037 where the surface expression is outside the site.

The Heritage Council considers that additional survey work needs to be submitted to justify the mitigation proposed and the conclusions of the assessment. A widespread geophysical survey, not just with respect to the specific locating of TS053 094 (as noted in the assessment), is needed. In this regard, we recommend the following:

 The 5 recorded monuments should all have an exclusion buffer based on their zone of notification.

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- If a "no surface expression" criteria of the archaeological feature is proposed as
 a justifiable reason for not having an exclusion buffer, this needs to be supported
 by a full geophysical survey.
- The entire development site should undergo a full geophysical survey to identify any archaeological anomalies/ activity or unknown features.

The archaeological information provided with the planning application is not sufficient to make a fully informed decision. Heritage considerations will be an important consideration in terms of how solar farms are considered. It is also unacceptable that different survey requirements to support large solar farm planning applications would exist depending on what part of the country the development is occurring. This may be due to the newness of this form of development and the lack of guidance on heritage issues relating to solar farms. With this in mind we would bring to the attention of the developer and Tipperary County Council a parallel application for a solar farm development in Westmeath County Council area [Planning Reference 2460050], where a more adequate archaeological assessment, supported by a geophysical survey, was provided with the application. This should be the minimum requirement for the provision of archaeological information when considering such applications. Such information will then fully determine whether 1. Archaeological exclusion buffers are required, and 2. Where non-intrusive fixing mechanisms are needed. Once this is conducted, we would then ask that this is made more explicit in the relevant drawings and enforced by condition.

In addition, for the cabling works for the grid connections and the general construction works, monitoring with an onsite archaeologist will be needed. We would also suggest that an archaeologist be on site when works are being undertaken both around the zone of notification in the case of the archaeological buffers, as well as for construction works for the installation of the solar panels on any newly discovered areas of archaeological activity.

NATURAL HERITAGE

Habitats and Ecology

There is one internationally protected site within 15km of the development site. This is the River Suir SAC, and there is a hydrological connection between the sites. The Natura Impact Assessment has considered the potential impacts on the SAC and we are satisfied that the mitigation measures as proposed will be adequate. Although they should be enforced by condition.

In addition, detailed habitat analysis based on the Heritage Council's Fossit Guide to Habitats in Ireland has been provided, as well as an assessment of NBDC data for the occurrence of protected species. The proposed development site is characterised by improved agricultural grassland (GA1), tilled land (BC3) and arable land (BC1). Treelines (WL2), hedgerows (WL1) and watercourses and drainage ditches (FW2 and FW4) are

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locally important receptors, while there is a stand of mixed woodland (WD1), wet grassland (GS4) and sedge swamp (FS1) also present. The treelines, hedgerows, streams/ drainage ditches, woodlands and wet grassland areas are important habitats for several of the species considered in the biodiversity chapter of the Environmental Report. This primarily relates to shelter and foraging for bat species, badger and bird species.

It does appear that the most important ecological receptors have been screened into the proposal. Although it also appears that no specific badger surveying has been carried out. In this regard, we recommend the following:

- Retention of existing hedgerows and treelines, particularly those with bat roost potential along field boundaries
- Greater level of assessment for the streams identified including chemical quality.
- To ensure no siltation or pollution run off during the construction phase, a suitably qualified project ecologist should be present for works in the vicinity of watercourses.
- Riparian zones along streams should be managed as per Bride EIP project guidelines.
- Given solar farm operations will desire no overshadowing of the PV panels, some condition for a specific strategy for how the field margins/hedgerows and trees will be managed should be included. Breeding birds will only nest at certain heights, and we recommend that the National Biodiversity Data Centre's <u>guidance</u> on hedgerow planting be included in such strategy (see also Foulkes et al, 2012 *Hedgerow Appraisal System*). Specific emphasis on the vitality of *Fraxinus Excelsior* (Ash) specimens would be needed in this regard and opportunities to rejuvenate/ gap filling of hedgerows could be pursued. Oak species should also be included in the hedgerows.
- Badger survey to inform the mitigation suggested and/or preconstruction (immediately before the construction begins) surveys for badger setts/presence of badger.
- More effort on landscaping could also have aspired to create corridors connecting patches of wet grassland and scrub/woodland.

On other points we recommend:

- Inland Fisheries Ireland is consulted on matters related to watercourses.
- No felling or removal of vegetation during the bird breeding season
- Preliminary flora/walkover survey should have been done in spring.



We note that comprehensive mitigation and a Biodiversity Management Plan (BMP) has been submitted with the application. This covers some of the recommendations we have made above. The Biodiversity Management Plan submitted with the application should be commended. It is recognised that intensive agriculture may not necessarily be the most species rich habitat; however, the hedgerows, treelines, and watercourses that surround it are of remarkable ecological value. We note the elements of the BMP for retention and bolstering of hedgerows. This is welcome and should be reflected in all the drawings so that the ambitions of the BMP can be easily ensured via condition.

We also note that three areas of biodiversity enhancement will be provided. Again, this is welcome. We note that they are located on what will be previously tilled or arable land. We would suggest that the applicant ensure that these are in fact the best locations for the biodiversity enhancement areas. Depending on the nutrient legacy of the previous agricultural land use, species rich grasslands in this location will probably need some level of intervention, and specific early years management to ensure the desired habitat/vegetation community establishes. The project ecologist should advise on this matter. We also recommend that the stand of woodland identified in Parcel 1 and Parcl 5 also be retained.

Finally, solar farms and their environmental impacts are a new frontier in Irish land use planning. There are elements of ecological mitigation/retention that should be commended in this scheme. We would however suggest to Tipperary County Council and the applicant that there is a unique responsibility to monitor these early consents to inform future developments. Matters of ecological impact could be monitored i.e. will the new biodiversity enhancement areas establish as intended; is the 'lake effect' or glint of solar farms leading to avian collisions a valid concern? Will species richness increase due to potentially less fertilizer use and will the vegetation community shift to more shade tolerant plants? Therefore, a monitoring condition on such ecological impacts could be included for lifetime of the solar farm. This would be a good scientific contribution to mitigate the negative impacts of the scheme and would inform future developments.

CONCLUSION

Solar farms will be a feature of the Irish landscape going forward. The Heritage Council support renewable energy rollout, but not at all costs. We are keen to constructively contribute to ensuring that good design and heritage considerations are properly addressed in rolling out such infrastructure. In this specific case we would suggest further archaeological information be provided, as set out above, to ensure that the proposal fully complies with Policy 13-4 of the Tipperary County Development Plan 2022-2028. We also recommend that Tipperary County Council fully condition the application to conform with the drawings as provided; and that the mitigation identified in both the archaeological report and ecological assessment be captured by way of condition.