



An
Bord
Pleanála

Inspector's Report ABP 304899-19

Development	Solar farm
Location	Kill St. Anne North, Castlelyons, Fermoy, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	18/6010
Applicant	Amarenco Solar Kill St. Anne Ltd.
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	3 rd Party v. Grant
Appellant	Edward Myers
Observer(s)	None
Date of Site Inspection	17/09/19
Inspector	Pauline Fitzpatrick

1.0 Site Location and Description

The site which has a stated area of 8.83 hectares, is located in the townland of Kill St. Anne North c. 1.1km to the north-west of Castlelyons village. The site comprises of 3 fields in agricultural use the boundaries of which are delineated by hedgerows. The lands are relatively level with falls from east to west. They are served by an existing entrance from the public road to the south (L5789). An 110kV overhead power line crosses the site.

The general area is characterised by lands in agricultural use with housing along the local road network, the nearest being c.30 metres to the west with a further dwelling located c.95 metres to the east. A further dwelling is immediately to the south on the opposite side of the road.

The local road was noted to be lightly trafficked on day of inspection with the roadside boundary delineated by a hedgerow.

2.0 Proposed Development

The application was lodged with the planning authority on the 31/07/18. Unsolicited further information was received 30/08/18 with further plans and details submitted 08/05/19 following a request for further information dated 21/09/18. Copies of revised public notices and further unsolicited information were received 06/06/19 and 19/06/19 respectively.

The proposal entails a 5MW solar farm comprising of:

- 22,200 photovoltaic panels mounted 2 metres above ground level with a maximum height of 3.55m
- 2 no. single storey inverter/transformer stations
- 1 no. single storey delivery station
- 3.5 metre wide compacted gravel internal access track
- 2 metre high security fencing
- CCTV

Details are provided as to potential connection to the ESB substation c.300 metres to the north via an overhead line.

The application is accompanied by:

- Introductory Report on Solar Farms
- Planning Statement
- Landscape and Visual Impact Analysis
- Glint of PV Power Plants – Technical Note
- Glint and Glare Assessment
- Ecological Impact Assessment
- Construction Management Plan
- Archaeological, Architectural and Cultural Heritage Impact Assessment
- Geophysical Report
- Photomontages
- Letter of consent from landowner

3.0 Planning Authority Decision

3.1. Decision

Grant permission for the above described development subject to 40 conditions including:

Condition 2: 25 year permission.

Conditions 3, 4, 28 & 30: All landscaping to take place in 1st planting season following commencement of development. Removal of vegetation to be done outside nesting season. Existing roadside boundary to be retained save where its removal is necessary for construction of the entrance. Retention of trees and hedgerows save those specified for removal.

Condition 5: 20 metre buffer zone from the outer extent of 2 archaeological features to be delimited using appropriate temporary boundary fencing and signage.

Condition 6: Archaeological testing of anomalies identified in the geophysical survey and on a sample area across the site where ground works is to take place.

Condition 7: Archaeological monitoring.

Condition 8: Construction method statement to be prepared and works to take place in accordance with same.

Condition 9: Container, inverters and fencing to be dark green in colour and substation to be finished in neutral colour.

Condition 10: CCTV cameras not to be directed towards adjoining property or the public road.

Condition 11: Dust and Noise Management system to be put in place.

Condition 18: Construction waste management plan to be prepared.

Condition 19: Construction and Environmental Management Plan to be submitted for written agreement.

Condition 22: Decommissioning requirements.

Condition 29: No construction related wastes to be stored or used to infill lands within Blackwater River SAC.

Conditions 36 & 37: 90 metres sight distance at a point 3 metres back from the edge of the road to be provided. Vegetation or any structure not to exceed 1 metre in height within sight distance triangle.

Condition 39: Detailed construction, piling, excavation and management plan to be agreed with local area office; no queuing of HGV traffic on public road and Health and Safety and structural assessment of existing bridge at junction of the L5790/L1517 to be submitted 3 months prior to commencement of construction.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The 1st Senior Executive Planner's report dated 20/09/18 considers there is no objection in principle to the proposal. He concurs with the visual assessment in terms of predicted impacts. Photomontages from viewpoints to the west recommended. Having regard to the submission from the Department of Defence a

glint and glare study is required. Concerns as to the adequacy of the local road and sightlines available raised. The proposal is acceptable in terms of surface water drainage/flooding issues. Clarity is required regarding landscaping proposals. Further details on archaeology as per the archaeologist's report (summarised below) also required. A request for further information recommended. The Senior Planner in a report dated 21/09/18 endorses the recommendation.

The 2nd report dated 31/05/19 following further information states that no observations were received from the Department of Defence in relation to the glint and glare assessment received. In the absence of specific guidance or standard for the assessment of glint and glare regard is had to standards set out by the Federal Aviation Authority. The issue of glint and glare is not considered to be a concern. It is not considered that the proposal will have a detrimental impact on the visual character of the receiving landscape. It is not considered a planning concern should panels have to be omitted to ensure an adequate buffer zone to the overhead power line. The revised access arrangements are acceptable but are considered a significant alteration from that previously proposed. Revised public notices recommended.

The 3rd report dated 21/06/19 notes that the Area Engineer recommends a setback of the proposed entrance 3 metres from the road edge by way of condition. It is noted that the cumulative impact of the proposal with that permitted to the north was assessed as part of the original planning assessment. A grant of permission subject to conditions recommended. The recommendation is endorsed by the Senior Planner in his report dated 21/06/19.

3.2.2. Other Technical Reports

3 reports from Environment Section dated 10/09/18, 18/09/18 & 19/09/18 addressing waste, air, noise and water have no objection subject to conditions. Further reports dated 15/05/19, 21 /05/19, 22/05/19 & 27/05/19 following further information endorse the original recommendations made.

Area Engineer in a report dated 18/09/18 recommends more detailed drawings confirming that there is sufficient road width to access the site at the proposed location, full extent of roadside boundary to be altered and consent from adjacent landowner if necessary. Health and Safety and Structural Assessment of the existing

bridge at the junction of L-5790-L-1517 required three months in advance of construction. A special contribution may be required to upgrade L5789 post construction. The 2nd report dated 30/05/19 following further information notes the relocation of the entrance to the west and demonstration of 90 metre sightlines. No objection subject to conditions.

The 1st report of the Heritage Unit dated 19/09/19 notes there are no hydrological links between the site and the River Bride which is a tributary of the River Blackwater. She is satisfied with the conclusions of the AA Screening Assessment. The ecological impact of the development is acceptable and will not have any undue significant effects on habitats, flora or fauna. A detailed landscaping plan and details of the grid connection required by way of further information. The 2nd report dated 23/05/19 following further information considers the response to be adequate. No objection subject to conditions.

The 1st Archaeologist's report dated 20/09/18 notes that an interesting archaeological landscape outside the known ringfort has been identified. The mitigation measures proposed are not sufficient. Further information recommended including submission of geophysical report, redesign of the site layout to include a 20 metre buffer zone from the outer extent of the two monuments, archaeological testing, and visual impact assessment on nearby Church and graveyard. The 2nd report dated 30/05/19 considers the revised archaeological mitigation to be acceptable.

3.3. Prescribed Bodies

Irish Aviation Authority recommends that should permission be granted that a condition be attached requiring appropriate mitigation measures if, upon installation, the development poses an unacceptable risk to the safety of aviation activities.

Department of Defence in an email states that an Aviation Impact Assessment to include a glint and glare study needs to be sent to *Airspace and Obstacles, Defence Forces*.

Inland Fisheries Ireland in a report dated 18/09/18 has no objection in principle subject to the design of any drainage network catering for hard standing areas or structures mimicking the current drainage regime of the lands, employment of

effective mitigation measures to avoid discharge of polluting matter to receiving surface waters and appropriate storage of fuel oils.

3.4. **Third Party Observations**

Objections to the proposal received by the planning authority are on file for the Board's information. The issues raised relate to access and traffic, impact on amenities and value of adjoining property, loss of privacy, loss of agricultural land, glint and glare, noise, impact on bloodstock, visual impact, impact on tourism, subsidence and presence of swallow holes in area, surface water runoff and flooding, risk to ground water supply, impact on wildlife, absence of details on decommissioning, impact on archaeological sites, width of corridor for ESB line, health and safety concerns and lack of consultation.

4.0 **Planning History**

I am not aware of any previous planning applications on the site.

PL08.248278 – permission granted on appeal for a 5MW solar farm on lands immediately to the north of the appeal site. The applicant is the same as in the current case.

ABP 300228-17 – permission granted on appeal for a 5MW solar farm on lands c.1.5km to the east.

PL08.248400 – permission granted on appeal for a solar farm on lands c 1.5 km to the south. The applicant is the same as in the current case

5.0 **Policy Context**

5.1. **Development Plan**

Cork County Development Plan

The site is within landscape character type 6c Broad Fertile Lowland Valleys which has a medium landscape value, medium landscape sensitivity and local landscape importance.

Fermoy Municipal District Local Area Plan 2017

Castlelyons/Bridebridge is designated as a key village

5.2. Natural Heritage Designations

The Blackwater River (Cork/Waterford) SAC (site code 002170) is approx. 1.7km to the south of the site.

6.0 The Appeal

6.1. Grounds of Appeal

The submission by Sean R. McCarthy on behalf of the appellant can be summarised as follows:

- The proposed development adjoins the entire south-western boundary and wraps around approx. half of the northern western boundary of his property.
- The proposal to use excess topsoil to build up ground level to the back of the ditch at the south corner is at odds with the statement that the development is totally reversible.
- No investigation has been undertaken to determine the effects on ground water and surface water the 0.8 metre raising of the ground levels on the western side of the development will have.
- If topsoil is being removed than vegetation on the lands will be compromised and therefore cannot be used for grazing of sheep and/or calves as suggested.
- No provision has been made to remove/eliminate glare to the rear of his property.
- The appellant keeps bloodstock. The glare would adversely impact same.
- His property will be adversely impacted from loss of privacy arising from the glare.
- The 34 metre wide corridor for the 110kV overhead line is inadequate. Eirgrid require minimum clearance of 23 metres from the centre wire.

- The assessment of noise during the construction and operational phases is inadequate.
- The 2.1 metre set back distance for vehicles exiting the property is inadequate. Sight lines should be a minimum of 120 metres from a point 3 metres back from the road edge.
- The photomontages are inadequate.
- The proposal forms part of a much larger development which is not shown on the drawings. Reference to 'hedgerow removal 4.4 metres portion of ditch for continuous maintenance' on the north-western boundary noted. It is connected to the development to the north.
- The change to include an entrance to the site to the north-west was not requested by the planning authority and should not have been considered by same.
- The full impact of the proposal when taken together with that proposed to the north-west has not been assessed

6.2. Applicant Response

The submission by McCutcheon Halley on behalf of the applicant can be summarised as follows:

- The proposal represents a form of agricultural diversification which is consistent with and will co-exist with existing agricultural practices. All civil works are totally reversible. The manner in which the panels are mounted in combination with the rest of the infrastructure occupies less than 5% of the site area with the remainder available to support vegetation growth and wildlife. On completion, the disturbed ground will be re-seeded with potential use as grazing land. The site will be suitable for medium sized livestock. During the lifetime of the solar farm the ground will not be tilled over or require fertilising and weed control to the benefit of long term soil quality.
- A site specific glint and glare assessment was submitted by way of further information. It determined that it is unlikely that there will be any nuisance or

hazard reflectance effects experienced at any of the dwellings or nearby roads and it would have no impact whatsoever on Cork Airport.

- There is currently no firm guidance on the adequacy of the buffer zones beneath overhead wires. It is a detail that will be agreed with the ESB prior to commencement of development.
- Section 5.5 of the Construction Management Plan deals within on site surface water generation. The only surfaces where infiltration is impeded are the inverter stations and delivery station which equates to approx. 115.5 sq.m. impervious area over a total area of 115300 sq.m. The proposed access track along the south-west boundary will increase run off from the field by a maximum of 33m³. This will be the equivalent of an 11% rise in run off from the existing field. To prevent this increased run off from affecting the adjoining property it is proposed to install a cut off drain to the west of the proposed road. The drain will have check dams and will prevent all additional run off from gathering at the south west corner of the site. All surface water is to be kept on site. Conditions 28 and 31 attached to the decision also address surface water runoff.
- The only devices which give rise to noise emissions are the invertors and transformers. Inverters are housed in noise insulating prefabricated structures and transformers are housed in a delivery station where noise will be imperceptible. Condition 11 of the decision requires that a dust and noise management system be put in place. Condition 12 relates to noise levels during construction. The invertors and transformer are located approx. 80 metres from the nearest dwelling and approx. 240 metres from the appellant's house
- As part of the further information response the setback distance for sightlines was reduced in order to minimise the amount of hedgerow being removed. The access is for the site, only, and there will not be access for traffic to the site to the north.
- The photomontages were carried out by a suitable qualified CGI and Animation Company.

- It is not proposed to connect the proposed solar farm and that permitted to the north. They will operate independently of each other and are self-sufficient in terms of access, maintenance and connections. The internal access track runs northwards along the western boundary of the site and terminates just after inverter/transformer station No.2.
- The removal of the 4 metre ditch outside the perimeter fencing is to allow annual farm maintenance to the boundary hedgerows.

6.3. **Planning Authority Response**

None

6.4. **Observations**

None

6.5. **Further Responses**

The applicant's response to the appeal was circulated for comment. The submission by Sean R. McCarthy on behalf of the appellant considers that their concerns have not been adequately or properly addressed. No details are given of the decommissioning of the solar farm.

6.6. **Section 131 Notice**

Due to the presence of a recorded monument on the site certain prescribed bodies were invited to make a submission. No responses received.

7.0 Assessment

I consider that the issues arising in the case can be assessed under the following headings:

- Principle of Development
- Residential Amenity
- Visual Impact
- Access and Traffic
- Ecology
- Other Issues
- Appropriate Assessment

7.1. Principle of Development

The proposed development is supported by national, regional and local policies in terms of renewable energy. Objective 55 of the National Planning Framework seeks to promote renewable energy and generation at appropriate locations within the built and natural environment, whilst paragraph 130 of 'Transition to a Low Carbon Energy Future 2015-2030 - White Paper on Energy Policy' recognises that solar energy will become more cost effective as technology matures and that it will be an integral part of the mix of renewables going forward. At a regional level it is an objective of the South West Regional Planning Guidelines to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network. At a local level, whilst there is support for solar energy production as a renewable resource, due to the emerging nature of the technology at the time of the plan preparation specific objectives with respect to same or identification of areas considered suitable/unsuitable for solar farms were not included. Therefore, in the absence of a 'plan-led' approach, applications are to be considered on their individual merits and subject to normal planning considerations.

The development would be sited on agricultural land, most of which is currently used for grazing. Save for the access track for the inverter/transformer stations it is not intended to remove soil from the site. Whilst the top soil layer will be disrupted

during construction due to the passage of heavy vehicles it is stated that the original pasture conditions are generally returned within less than a season. Grazing of small animals can be accommodated on the site. This appears to be the norm for most solar farms being proposed. This will maintain the fields in agricultural use, albeit restricted in the type of agricultural use.

7.2. Residential Amenity

The site is located within a rural area characterised by sporadic one off housing along the local road network. The nearest property is that immediately to the south-west with a setback of 54.40 metres to be maintained to the nearest arrays. There is a dwelling immediately opposite the existing agricultural entrance to the site with the closest array being 31.20 metres from same. The appellant's dwelling is located to the south-east with the closest array being 109.75 metres to the south-west of same. All would have views of the development.

Glint and Glare

I note that the proposed development does not include tracking panels and that the panels are instead fixed in one orientation, facing due south. Solar PV panels, in order to be efficient, need to absorb as opposed to reflect solar irradiation and therefore have an anti-reflective coating.

A site specific Glint and Glare assessment was submitted by way of further information. In relation to dwellings 38 properties were examined. The analysis states that whilst glint and glare effects would be geometrically possible at 23 properties in the 'bare ground' scenario (which does not consider screening from terrain or hedgerows) when such screening is taken into account none are actually likely to have the potential to be materially affected by glint and glare and thus it is concluded that it is likely no nuisance effects would be generated. Existing screening in terms of hedgerows which are to be augmented with further planting will further restrict any potential.

The study also examined a total of 50 road receptor points. Whilst glint and glare is theoretically geometrically possible at 21, further analysis taking account of the existing screening concludes that none have the potential to be materially affected by glint and glare.

The appellant expresses concern as to the impact of glint and glare on bloodstock on his lands. I am not aware of any evidence to suggest that horses are specifically susceptible.

Overall, I accept the findings of the report that no significant nuisance is predicted from glint and glare.

Noise

The panels in themselves would not generate noise. The main noise sources would be from the transformer/invertors which will be within containers which will have insulating properties and are located at a remove from the nearest dwellings. The closest distance is from the delivery station and transformer in proximity to the roadside boundary c. 65 to the east of the dwelling to the west. A distance of 250 metres is to be maintained to the dwelling to the east. In addition I note that noise would only be generated during daylight hours and consequently there will be no noise emissions at night. Having regard to the low level of noise that will be generated, the separation distance to dwellings and the daytime operation of the solar farm when other noise sources such as traffic and farm machinery will contribute to the noise environment, I consider that impacts would be negligible and insignificant.

Construction Phase

It is estimated that the construction period would be in the region of 3 months and it is inevitable that potential negative impacts to the local population may occur particularly in terms of noise and traffic. However, these impacts will be temporary. As noted above the additional traffic generated during the operational phase would be minimal.

Privacy

The solar arrays in themselves would not give rise to loss of privacy. On completion of the construction works the site would be intermittently visited for maintenance purposes etc. Such visits would not give rise to concerns in this regard. The site is proposed to be surrounded by security fencing and a number of CCTV cameras are proposed. A condition requiring the cameras to be fixed in place facing into the site should be attached, which will address any concerns in this regard. No lighting is proposed as part of the development.

7.3. Visual Impact

The subject site covers an area of 8.82 hectares in a landscape which is relatively level, largely in agricultural use, although I note that due to the topography there are falls along the western section of the site resulting in the site being higher than the single storey dwelling adjacent. As per the current County Development the site is within landscape character type 6c Broad Fertile Lowland Valleys which has a medium landscape value, medium landscape sensitivity and local landscape importance. It is not within a designated high value landscape. There are no listed views or prospects in the vicinity.

The potential landscape and visual impact of the scheme is considered in the Landscape and Visual Impact Analysis supplemented by photomontages submitted by way of further information. Whilst I note the comments regarding the summer and winter settings in terms of photomontages I submit that they provide a useful tool to assist in the assessment and I consider that that they have been presented in a reasonable and competent manner.

Whilst the development will be visible from the immediate surrounds including the nearest dwellings and from points to the west along the local road, the relatively level nature of the topography and existing field boundaries provide a level of screening precluding open unrestricted views either in the immediate environs or from further distances. Any views would be intermittent. I submit that the setting which is working rural landscape would, following mitigation, have a low visual impact. The Board will note the intention of the applicant to retain, save at certain points, the existing hedgerows within and abounding the site as well as proposals to reinforce the existing site boundaries with further planting including a screening cluster in the south-western corner to act as a buffer to the dwelling to the south-west.

Whilst there is no doubt that the proposed development both in its own right and when viewed in conjunction with the permitted solar farm to the north would change the local landscape from a visual perspective, in my view the established landscape is capable of absorbing change. Having regard to the mitigation measures proposed I am satisfied that the proposed development would not adversely impact on the landscape and visual amenities of the area including those from adjoining properties.

7.4. Access and Traffic

The site is accessed via a local road to the south. The lands are currently served by an agricultural entrance in the south-eastern most corner of the site. The 80kph speed limit applies with vehicular movements noted to be light on day of inspection.

Following further information it is proposed to relocate the site entrance to the south-western most corner along the road. 90 metre sightlines from a point 2.1 metres back from the road edge can be attained. This relaxation in terms of setback was used so as to limit the extent of hedgerow removal that would be required to be removed to attain the necessary sight lines. A swept analysis demonstrating that articulated vehicles can access and exit the site are also provided by way of further information.

The agent for the appellant considers the setback at which the sight lines were measured to be inadequate and that 3 metres should be required. I note that the planning authority by way of condition 36 require 90 metre sightlines from a 3 metre setback. It is inevitable that this will require further removal of the roadside hedgerow in an easterly direction to attain same which will reduce the screening available along same. In view of the limited duration of the construction phase and subject to appropriate traffic control measures during the construction phase as part of the Construction Management Plan I consider the arrangements as proposed are acceptable. As noted previously the access requirements during the operational phase would be intermittent along what is a lightly trafficked road.

The Construction Management Plan that accompanies the application provides for a Traffic Management Plan. Of particular concern is the construction period which is anticipated to last in the region of approx. 3 months with 118 no. HGV trips in total, the majority of which will be between weeks 1 and 3 and weeks 9 to 12 corresponding with site preparation and the delivery and installation of the solar panels. The greatest number of movements would be in the first two weeks equating to 20 movements per week (see Table 2). Construction staffing numbers will vary over the 12 week period from 5 in weeks 1-2 rising to approx. 18. Car parking is to be made available within the site. A delivery route for the PV panels and constructed materials is illustrated in Figure 5 of the Management Plan, the majority of which is motorway and national road.

I consider that the proposed construction traffic can be accommodated on the local road network. Whilst the additional traffic and management measures will inconvenience local road users and residents of dwellings in the vicinity the impacts are considered acceptable having regard to the limited duration of the works. The Area Engineer recommends that a structural assessment of the existing bridge at the junction of the L-5790/L-1517 be required which would involve a before and during construction phase monitoring of the structural integrity of the bridge to facilitate the construction traffic. I have no objection to such a condition being attached should the Board be disposed to a favourable decision. I note that the applicant has not appealed the condition.

The operational phase of the solar farm would generate limited vehicular movements by maintenance staff on an ad hoc basis. I do not consider that the additional movements would give rise to a material concern.

7.5. Drainage

The site is not located within or near any designated area of flood risk. No flood events are recorded on the OPW National Hazard Mapping. A small area along the north-western boundary is subject to extreme event pluvial flooding. This has been addressed in the layout with the arrays setback over 8 metres from the boundary in this area.

Section 5.5 of the Construction Management Plan deals within on site surface water generation. The only surfaces where infiltration is impeded are the invertor stations and delivery station which equates to approx.115.5 sq.m. impervious area over a total area of 115300 sq.m. The appellant refers to the proposed raising of levels by 0.8 metres in south-western most corner. In this regard the proposed access track along the south-west boundary will increase run off from the field by a maximum of 33m³. This will be the equivalent of an 11% rise in run off from the existing field. To prevent this increased run off from affecting the adjoining property it is proposed to install a cut off drain to the west of the proposed road. The drain will have check dams and will prevent all additional run off from gathering at the south west corner of the site. All surface water is to be kept on site. A condition requiring that no surface water is to be discharged onto the local road or adjoining property could be attached to a grant of permission in the interests of clarity.

Subject to a condition requiring the submission of a detailed Construction Management Plan I am satisfied that the proposed development would not negatively impact on current drainage patterns or result in a significant increase in flood risk elsewhere. Therefore, having regard to the above, I am satisfied that the development should not be refused on the basis of surface water management or flood risk.

7.6. Decommissioning

The project life is expected to be 25 years. The Construction Management Plan contains a statement on decommissioning. The philosophy is that the site can be restored to its original state after its useful lifetime with general principles to be followed. The appellant considers that the details provided by the applicant are insufficient and do not address his concerns. I note that it is practice to require both the submission of a detailed restoration plan by way of condition outlining all measures to be taken at decommissioning stage and a payment of a bond.

7.7. Other Issues

Environmental Impact Assessment

Solar farms are not a development class for which an Environmental Impact Assessment Report is required. I note that a similar conclusion has been reached by the Board on other solar farm developments. I am also satisfied that no component part of the proposed development is a development class for which an EIAR is required.

Ecology

An Ecological Report accompanies the application which includes an Appropriate Assessment Screening Report. The appeal site is not located within a SAC or a SPA. The Blackwater River (Cork Waterford) SAC is located c.1.7km to the south. There is no pathway between the site and the SAC with no watercourses on or near the site.

The site is currently in use for pasture and used for grazing horses and cattle. The site is occupied by improved agricultural grassland and no rare or protected plant species were recorded by desk or field surveys carried out by the applicant. The Report concludes that the development site is of local importance for biodiversity,

which is typical of the surrounding agricultural landscape. It is proposed to permit grazing when the site is operational and as such, I am satisfied that there will not be a net loss of biodiversity given the planting to be undertaken.

Cultural Heritage

The Archaeological, Architectural and Cultural Heritage Impact Assessment report which accompanies the application is supplemented by a Geophysical Survey submitted by way of further information.

There is 1 no. RMP enclosure within the site. In addition the geophysical survey has indicated a bivallate enclosure in the north part of the site and some areas of high and medium archaeological potential. It is proposed that non-invasive panel supports are used in a 20 metre zone around the RMP and bivallate enclosures. It is also proposed to use non-invasive support in the other areas of high archaeological potential. In relation to the other geophysical anomalies it is proposed to carry out test trenching prior to construction.

The assessment noted that there will be a visual impact on the current setting of the ringfort (CH003) located to the north-west of the proposed development. The site is not preserved above ground, current not accessible by the public and not a public amenity.

I am satisfied that subject to appropriate conditions that the proposed development would not have a material impact on the cultural heritage of the area.

Cumulative Impacts

The lands subject of the application and appeal are immediately to the south of a 8.7 hectare site on which there is an extant permission for a 5MW solar farm (PL04.248278 (16/4570)). The applicant was the same as the current applicant. Cumulatively they would read as a single solar farm of 17.5 hectares but are to be constructed and maintained independently of each other. No internal connection is proposed.

There are two other solar farms that obtained planning permission in the vicinity, ABP Ref. 248400 and ABP-300228-17. The former is located c. 1km to the south-west of Castlelyons crossroads and c 1.5km to the south of the subject site. The latter is c.300 metres to the east and c.1.4km to the south-east of the subject site.

The appeal site itself is c.1.17km from Castlelyons. While this would appear to be a substantial number of solar farms in one area, having regard to the topography and intervening vegetation, I am satisfied that this will not give rise to cumulative visual impacts in the area.

Setback from 110kV Overhead Power Line

A 110kV overhead power line traverses the site with the arrays to be setback to maintain an approx. 35 metre corridor along same. The appellant considers this is insufficient. In response the agent for the applicant maintains that there is currently no firm guidance on the adequacy of the buffer zones beneath overhead wires. I would concur with the applicant that the necessary buffer to be maintained is a detail that can be agreed with the ESB prior to commencement of development. I do not consider that any subsequent requirement to omit arrays from the scheme were it to arise would result in material changes to the assessment as carried out herein.

Glint and Glare Cork Airport

Irish Aviation Authority recommends that should permission be granted that a condition be attached requiring appropriate mitigation measures if, upon installation, the development poses an unacceptable risk to the safety of aviation activities.

Department of Defence in an email states that an Aviation Impact Assessment to include a glint and glare study needs to be sent to Airspace and Obstacles, Defence Forces.

The Glint and Glare Assessment submitted by way of further information specifically addressed aviation receptors. The site is over 30km from Cork Airport and is materially outside the 15km radius which was established by DAA in terms of a study area. Notwithstanding, SGHAT (Solar Glare Analysis Hazard Tool) was undertaken for the standard aviation receptors in relation to the airport. It concluded that there would be no impact along the runway approaches or at the air traffic control tower at the airport.

I consider that the applicant has provided sufficient evidence to support its conclusions and, on this basis, I recommend that the condition recommended by the Irish Aviation Authority (correspondence predates the site specific glint and glare assessment) is not necessary in this instance.

Period of Permission

I note that the applicant has not sought a period in excess of the normal 5 years in which to carry out the development.

Appropriate Assessment

There are no drainage ditches on site. The nearest watercourse is the Shanowennadrimina Stream located c.630 metres to the east which is a tributary of the River Bride which is located c. 2km to the south. The River Bride is in turn a tributary of the Blackwater River. There is therefore no pathway between the site and any European site. Therefore, having regard to the nature and scale of development proposed and to the nature of the receiving environment, no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

8.0 Recommendation

Having regard to the foregoing I recommend that permission for the above described development be granted for the following reasons and considerations subject to conditions.

9.0 Reasons and Considerations

Having regard to:

- regional and national policy objectives in relation to renewable energy,
- the provisions of the Cork County Development Plan 2014-2020,
- the nature, scale, extent and layout of the proposed development,
- the topography of the site,
- the existing hedging and screening on the site, and
- the pattern of development in the vicinity,

it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual amenities of the area or

the residential amenities of property in the vicinity, would not be likely to have significant effects on the environment, or the ecology of the area and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 30th day of August, 2018 and the 8th day of May, 2019 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of the development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) The permission shall be for a period of 25 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.

(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays,

including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.

3. This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

Reason: In the interest of clarity.

4. The developer shall facilitate the archaeological monitoring of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further

archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

5. Buffer zones shall be established around:

- (a) Ringfort NM CO044-010 and probable enclosure CH001 and associated geophysical anomalies H:05 and H:06 and
- (b) The bivallate enclosure H:01 and H:02

as delineated in the Archaeological, Architectural and Cultural Heritage Impact Assessment report received by the planning authority on the 15th day of July, 2018 and as delineated on the Site Layout Plan (Drawing No. L201) received by the planning authority on the 8th day of May, 2019.

The buffer zones shall be delimited using appropriate temporary boundary fencing and signage until the solar panels are installed. No construction works, stockpiling of topsoil, or any development, landscaping and/or planting shall take place within the designated buffer zones. No trees or plants shall be removed from this buffer zone.

Subsequent to the completion of development, the buffer some shall remain around the sites. Planting within these buffer zoned shall be limited to shallow rooted plants and/or grass.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site

6.
 - (a) All existing hedgerows (except at access track openings) shall be retained and new planting undertaken in accordance with the details set out on the Site Layout Plan (drawing no. L201 Rev.D) submitted to the planning authority on the 8th day of May 2019.
 - (b) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development. Any trees or hedgerow that are removed, die or become seriously damaged or diseased during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interests of biodiversity, the visual amenities of the area, and the residential amenities of property in the vicinity.

7.
 - (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
 - (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
 - (c) Cables within the site shall be located underground.
 - (d) The inverter/transformer stations shall be dark green in colour.

Reason: In the interest of clarity, of visual and residential amenity and to minimise impacts on drainage patterns and surface water quality.

8. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including but not limited to, hours of working, noise and dust management measures, surface water management proposals, the management of construction traffic, and the off-site disposal

of construction waste.

Reason: In the interests of public safety, residential amenity and protection of the environment.

9. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. Surface water from the site shall not be permitted to drain onto the adjoining public road or adjoining properties.

Reason: In the interest of environmental protection and public health.

10.
 - (a) Sightlines shall be provided in both directions of the proposed entrance to the site in accordance with details submitted to the planning authority on the 18th day of July, 2018.
 - (b) A structural assessment of the existing bridge at the junction of local road L-5790 and local road L-1517 shall be submitted to the planning authority for written agreement prior to commencement of development. The assessment shall provide for monitoring of the structural integrity of the bridge prior to and during the construction phase.

Reason: In the interest of traffic safety.

11. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála

for determination.

Reason: To ensure satisfactory reinstatement of the site, and to allow wildlife to continue to have access to and through the site.

12. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission

Pauline Fitzpatrick
Senior Planning Inspector

September, 2019