

Inspector's Report ABP 304143-19

Development Location	Solar Farm, substation, battery storage module and associated works. Kilnaglory, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	18/5760
Applicant	Terra Solar II Limited
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	1 st Party v. Condition
Appellant	Terra Solar II Limited
Observer(s)	None
Date of Site Inspection	24/06/19.
Inspector	Pauline Fitzpatrick

1.0 Site Location and Description

The site, which has a stated area of 19.9 hectares, is within the townland of Kilnaglory approx. 500 metres to the south of the N22 and the boundary of Ballincollig. The site is comprised of a number of fields in horticulture/grass. A portion of land in the centre is excluded from the application site and is currently being raised (permission granted under ref. 17/4864(ABP 300404-17)). Hedgerows delineate the majority of the field boundaries with fencing delineating the remainder.

The site is accessed via an existing agricultural access from a local road to the south-east with the overall lands also served by an access from the L2216 to the north which is being used by HGVs bringing fill material to the site currently being raised.

The Grange Hill Stream forms the northern boundary of the site and marks the lowest point of the site. The topography slopes up to the south from same.

The immediate area is in cultivation with one off housing noted along the local road network, the nearest being c.110 metres to the east.

2.0 **Proposed Development**

The application was lodged with the planning authority on the 05/07/18 with further details submitted 15/03/19 following a request for further information dated 21/08/18.

The proposal entails:

- 75,000 sq.m. of solar panels on ground mounted frames
- 1 no. 54 sq.m. substation
- 1no. 29.4 sq.m. battery storage container with 1no. 15 sq.m. ancillary battery storage equipment unit.
- 6 no. 29.8 sq.m. inverter/transformer units.
- Ancillary works including equipment container, satellite pole, CCTV and security fencing.

Construction access is proposed via an existing access from the L2216 to the north with operational access via the existing agricultural entrance from the local road to the east at Kilnaglory.

The application is accompanied by:

- Letters of consent from landowners
- Planning and Environmental Statement
- Landscape and Visual Impact Assessment
- Glint and Glare Assessment (supplemented by way of further information)
- Ecological Impact Assessment
- Archaeological, Architectural and Cultural Heritage Impact Assessment
- Outline Construction and Environmental Management Plan
- Drainage Assessment and Strategy
- Preliminary Invasive Species Management Plan

3.0 Planning Authority Decision

3.1. Decision

Grant subject to 34 conditions. Of note:

Condition 4: If following installation, the photovoltaic solar panels are the subject of occurrence reports from the aviation community and are deemed to present an unacceptable risk to aviation activities then appropriate mitigation measures (eg. reorientation of panels, additional screening etc.) shall be agreed and implemented to the satisfaction of the Irish Aviation Authority and the Dublin Airport Authority/Cork Airport.

Note: The planning authority issued a section 146A notice to the applicant regarding the operational life of the development as set out in condition 3 replacing the stated 25 years with 30 years.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The 1st Executive Planner's report dated 20/08/18 states there is no objection in principle to the development. The applicant should be requested to clarify the intended voltage output of the proposed transmission in the context of the limitation set out in Class 27 of the Planning and Development Regulations. Overall it is considered that the proposal will not have an adverse visual impact on the landscape character of the area and represents a form of modern agricultural practice diversification. A glint and glare study incorporating a detailed analysis of any potential effects on aviation safety as per the submission received from the IAA recommended. Given the separation distance between dwellings and the nearest panels the proposal is not likely to generate serious impacts on neighbouring properties. The requirement for AA has been screened out having regard to the lack of ecological or hydrological connection between the development site and any European Site. Geophysical testing recommended unless otherwise agreed with the County Archaeologist. A request for further information recommended. The Senior Planner in comments on the Executive Planner's report dated 21/08/19 agreed with the assessment therein. Notwithstanding the location of the site in close proximity to Ballincollig and Ovens it is well screened and in very close proximity to the ESB substation. Concurs with request for further information.

The 2nd Executive Planner's report dated 08/03/19 following further information recommends a grant of permission subject to conditions. The Senior Planner in comments on the report notes that the IAA have made a follow up submission indicating that it has no further observations to make. Grant of permission subject to conditions recommended.

3.2.2. Other Technical Reports

Area Engineer in reports dated 31/07/18 & 22/02/19 has no objection subject to conditions.

1st report from Environment Section dated 13/08/18 notes that there is significant risk that surface water could be impacted by construction activities. Good site management and avoidance of field work during wet periods of the construction stage will minimise impacts on surface water quality. The underlying aquifer in the

northern part of the site is a Regionally Important Karstified Aquifer while the southern part is underlain by a Locally Important Aquifer. Groundwater vulnerability is classed as Extreme for much of the northern end of the site and High for the remaining areas. The main risk to ground water during construction stage is leakages or discharges of hydrocarbons or chemicals to ground. This risk will be minimised with good management. No objection subject to conditions. A 2nd report dated 20/02/19 following further information refers to the 1st report.

2nd report from Environment Section dated 16/08/18 reviewed the air and noise impact of the proposal. No objection subject to conditions. The subsequent report dated 07/03/19 following further information refers to the 1st report.

3rd report from Environment Section dated 24/08/18 reviewed the Outline Construction and Management Plan and Planning and Environment Report. No objection on environmental grounds pertaining to management of waste arisings subject to conditions. The subsequent report dated 04/03/19 following further information refers to the 1st report.

The Archaeologist's report dated 12/09/18 recommends a geophysical survey be carried out given the location and scale of the development and the archaeological sites in the area. The 2nd report dated 05/03/19 following further information states that granting permission can be considered with conditions including a geophysical survey. The applicant needs to be aware that where clear archaeological sites and features are identified the Council's position with regard to appropriate mitigation measures will to be 'preserve in situ' with a suitable buffer zone. Conditions recommended should permission be granted.

3.3. Prescribed Bodies

DAA/Cork Airport in a letter dated 31/07/17 (sic) has no objection to the proposal. It recommends that the Glint and Glare Assessment be referred to the IAA for assessment and comment.

IAA in a letter dated 10/07/18 states that as the installation appears to be within 10km of Cork airport it is necessary for the applicant to engage a specialised consultant to carry out a detailed analysis of any potential effects on aviation. The 2nd letter dated 11/03/19 following further information states that following review of same it has no further observations to make.

IFI in a letter dated 06/08/18 recommends conditions to be attached should permission be granted.

3.4. Third Party Observations

2 objections to the proposed development received by the planning authority are on file for the Board's information. Issues raised relate to:

- Site access and adequacy of road for maintenance of site on completion.
- Use of agricultural land
- Visual Impact
- Impact on ecology
- Residential Amenity
- Noise
- Reinstatement on cessation of solar farm
- Potential use of adjoining lands
- Impact on archaeological and cultural heritage
- Capacity of existing substation.

4.0 **Planning History**

ABP 300404-17 (17/4864) – permission granted for importation of soil, stone, bricks, tiles, ceramics and concrete for the raising of an agricultural field. The appeal was by the 1st party against a financial contribution. The said field is surrounded by but not within the boundary of the application site.

5.0 Policy and Context

5.1. Development Plan

Cork County Development Plan, 2014

The site is not within a designated High Value Landscape.

5.2. Natural Heritage Designations

The site is over 12.5 km to the west of the nearest point of the Cork harbour SPA (site code 004030).

6.0 The Appeal

6.1. Grounds of Appeal

The 1st Party appeal is against condition no.4 attached to the planning authority's notification of decision to grant permission, only. The grounds of appeal can be summarised as follows:

- It has been fully demonstrated that the proposal will not pose a hazard to aircraft operating in the area. This has been validated by way of modelling. The findings are technically indisputable. They have been accepted in full by the IAA and have not been challenged.
- The condition is contrary to the Development Management Guidelines for Planning Authorities 2007 on the basis that -
 - it is not necessary or relevant to the development to be permitted. No appropriate justification for the imposition of the condition has been put forward relative to the completed assessments. The scope of the condition is excessively broad insofar that it is not focussed on a specific issue or objective to meet the test of necessity.
 - It is not precise. It does not clearly state what is required and when it must or must not be used. The ambiguous nature of the condition

means that, in practice, it will be impossible to define contravention of it or agree/remedy any breach of it.

- It has the real potential to effectively nullify the benefit of the permission granted. It creates significant unwarranted uncertainty which directly undermines the deliverability of the solar farm.
- Neither the IAA or DAA/Cork Airport have any objections to the development.
- The condition is contrary to established precedent. Case refs. PL93.248487, and PL93.247310, ABP 300230-17 and Cork County Council file 17/0635 cited.

6.2. Planning Authority Response

The response notes that the IAA has clarified its position in a letter to the Senior Planner dated 03/04/19. The Council has no objection to the omission of condition 4.

6.3. Observations

None

6.4. Section 131 Notices

In view of the site's location with a zone of archaeological potential of a recorded monument certain prescribed bodies were invited to make a submission on the appeal.

The response received from the Department of Culture, Heritage and the Gaeltacht recommends that conditions 5 and 6 as attached to the planning authority's notification of decision be retained as worded.

7.0 Assessment

7.1. Overview

Policy Considerations

I note that the proposed development is supported by national and regional policies in terms of renewable energy. 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.

Visual Impact

The development would be sited on agricultural land, most of which is currently used for horticulture. Whilst close, the lands are outside the development boundary of Ballincollig and are not within an area designated as being a High Value Landscape with no views or prospects listed for protection the vicinity. I consider that the Landscape and Visual Assessment and Photomontages that accompany the application are reasonable. Whilst the development will be visible from the immediate surrounds and from points along the local roads immediately to the east and north the undulating nature of the landscape provides a level of screening precluding open views either in the immediate environs or from further distances. Any views would be intermittent. The Board will note the intention of the applicant to retain and reinforce existing hedgerows. Whilst there is no doubt that the proposed development would change the local landscape from a visual perspective, the landscape is capable of absorbing change.

Residential Amenity

In terms of residential amenity, the nearest properties are those on the local roads to the south-east and north of the site. Mitigation measures including setting back of panels from nearest receptors and landscaping proposals are noted. No issues in terms of glint and glare would arise with noise outside of the construction period not being a material concern. Construction access traffic is to be from the existing access serving the lands from the north (currently serving the HGVs accessing/exiting the lands being raised) with operational traffic to use the existing access from the local road to the south-east. The operational phase would generate limited vehicular movements and can be accommodated on this road.

Drainage

A Drainage Assessment Strategy report which includes a flood risk assessment accompanies the application which concludes that the proposal would not adversely affect the existing drainage regime. An outline Construction and Environmental Management Plan accompanies the application which details the measures to be invoked during the construction phase which would be line with best practice. The Environment Section of the County Council has no objection to the proposal subject to conditions.

Ecology

An Ecological Impact Assessment accompanies the application. The site is not within or in the vicinity of a European Site. The flora as identified is synonymous with a managed agricultural landscape. One red listed bird species the Yellowhammer was recorded along the site hedgerows but there are no habitats on the development site considered particularly attractive to other species. Japanese Knotweed identified in the western boundary is to be appropriately treated. Given the location of the site in an area characterised by similar lands and habitats and the mitigation measures to be incorporated the impacts on the ecology of the site and the wider area would be acceptable.

Cultural Heritage

An archaeological impact assessment based on a desktop and field surveys accompanies the application. There is one recorded monument within the site with a 2^{nd} in close proximity. Issues arising including geophysical surveying can be addressed by way of condition. I note that the Department of Culture, Heritage and the Gaeltacht in a section 131 response considers the wording of conditions 4 and 5 attached by the planning authority to its decision to be acceptable.

Grid Connection

It is proposed to connect to the national grid through the 38kV substation located c. 350 metres to the north-east of the site. An indicative line for the connection has been delineated.

Appropriate Assessment

AA Screening is included in the Ecological Impact Assessment report accompanying the application. As noted the nearest designated site is the Cork Harbour SPA c. 12.5 km to the east with a hydrologic link being in excess of 18km via watercourses. Best practice measures in the construction phase are set out in the Outline Construction Environmental Management Plan to protect against sediment and hydrocarbon release. I would concur with the conclusions of the screening report that no indirect impacts are envisaged.

It is reasonable to conclude that on the basis of the information on the file, that the proposed development, individually and in combination with other plans or projects would not be likely to have a significant effect on any European Site and in particular Cork Harbour SPA (site code 004030) in view of the site's Conservation Objectives and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

Conclusion

I am satisfied, having examined the details of the application and having visited the site, that the determination of the application by the Board, as if it has been made to it in the first instance, would not be warranted. Accordingly, I consider that it is appropriate to use the provisions of Section 139 of the Planning and Development Act 2000, as amended, and to consider the issues arising out of the disputed condition only.

7.2. Condition No. 4

Condition No.4 refers to mitigation measures that may have to be carried out post development should there be reports from the aviation community that the development presents an unacceptable risk to aviation activities. Such measures are to be agreed and implemented to the satisfaction of the IAA and DAA/Cork Airport.

The application is accompanied by a Glint and Glare Assessment in which cognisance is had of Cork Airport which is approx. 8.5 km to the south-east of the site. The said study undertook an assessment of the final approaches (2 miles) to the 4 runways and the Air Traffic Control Tower at the airport.

In the absence of Irish guidance, the Solar Glare Hazard Analysis Tool (SGHAT) endorsed by the US Federal Aviation Authority, and which is regarded as accepted industry standard when considering the glint and glare effects upon aviation related receptors, was utilised. The results demonstrate there is no glare along the approach to any of the runways at Cork Airport. In addition, a viewshed analysis was undertaken which concludes that it is not possible for reflectance to occur at Cork Airport's Air Traffic Control Tower.

Consequent to correspondence from the Irish Aviation Authority (IAA) which informed the further information request, a further SGHAT analysis of the effects of glint and glare at the airport including 8 receptor points representative of the closest holding path flight pattern located above Inishcarra Dam to the west of Cork City was submitted. It concludes with certainty that the proposal would have no solar reflectance implications for any of the listed aviation receptors at the airport. To further demonstrate the conclusions made with respect to the Traffic Control Tower a digital terrain model was prepared which identified that the tower would have to be c.57 in height in order to have inter-visibility with the proposed solar farm. This is approx.3 times its existing height.

I note that DAA/Cork Airport in its submission on the application had no objection to the proposal. The IAA on receipt of the further information had no further comments. The planning authority's Senior Planner in response to the grounds of appeal notes correspondence from IAA dated 03/04/19 received by him which clarifies its position. The Board is advised that a copy of this letter has not been forwarded to the Board. The Senior Planner states that there is no objection to the removal of the condition.

On the basis of the findings of the modelling undertaken which are clear and taking into consideration the correspondence from the Irish Aviation Authority on file, I consider that the applicant has satisfactorily demonstrated that the proposed development would not have an adverse impact on Cork airport and aircraft operations. On this basis I conclude that condition 4 is, therefore, not necessary.

8.0 **Recommendation**

Having regard to the documentation on file the grounds of appeal, the grounds of appeal, my site inspection and the assessment above I recommend that the planning authority be directed to **REMOVE** condition 4 for the following reasons and considerations.

9.0 Reasons and Considerations

Having regard to the documentation accompanying the application including the Glint and Glare Assessment report which was supplemented by further details submitted by way of further information received by the planning authority on the 15th day of February, it is considered that the proposed development would not endanger or interfere with the safety of aircraft or the safe and efficient navigation thereof.

Pauline Fitzpatrick Senior Planning Inspector

July, 2019