



An
Bord
Pleanála

Inspector's Report PL03.247632

Development	Ten year permission for a 29,225 sq. metre solar PV development on a site of 12.23 hectares.
Location	Ballymorris, Co. Clare.
Planning Authority	Clare County Council.
Planning Authority Reg. Ref.	16368
Applicant	Terra Solar Limited.
Type of Application	Permission.
Planning Authority Decision	Grant Permission.
Type of Appeal	Third v Grant
Appellant	Laurence and Siobhan Boyce
Observer	None
Date of Site Inspection	28 th February, 2017.

1.0 Site Location and Description

- 1.1. The site is located to the south of the N18 between Limerick and Shannon. Shannon is approximately 7.5 km to the north west and the village of Cratloe is located approximately 1km to the north east of the site. The site comprises modified grazing agricultural lands that form part of a larger land holding in this location with the agricultural holding being based from a farm complex on the local road to the south east of the site (L-3120). The stated area of the site is 12.23 ha. As per the planning application form.
- 1.2. The site is accessed via a local road, (L-7124) which runs parallel and in close proximity to the N18 in the townland of Ballymorris. This local road connects with the N18 at a junction c. 400 metres to the east of the site at the closest point and there is an additional connection onto the N18 c.500 metres to the west. Junction 5 on the N18 which is the exit for Cratloe Village and Sixmilebridge is located approximately 1.5 km to the east of the appeal site.
- 1.3. The site is surrounded by a number of significant watercourses and drainage channels. The River Shannon is located to the south and within c.850 metres of the appeal site at the closest point. The Owennagarry River that drains towards the Shannon is located c. 1km to the north west at the closest point on the northern side of the N18. Closer to the site, the northern boundary approximately follows the line of the Brickhill Stream which flows from Cratloe Village past the site and discharges to the River Shannon approximately 1 km to the south of the site or c. 2km measured by length of the stream channel. The site itself is characterised by a number of deep drainage channels that run through the site and connect with the Brickhill Stream to the north. The roadside to the south of the L-7124 (local road immediately to the north of the site and from which access is proposed) is also characterised by a deep drain.
- 1.4. There are a significant number of houses located in the general vicinity of the site with the majority of these being located on the L-3120 to the south of the site. In particular, there are houses located to the northern side of the straight section of

road that is to the west of the landowner's farm complex and a number of these dwellings are not indicated on the OS maps or on the most up to date available aerial photography. These houses would be located within c. 180 metres of the site boundary at the closest point and c.200 metres of the closest proposed solar array. A small number of additional dwellings are located to the north west of the site and accessed via the L-7124. All of these dwellings are located in excess of 250 metres from the boundary with the appeal site.

- 1.5. There are no structures located on the appeal site and there are no recorded monuments within the development area. The site is traversed by an overhead electricity line, which runs in an east – west direction. There is a 38Kv sub station located approximately 400 metres to the east of the site at the junction of the L-3120 and the L-3118 and which is the termination of the overhead lines that cross the appeal site. It is this sub station which it is proposed would be the grid connection to serve the proposed development.
- 1.6. The applicants are not the owners of the appeal site and the written consent of the landowner to the making of an application has been submitted.

2.0 Proposed Development

- 2.1. The proposal comprises a Solar PV Energy Development contained within a single plot of land of area 12.23 ha. and which forms part of a larger landholding in this location.
- 2.2. The significant elements of the development are described below:
 - The construction of a total of up to 29,225 sq. metres of solar panels on ground mounted steel frames.
 - 1 no. sub station to be located at the far north east corner of the development and accessed from the L-7124. This sub station structure is stated to have a footprint of 10 metres by 5.36 metres and to be enclosed within a building with a pitched roof and an overall height of 4.65 metres.
 - The construction of 3 no. inverter cabins and associated equipment. These inverters are proposed to be located on the northern side of the site to the north of the main service access road within the site. Each of the inverter units is

stated to have dimensions of 6.06 by 2.44 metres wide and approximately 3.4 metres in height. The units are proposed to be elevated such that they are c. 500 mm above ground level.

- Cable ducting to connect the solar panels to the inverter units and the on site sub station.
- A site access off the L-7124 at the north of the site is proposed. This access would involve the bridging over the existing roadside drain at this location and the provision of an access suitable to accommodate construction traffic and having a radius of c. 10 metres.
- An internal access track from this new access is proposed. This access track is L shaped and approximately 425 metres in length. The sub station and inverter units are accessed directly from this road.
- A construction compound is proposed to be provided at the far north east corner of the site adjacent to the site access. This compound is proposed to be a temporary structure for the duration of the construction works, estimated at 3 months.
- Boundary security fencing around the site is proposed. This fencing would have an overall height of 2.625 metres and be a wire mesh security fence. The fencing would be fitted with mammal passes.
- Additional landscaping and planting of the site boundaries.
- The installation of cctv equipment on site and all ancillary equipment. The equipment would be installed on poles of up to c.4.0 metres in height and infra red sensors would be used for site security and lighting.
- The issue of a connection between the development and the grid is addressed in the submitted planning and environmental report. No definitive alignment is given or conclusion as to whether the connection would be above or underground. The indicative connection is overground via the field to the east of the appeal site and connecting to the Ballymorris 38Kv sub station c. 400 metres to the east of the site. The grid connection is not part of the application for permission submitted to the planning authority and it is contended by the applicant that it would constitute exempted development.

- The permission is requested to be for a 10-year period. The proposed lifespan is projected to be 25-30 years.
- 2.3. The solar panels are proposed to be assembled in rows over the development area. The photo voltaic modules will be mounted on galvanised metal racks and are proposed to run east to west across the site with the panels south facing. The panels will be fixed at an angle of 25 degrees to the horizontal. The array will be mounted 1.1 metres in height at its lowest point and 2.8 metres in height at the upper point. The rows making up each array are proposed to be spaced out such that there would be a separation of c. 7.6 metres between the front of one panel to the front of the panel in the next row. The application documentation indicates that the precise solar panel and rack type to be used will be established prior to construction.
- 2.4. The initial application documentation submitted in the form of the Planning and Environmental Report prepared by McCarthy Keville O'Sullivan Planning and Environmental Consultants is not completely clear with regard to the type of fixing to secure the array structures to the ground. Section 3.4.2 indicates that they could be secured with piles or with concrete anchors. It is however stated at 3.4.12 that screw piling is the preferred option and section 7 relating to Ecology states that screw piling would be used.
- 2.5. Delivery of components to the site is proposed to be via the N18 with access routes via junctions 5 and 6 indicated as being feasible. Local access to the site for construction would be via the L-7124 at the northern side of the site.
- 2.6. Public consultation prior to the application involved circulation of all properties within 500 metres of the proposed development.
- 2.7. The application includes an appropriate assessment screening report and the submitted Planning and Environmental Report includes a section on general ecology and ecological impacts, (Section 7).
- 2.8. The landscape and visual impact assessment is also included in the Planning and Environmental Report, (Section 6) and a booklet of photomontages is also included with the application documentation.

2.9. A glint and glare effect description is included in Section 8 of the Planning and Environmental Report.

3.0 **Planning Authority Decision**

3.1. **Internal Reports**

Planning Officer – An initial report considered that the site was suitable in principle for development of the form and scale proposed however it highlighted a number of concerns with regard to the conservation / ecology comments of the conservation officer and also the potential for glare to impact on aircraft / users of Shannon Airport. The report also raised concerns regarding the potential medium range / distance visual impact of the proposed development. The initial report recommended further information. Second report subsequent to the submission of a response to the request for further information recommended a grant of permission that is consistent with the Notification of Decision which issued.

Road Design Office – Report recommends further information on the design of the proposed site access junction and the bridging over the drain along the L-7124. Conditions relating to lighting, glare and drainage also proposed. Second report subsequent to further information states that no objection.

Area Engineer – No objection in principle subject to conditions relating to the maintenance of the L-7124 road.

County Fire Officer – No objection.

Conservation Officer – Recommended that an archaeologist be retained to undertake an archaeological impact assessment of the site.

Environmental Assessment Officer – Recommends further information on issues including justification of proposed 10 metre setback from watercourses, impact on whooper swan and also protection of water quality. Second report subsequent to submission of FI states that no objection once best practice measures as set out in the FI are conditioned.

3.2. Other / Prescribed Bodies

Inland Fisheries Ireland – No objection.

Shannon Airport – Initial submission prior to request for further information notes there is no national policy for solar farms and raises concerns regarding the potential impact on aircraft safety. Recommends liaison with pilot groups and also the submission of a glint and glare assessment. Report subsequent to FI notes that no consultation / response from pilot groups but that glint and glare results have been presented. Recommends that pilot groups be consulted.

Irish Aviation Authority (IAA) – require a glint and glare assessment to be undertaken and note US FAA Guidance on the issue. Note that this guidance recommends that a specialist consultant should be used where development within 10km of an airport and that contact should be made with relevant airports within 30km.

An Taisce – No objection.

Transport Infrastructure Ireland (TII) – No objection.

3.3. Observers

A total of 7 observations were submitted and the following is a summary of the main issues raised:

- That there was a lack of consultation. That the layout of the development has changed since the consultation.
- Negative impact on residential and visual amenity and out of character with rural area.
- Impact of glint and glare.
- Flooding due to development.
- Noise from inverters and sub station. Potential health impacts.
- CCTV proposed that will impact on privacy and residential amenity.
- Inadequate road network.
- Negative impact on flora and fauna.

- Inadequate consideration of impact on archaeology.
- Lack of any national guidance on this form of development.
- Security concerns.
- Potential for precedent and potential for future expansion of the development to surrounding lands.

3.4. Notification of Decision

The Planning Authority issued a Notification of Decision to Grant Permission subject to 17 no. conditions. The most notable of these conditions are considered to be as follows:

Condition 2 specifies that development shall be carried out within 10 years from the granting of permission.

Condition 3 clarifies that the permission does not cover / relate to the grid connection.

Condition 4 requires that all structures be removed not later than 25 years from the date of commencement and that a detailed restoration plan would be submitted prior to the commencement of development.

Condition 6 specifies that the support structures for the panels shall be fixed using driven or screw piles.

Condition 12 requires the submission of a construction management plan.

Condition 13 specifies that there shall be no direct discharges to watercourses and specifies mitigation measures to ensure the protection of watercourses from pollution including silt fences.

4.0 Grounds of Appeal

4.1. The main points of the third party received from the residents of a dwelling located to the north west of the site can be summarised as follows:

- Question why a bond has not been required by the local authority especially given the new nature of solar farm development.
- Question how the local authority and third parties can assess a proposal when there is no national guidance.
- That such development should at a minimum be confined to non residential areas. The area of the site is agricultural / residential and the proposed development appears to be contrary to such planning regulations.
- Clarification is sought as to how the proposed screening will be 'effective'. It is not possible to screen the proposed development from the appellants elevated residential site or other residential properties in Cratloe.
- Questioned how reports submitted by consultants who are retained by the applicant can be considered to be reliable basis for forming a decision on the proposal. It would be expected that the local authority would engage independent consultants to assess the proposal and this is now requested of An Bord Pleanala.
- Questions why the north westerly noise survey was not taken from the appellant's property instead of being taken from a position twice the distance from the proposed development site. Questions how the result of this noise survey can be reliable.

5.0 Responses to Appeal

5.1. First Party Response to Appeal

The following is a summary of the main issues raised in this response submission:

- That details of the proposed decommissioning of the site were set out at 3.4.12 of the Planning and Environmental report submitted. It is estimated that this process would take approximately 2 months and materials will be recycled.

- That there is no national planning guidance however there is UK guidance that is of relevance and which has been used to inform the design. There are also a number of other applications in Ireland for similar developments.
- That the form of development proposed is supported by a range of policy documents and other policies including the 2015 Energy White Paper, the National Renewable Energy Action Plan as well as national, regional and local planning policy.
- That the report of the planning officer notes that views from private dwellings are not subject of specific protection and that given the scale of the development and the structures proposed that residential amenity would not be adversely interfered with.
- That the site is well screened by existing hedgerows and boundaries and this is demonstrated in the visualisations submitted to the Planning Authority. The development is set back from the road and is designed to blend in with the existing vegetation.
- New landscaping comprising fast growing species is also proposed to augment the existing planting.
- That the project design team are very experienced as indicated in submitted project team description and qualifications. Now that the proposal is the subject of appeal it will be up to the Board to carry out its own assessment.
- That the development will not be the subject of noise and the limited noise implications of this form of development was recognised in the report of the planning inspector on Ref. PL26.244351.
- That a noise impact model was developed and Location A of this 3D model reflects the exact position of the appellant's property and the predicted noise level at their property.
- That the noise calculation software used is in accordance with ISO 9613 standards. Detail of the noise impact assessment methodology is provided.

5.2. Planning Authority Response to Appeal

The Planning Authority notes in response to the appeal.

- That a bond was not sought as there is no element of public area within the development. The bond referred to in condition no.17 relates to the reinstatement of the public road.
- That the planning authority assessed the proposed development on the basis of EU Directives, national policy guidance, renewable energy policy and local policy as per the Clare County Development Plan, 2011-2017. The fact that there is no national policy on solar farms is noted however it is submitted that this does not preclude applications for such development types being assessed.
- That the proposed screening is considered to be effective having regard to the height and extent of existing hedgerows, the height of the solar panels, the generally low lying nature of the site. The fact that the appellants dwelling site is elevated is noted as is the fact that there was a condition attached to the granting of permission (Ref. 10/576) which requires the screen planting of southern, eastern and western boundaries. The maturation of this boundary would significantly screen the objectors dwelling from the proposed development.
- Comments regarding independent consultants are noted.
- That the report of the planning officer concluded that the noise from the inverter units would be imperceptible from the nearest noise sensitive property. The appellants dwelling is not the nearest noise sensitive property to the development and there should be no adverse impact on residential amenity due to noise.

5.3. Further Submissions

The first party response to the Ground of appeal was circulated to the Planning Authority and the appellants for comment. The Planning Authority responded to

state that they have no further comment to make. No further response has been received from the appellants.

5.4. Further Referrals Under S.131

The Board referred details of the proposed development to the following:

- Department of Communications, Climate Action and Environment,
- Commission for Energy Regulation (CER),
- Development Applications Unit (DAU) of the Department of Arts Heritage, regional, Rural and Gaeltacht Affairs, and
- The Heritage Council

The **CER** responded to acknowledge receipt of the request. No further comments were received within the time period prescribed.

The **DAU** have responded to state that the specific issues raised by the Board regarding badgers, otters, little egret and the Brickhill Stream are noted. It is recommended that a method statement for construction works to avoid impact on badger setts is requested. The 10 metre buffer strip from the Brickhill Stream is considered sufficient to protect otters and little egret. Subject to Condition No.13 as attached by the planning authority the DAU do not consider that there would be any impact on the water quality of the Brickhill stream either during or post construction.

6.0 Planning History

- 6.1. There is no planning history relating to the appeal site. The report of the planning officer notes a number of planning applications for residential development on the roads to the north and south of the site. The Planning Authority response to the appeal notes the planning permission under which the dwelling of the third party appellant was granted, (Ref. 10/567).

6.2. There is also reference in the Planning and Environmental Report and the report of the Planning Officer to cases determined by An Bord Pleanála. These include the following:

- ABP Ref. PL04.244539 – Permission granted by the Planning authority and upheld on appeal for the development of a solar PV panel array of up to 5,400 sq. metres on a site at Ballytrasna, County Cork.
- ABP Ref. PL26.244351 – Permission granted by the Planning Authority and decision upheld on appeal for a solar PV energy development of maximum export capacity 5MW, two electricity control buildings 3.951 metres high, site access road and solar PV panels mounted on steel support structures with associated cabling and ducting at Coolroe, Ballycullane, County Wexford. An oral hearing on this case was held.
- ABP Ref. PL26.247217 – Permission refused by the Planning Authority and decision upheld by the Board for a 10 year permission for a solar PV energy development on lands at Tomhaggard, Co. Wexford. Permission was refused for a single reason relating to the scale of the development (89 ha.) and resulting adverse impact on the rural character of the area, visual amenities of the landscape, amenity of residential property and agricultural land use patterns.

7.0 Planning Policy Context

7.1.1. The following sets out a brief outline of key recent publications and policy provisions which I consider are most relevant to this case.

7.2. **Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland October 2016.**

7.2.1. This is a research paper prepared by Future Analytics which was funded by the SEAI and is not a policy document. The report contains a set of planning policy and development guidance recommendations, which it is suggested may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility Scale Solar Photovoltaic (USSPV) developments in Ireland.

- 7.2.2. It notes that over a hundred applications for USSPV developments have been lodged with planning authorities by October 2016 and that an estimated 594 MW have been granted or are on appeal. The combined site area for these schemes is 1331.9 hectares. This constitutes 0.03% of the area of land available for agriculture.
- 7.2.3. Recommendations include that the development plans set out policy objectives to support USSPV development and put in place development management standards. Clear policy guidance can alleviate public concerns. Agricultural lands are listed amongst the list of types of locations where such development is particularly suited.

7.3. **Energy White Paper - Transition to a Low Carbon Energy Future 2015:2030.**

- 7.3.1. This comprises a complete energy policy update. It sets out a range of actions that the Government intends to take and reiterates a previously adopted target of achieving 40% of electricity generation by 2020 in renewable forms. The document emphasises the role of new technologies and the role of the citizen. Paragraph 137 refers to the potential of solar energy.

Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity. It can be deployed in roof-mounted or ground-mounted installations. In this way, it can empower Irish citizens and communities to take control of the production and consumption of energy. Solar technology is one of the technologies being considered in the context of the new support scheme for renewable electricity generation which will be available in 2016.

- 7.3.2. Paragraph 171 sets out the goal to

Publish a Renewable Electricity Policy and Development Framework (with a spatial dimension) to underpin the proper planning and development of larger scale renewable electricity generation

development on land. This plan will give guidance to those seeking development consent in relation to larger-scale onshore renewable electricity projects, and to planning authorities, statutory authorities and citizens.

7.4. Clare County Development Plan

- 7.4.1. It is noted that the application was assessed by Clare County Council under the provisions of the Clare County Development Plan, 2011-2017 and the Clare County Renewable Energy Strategy, 2014-2020. Since the decision of the Planning authority a new Clare County Development Plan, 2017-2023 has come into effect.
- 7.4.2. The site is located outside of any identified cluster of residential settlement. The closest settlement is Ballymorris to the south which is identified in Table 2.1 of the plan as a cluster.
- 7.4.3. The site is located within an area that is identified as being part of the Western Corridor Working Landscape. Within this area it is an objective (**CDP13.3**) to permit development that would sustain economic activity within this area subject to protections regarding design and siting.
- 7.4.4. Paragraph 6.3.17 relates to rural enterprise and **Objective CDP 6.20** states that it is an objective to support rural enterprise and the rural economy.
- 7.4.5. Paragraph 8.8.6 relates to renewable energy and states that the importance of the development of renewable energy sources as identified in the Government White Paper is recognised.
- 7.4.6. **Objective CDP8.40** relates to renewable energy and states, inter alia, that it is an objective of the development plan to
- (a) Encourage and to favourably consider proposals for renewable energy developments and ancillary facilities in order to meet national, regional and county renewable energy targets and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy.*
 - (b) To assess future renewable energy related development proposals having regard to the Clare Renewable Energy Strategy 2017-2023.*

(h) to promote and market the county as a leader of renewable energy provision,

To support the implementation of 'Ireland's Transition to a low carbon Energy Economy 2015-2030'.

7.4.7. **Objective CDP10.11** relates to renewable energy and states that it is an objective to facilitate the development of renewable energy developments in rural areas in accordance with the adopted Renewable Energy Strategy.

7.4.8. The plan contains a renewable energy strategy that comprises Volume 6 of the Plan. Chapter 8 of this strategy relates to solar energy and **Objective RES 8.2** states that *It is an objective of Clare County Council:*

A. To favourably consider the redevelopment of brown field sites in predominantly industrial / commercial areas for large solar PV projects subject to normal planning considerations and appropriate environmental considerations;

B. To favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multi-purpose land use, subject to normal planning considerations. All such applications should be accompanied by an environmental report addressing issues such as ecological impacts, impacts on the amenity of adjoining properties, glint/glare, landscape impact assessment, cable trenching, sustainable drainage systems for the management of surface water disposal on site, decommissioning and site restoration;

7.5. **Natura Sites**

7.5.1. The nearest sites designated under the Habitats Directive are the River Shannon and River Fergus Estuaries SPA and the River Shannon SAC which are located to the south and c. 850 metres (direct distance) from the appeal site.

8.0 Assessment

8.1. Overview

8.1.1. I consider that the main issues in this case can be considered under the following headings:

- Principle of Development
- Environmental Impact Assessment
- Landscape and Visual Amenity
- Residential Amenity
- Air Traffic Safety
- Appropriate Assessment
- Ecology
- Other Issues

8.2. Principle of Development

8.2.1. At a strategic level, the proposal is presented as supporting the national objective to achieve the target of 40% electricity generation from renewable sources by 2020. The applicant has set out in the Planning and Environmental Report submitted how the technology of solar PV has developed to the extent that it is a cost effective and efficient source of sustainable energy in the Irish context. It is apparent from the information presented that the viability of solar in an Irish context is not restricted to the south east of the country and that most parts of the island are viable locations for development.

8.2.2. The national policy context in terms of the government white paper on energy is clearly supportive of the principle of this form of development and, on the basis of the information available, solar PV has significant potential and an important role in Ireland meeting future renewable energy targets.

8.2.3. The research paper on USSPV prepared by Future Analytics on behalf of the SEAI indicates that 594MW of solar energy capacity has been permitted or is on appeal.

The Board is referred to the stated capacity of 5.6MW in situ on an all-Ireland basis in 2014. Based on these figures it is clear that there is considerable potential for the sector in meeting renewable energy targets. It also indicates the very significant number of current applications for solar PV developments.

8.2.4. The scale of the proposed development at approximately 29,225 sq. metres of panels on a site of c. 12.2 ha. and an installed generating capacity of 5.19 MW is of roughly comparable scale with a significant number of other solar PV developments that have come before the Board in recent times. Specifically, the proposed development is of a similar scale to that permitted under Ref. PL26.244351 –at Coolroe, Ballycullane, County Wexford which had an output of c. 5MW. The development refused under ABP Ref. PL26.247217 at Tomhaggard, Co. Wexford was of a very significantly larger scale than that which is the subject of the current proposal having a site area of c. 89 ha. and an output of c. 39MW. In that case, permission was refused for a single reason relating to the scale of the development and resulting adverse impact on the rural character of the area, visual amenities of the landscape, amenity of residential property and agricultural land use patterns. The issues of visual impact and residential amenity are discussed in more detail in the sections below, however it is my opinion that the scale and potential impact of the development proposed under Ref. PL26.247217 is of a very different scale and potential impact to that which is the subject of the current appeal. The issues raised in the Wexford case relating to the loss of high quality agricultural lands are noted, however given the location of the site, its scale, and the nature of the lands I do not consider that the case can be sustained that development should be refused on the basis of loss of agricultural lands.

8.2.5. The third party appellants have questioned the appropriateness of the use of a rural area for solar PV development and contend that such development should at a minimum be confined to non residential areas. While Ballymorris is identified as a settlement cluster in the *Clare County Development Plan, 2017-2023*, I do not consider that the proposed site and environs is a residential area. Rather it is, in my opinion, a rural area that is characterised by agriculture and residential properties. The erection of the proposed solar PV panels would have a visual impact and would clearly result in a temporary change the appearance of the site. As noted by the inspector in the case of PL04.244539, however there are a number of activities/uses

within a landscape which can have a visual impact (temporary or longer-term) examples including the covering of agricultural lands with sheeting, forestry use or glasshouses / polytunnels. I do not therefore consider that the proposed form of development is such that it would be incongruous with a rural setting such as the setting of the current appeal site or that it is such as not to be open for consideration on rural agricultural lands such as the appeal site.

8.2.6. The third party appellants also question how the local authority and third parties can assess a proposal when there is no national guidance and submit that in the absence of such guidance the proposed development is not appropriate. It is noted and agreed that there is currently no national guidance available. There is however guidance from the UK on solar farm developments and I note that these guidance documents do not prescribe any minimum set back distance that solar PV developments should maintain from residential properties. The general thrust of the UK guidance in terms of the principal of development relates to the scale of development and extent of quality agricultural lands lost, visual impacts and environmental considerations. As set out above, I do not consider that the circumstances of the current appeal site are such that the development should be considered not acceptable on the basis of scale and impact on agricultural lands and the visual and environmental issues will be considered in more detail in following sections. In conclusion, I do not consider that the absence of specific planning guidance on this form of development (solar PV) is such that it compromises the ability of the Board to identify the relevant planning issues arising and to make a comprehensive assessment of these issues.

8.2.7. In terms of compliance with local planning policy I would firstly highlight to the Board that the proposed development was assessed by the Planning Authority under the provisions of the *Clare County Development Plan, 2011-2017* and that subsequently a new *Clare County Development Plan, 2017-2023* has come into effect. I note the fact that Paragraph 8.8.6 of the *Clare County Development Plan, 2017-2023* relates to renewable energy sources and that Objective CDP8.40 of the plan states that it will be an objective of the plan to '*encourage and favourably consider proposals for renewable energy developments and ancillary facilities in order to meet ...renewable energy targets....*'. This objective also seeks '*to promote and market the county as a leader of renewable energy provision*' and '*to support the implementation of 'Irelands*

Transition to a Low Carbon Economy 2015-2030'. The proposed development would, in my opinion be of a form that is consistent with Objective CDP 8.40.

- 8.2.8. Objective CDP 10.11 of the Plan relates to renewable energy development and states that it is '*an objective of the plan to facilitate the development of renewable energy developments in rural areas in accordance with the adopted.....Renewable Energy Strategy and associated SEA and NIR*'. The Renewable Energy Strategy is contained at Volume 6 of the *Clare County Development Plan, 2017-2023* and Chapter 8 of the strategy relates specifically to solar energy. RES 8.2 in Chapter 8 states that it is an objective of the Council to (inter alia) '*B. favourably consider the development of solar farms on agricultural lands which allow for farm diversification and multi purpose land use, subject to normal planning considerations. All such applications should be accompanied by an environmental report addressing issues such as ecological impacts, impacts on the amenity of adjoining properties, glint / glare, landscape impact assessment, cable trenching, sustainable drainage systems for the management of surface water disposal on site, decommissioning and site restoration*'. It is my opinion that the principle of the proposed development on the appeal site would be consistent with this objective and that the issues referenced to be included in an accompanying environmental report have been provided in this case. It is therefore my opinion that the principle of the proposed development is supported by local planning policy.

8.3. Requirement for Environmental Impact Assessment

- 8.3.1. With regard to EIA, the issue is addressed in the applicant's submitted Planning and Environmental Report (see section 1.5) and has been thoroughly considered in other solar farm cases considered by the Board. In summary, solar PV electrical generation parks/farms are not listed in either Annex I or Annex II of the EIA Directive. There is therefore no mandatory requirement for the submission of an EIS for this form of development.
- 8.3.2. With regard to sub threshold development under s.109, the assessment undertaken by the Planning Authority concludes that Environmental Impact Assessment is not required. Nevertheless, the board is also required under the provisions of Article 109 of the Planning and Development Regulations 2001 (as amended) to undertake a

screening for EIA. On the basis of a review of the classes of development set out at Part 1 and Part 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended), I do not consider that the proposed development is of a type that is listed in Part 1 or Part 2 'subthreshold development' for the purposes of EIA. I do not therefore consider that it is required to continue to assess the development in the context of the criteria set out in Schedule 7 of the Regulations relating to sub threshold development.

- 8.3.3. In conclusion, it is my opinion that the proposed development does not fall within Part 1 or Part 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended). I therefore agree with the applicant's submission that EIA is not required as the development is of a type which is not listed in the regulations and which therefore does not trigger a requirement for EIA.

8.4. Landscape and Visual Amenity

- 8.4.1. The Clare County Development Plan identifies a number of landscape character types within the county and the appeal site is located within an area that is identified as being within River Valley Farmland landscape category. The site is also within what is identified as a Western Corridor Working Landscape and Objective 16.3 of the Plan is relevant within such areas. This states that it is an objective to permit development in this area that will sustain economic activity subject to other relevant plan provisions being met. The Objective also requires that site selection and design would be directed towards minimising visual impact and that that there would be particular care to avoid impacting on scenic routes, ridgelines, walking and recreational trails.
- 8.4.2. In the case of the appeal site and proposed development, the form of development is in my opinion consistent with economic activity promoted under Objective 16.3. There are two scenic routes that are located in the general vicinity of the appeal site, both of which are located to the north of Cratloe Village, 1.5km to the north of the site. The separation from the appeal site to these routes, the topography and intervening features including hedgerows and the N18 national road are such that in my opinion the proposed development would not have any material impact on the views from or amenity value of these designated scenic routes.

8.4.3. With regard to visual assessment, the application documentation was accompanied by visualisations prepared from 4 no. viewpoints in relatively close proximity to the site boundaries. These visualisations indicate the existing situation, the proposed development and then the proposed development with mature planting c. 3-5 years post development. In my opinion the local views indicated in the photomontages are reflective of the main areas where there would be a potentially significant visual impact arising and, as can be seen from the views presented, the visual impacts arising are limited. Existing field and roadside boundaries are proposed to be largely retained in the development and the existing mature nature of these boundaries means that the visual impact of the proposed development will be limited. The existing situation in terms of screening is proposed to be augmented by additional planting of the boundaries and the overall impact is in my opinion not such as to have any significant adverse visual impact.

8.4.4. In addition to the four local viewpoints which were the subject of assessment, there are a number of other locations in close proximity to the site that are sensitive. Specifically, the third party appellants who reside in a property to the north west of the site contend that there would be an adverse visual impact when viewed from their property arising due to the proximity and scale of development and also the elevated nature of their property. As highlighted above however, it is apparent from the visualisations, and also from an inspection of the site, that the existing field boundaries provide significant screening given the low height of the proposed structures and that this would be augmented by new planting. In addition, I note that while the appellant's property is elevated, it is not significantly so relative to the appeal site and that the boundaries of the appellant's property are relatively open. There is also a significant degree of separation with the appellant's property being almost 300 metres from the closest solar array proposed on the appeal site. As noted by the planning authority, a condition attached to the grant of permission for the appellants dwelling (Ref. 10/567) required screen planting and additional planting of the boundaries which would further mitigate any visual impacts that may arise.

8.4.5. The Planning Officer raised a number of concerns in their initial report regarding potential medium and long range views of the proposed development and an assessment of such views was requested by way of further information. The response submitted indicates that there would be a very limited visual impact at the

medium range (500 metres to 2km) and no long range impacts (2 – 10 km) arising. From an inspection of the site and having regard to the mature site boundaries, the retention and proposed augmentation of these features and the scale of development proposed I am satisfied that medium and long range visual impacts arising would be minor.

8.5. Residential Amenity

- 8.5.1. The main issues raised in the submission of the third party appellants relates to the potential impact on residential amenity. In my opinion the main potential adverse impacts on residential amenity arise from visual impact, glint and glare and noise as well as construction phase impacts.
- 8.5.2. With regard to visual impacts, as set out above, I do not consider that the proposed development would have a significant adverse impact on the residential amenity of the appellants having regard to the nature and scale of the proposed development, the separation to the proposed development and the existing and proposed planting within and bounding the site.
- 8.5.3. As set out in the description of the site location, there are a significant number of houses located in the general vicinity of the site with the majority of these being located on the L-3120 to the south of the site. These houses would be located within c. 180 metres of the site boundary at the closest point and c.200 metres of the closest solar array. Given this separation and the natural screening afforded by the existing hedgerow boundaries I do not consider that there will be a significant loss of residential amenity for these properties arising on foot of the proposed development.
- 8.5.4. With regard to glint and glare, the application documentation included at section 8 an assessment of the potential impacts. This assessment was augmented by the submission of a more detailed solar photovoltaic glint and glare assessment prepared by a specialist consultant (PagePower). This assessment focusses on the potential impact of the proposed development of aircraft and air safety. The information presented indicates that in the case of a fixed receptor there would be potential for glinting once per day during two periods either side of the summer equinox. The design and layout of the proposed development is not therefore

considered likely to have a significant impact on surrounding fixed receptors (i.e. residential properties) in terms of glint or glare and the potential impact as set out above would be mitigated by the presence of vegetation within and bounding the site. In addition, it should be noted that the orientation of the solar arrays facing due south is such that potential impact would be largely confined to locations to the south of the site. In view of the above, I do not therefore consider that the impact on fixed receptors is therefore likely to be significant.

- 8.5.5. The proposed development would have some potential to impact on traffic and therefore to impact on traffic and road safety. This issue was raised in the report of the Road Design Office of the council and a number of observations made by third parties to the Planning Authority. The main potential impact would be on the N18 which is located within c. 125 metres of solar PV arrays at the closest point. I note however that the boundary between the local road at the northern side of the site (L-7124) and the parallel N18 comprises a mature planted boundary of dense hedgerow planting and trees which would have the effect of preventing any significant impact on this road. In addition, the orientation of the panels being to the south would be such that the local road and M18 to the north should not be impacted by glint or glare.
- 8.5.6. The appellants have also raised concerns with regard to the potential for noise generated by the proposed development to impact negatively on residential amenity. Potential sources of noise from the proposed development would be limited to that generated by electrical equipment and potentially wind noise as there are no mechanical elements to the form of solar array proposed and fixed rather than tracker structures are proposed, (see Planning and Environmental Report section 2.3). The third party appellants have specifically queried how the results of the noise assessment were obtained and their accuracy given the fact that their property was not one of the locations where survey information was collected with the survey location being at a significant further remove from the appeal site.
- 8.5.7. The issue of noise was raised with the applicant in the request for further information submitted and the response to further information sets out at section 4 the methodology used in some detail. Essentially the noise monitoring location (location 1 as indicated in Figure 4.1 of the FI response) was not located at a significant further remove from the site than the appellant's property. In any event, the

methodology used was for noise data collection in order to develop a model for prediction. The fact that the noise monitoring location was not in the exact location of the appellant's property does not therefore mean that the results obtained are not correct and the rationale for this is clearly set out in the FI response submitted to the Planning Authority.

8.5.8. The potential for the inverter units and on site sub station to impact in terms of noise is indicated in the assessment to be very limited and, on the basis of the information presented in both the Planning and Environmental report and the Response to Further Information (Section 4) I am satisfied that the proposed development would not have an adverse impact on the residential amenity of any residential properties in the vicinity by virtue of noise. As set out above, a noise impact model was developed and Location A of this 3D model reflects the exact position of the appellant's property and the predicted noise level at their property are 32 dB(A) during the day and 22 dB(A) at night. These levels are very comfortably within normal limits including those of the EPA and the WHO.

8.5.9. Finally, a number of observations made to the planning authority raised concerns with regard to the proposed installation of cctv on the site and the potential impacts on privacy and residential amenity. The application documentation, including the response to further information (specifically section 3.0) sets out the proposed locations of the 16 no. cctv units on the site and the separation distances between these units and the nearest dwellings houses, (see Table 3.1 of the Response to Further Information). The locations are indicated at Appendix 3-1 of the response submission. The applicant has set out how the site would not be manned and therefore requires some level of security. A security fence is proposed however on site cctv is considered necessary and is a standard feature in similar developments. The cctv would include detection control such that it would operate when it detects something within its range and infrared lighting would be used for the monitoring. The separation distances to the nearest residences varies between 145 metres at the closest point, with most in the 200-250 metre range. These distances are the closest straight line distances and the cameras would be orientated away from the closest houses. In view of this and the proposed separation distances and the method of operation of the cameras I do not consider that they would be such that they would adversely impact on privacy or residential amenity.

8.6. Air Traffic Safety

- 8.6.1. The issue of air traffic safety and the potential impact on the operation of Shannon Airport which is c. 8km to the west of the appeal site is discussed in some detail in the report of the Planning Officer and was one of the items raised in the request for further information made by the Planning Authority. During the course of the assessment of the application, the Planning Authority received submissions from both the Irish Aviation Authority (IAA) and Shannon Airport with regard to the potential for the proposed development to impact on air traffic safety, primarily due to the issue of glint and glare. The initial submissions from both the IAA and Shannon Airport recommend that a glint and glare assessment prepared by a recognised specialist consultant would be prepared and this was the subject of the further information request issued. As noted at 8.5.4 of this report above, a glint and glare assessment prepared by a specialist consultant (Pager Power) was submitted, and this report concludes that the proposed development is not sited such that it would adversely impact on aircraft safety. In particular, the report concludes that the model used indicates that the solar panels could produce glare with 'low potential' for temporary after image on the approach path for runway 06 at Shannon Airport, that aircraft would pass through any reflection zone very quickly and that the intensity of glare that is predicted is acceptable based on FAA Guidance. The conclusion of the assessment is that no significant impact on the approach paths at Shannon Airport is expected.
- 8.6.2. I note the fact that subsequent to the submission of further information response and the Pager Power report that no further comments were received from the IAA however the report addresses the specific requirements of the Authority as set out in their submission, primarily that a specialist consultant be engaged in accordance with US FAA Guidance on the issue. I also note the content of the report and the specific examples cited of solar farm developments being sited in very close proximity to airports and airport infrastructure without any adverse impact on safety.
- 8.6.3. The US FAA guidance recommends that contact should be made with relevant airports within 30km of a solar farm development site and I note the fact that the

applicant and the Planning Authority made contact with Shannon Airport who recommended the submission of a glint and glare assessment and that liaison with pilot groups be undertaken. I also note the fact that a second submission from Shannon Airport subsequent to the submission of further information notes that there is no information from pilot groups and that this should be undertaken. The second report of the Planning Officer (dated 27th October), makes reference to the receipt of an e mail from the applicant which was treated as unsolicited further information and which stated that attempts to get a response on the safety issue from the pilot representative groups in Ryanair and Aer Lingus had provide unsuccessful. This e mail correspondence does not appear to be on the appeal file. Overall however on the basis of the response to further information submitted, in particular the contents of the Pager Power Report and the comments of the IAA, I am satisfied that the proposed development would not have an adverse impact on air traffic safety and is acceptable in this regard.

8.7. Appropriate Assessment

- 8.7.1. The site is not part of or located within a European Site. The application submissions include a AA Screening Report which concludes that the development would not be likely to give rise to significant effects on a European Site having regard to the conservation objectives. The AA screening report submitted with the application is augmented by the response to Item No.7 of the request for further information issued by the Planning Authority and which related to the justification for the set back to surrounding watercourses / streams, confirmation of survey for Red List and FPO species, fencing construction details, further details regarding the range of the Whooper Swan and further details with regard to measures to protect water quality during construction works.
- 8.7.2. The AA Screening report identifies a total of 10 no. Natura 2000 sites within 15 km of the site which are the subject of assessment for the potential significant effects of the proposed development on the qualifying interests of these sites. In defining this range it would appear that the applicant has used the standard 15 km range as set out in AA Guidance. By contrast, I note that in the case of a much larger solar farm development proposal in County Wexford (ABP Ref. PL26.247217) that the inspector restricted consideration of Natura 2000 sites to a radius of 5km from the appeal site.

8.7.3. In the case of the subject appeal site, the closest Natura 2000 sites are to the south in the area of the Shannon River estuary. The two sites in this area are as follows:

- Lower River Shannon SAC
- River Shannon and River Fergus Estuaries SPA.

In terms of distance these two natura sites are located approximately 850 metres from the site boundary at the closest point. The main potential pathway between the appeal site and proposed development and the designated sites to the south is via existing watercourses, namely the Brickhill stream. The distance for the hydraulic connection between the appeal site and the River Shannon via the Brickhill Stream is approximately 2km.

8.7.4. The next closest Natura 2000 site to the appeal site is Ratty River Cave SAC which is located c. 8km to the north of the site. Having regard to the nature of the proposed development, in particular the limited potential impacts on groundwater by virtue of construction, to the limited potential emissions from the site, to the surface water flow paths in a southerly direction towards the River Shannon and to the separation distances involved, it is my opinion that, with the exception of the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA there would not be any likely significant effects on any European site. I therefore consider it appropriate that the rest of this screening assessment would be limited to consideration of the potential effects of the proposed development on the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA having regard to the conservation objectives of these sites.

8.7.5. The site specific conservation objectives for the **Lower River Shannon SAC** (site code 002165) are to maintain or restore to favourable conservation status the following species and habitats which are features of interest for the site.

- Sandbanks which are slightly covered by sea water all the time
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Coastal lagoons
- Large shallow inlets and bays

- Reefs
- Perennial vegetation of stony banks
- Vegetated sea cliffs of the Atlantic and Baltic coasts
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- Mediterranean salt meadows (*Juncetalia maritimi*)
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- *Margaritifera margaritifera* (Freshwater Pearl Mussel)
- *Petromyzon marinus* (Sea Lamprey)
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Salmo salar* (Salmon)
- *Tursiops truncatus* (Common Bottlenose Dolphin)
- *Lutra lutra* (Otter)

8.7.6. With regard to potential effects on the European site arising from the proposed development I note that the appeal site is located outside of the boundary of the SAC and that no direct impacts therefore arise. There are limited works proposed in terms of construction that could potentially impact on groundwater and the main areas of potential impact and connectivity with the SAC site relate to potential surface water contamination and the potential impact that the development might have on species and habitats which are qualifying interests for the site. Mitigation during construction and design in the form of set back from watercourses and the

Brickhill stream and the use of best construction methods including silt fencing are set out in the application documentation and are, in my opinion, standard in nature and scope such that they can be considered to form an intrinsic part of the development. I also consider that the use of piled foundations should be specified and taken into consideration in this screening assessment and note that this is proposed in 3.4.12 and section 7 of the Planning and Environmental Report submitted by the applicant. The implementation of these measures together with the river channel distance of at least 2 km between the appeal site and the Natura 2000 site would, in my opinion, be such that there would not be any significant pollution impacts arising and no impact on water quality that would impact on the conservation objectives for the site.

- 8.7.7. The submitted NIS screen assessment contains information regarding the observations of otter and badger on the site. Otter spraint was recorded on the banks of the Brickhill stream bounding the site and it is likely that the site forms part of the foraging range of otter that are a conservation objective of the SAC. No holts or couches were observed during inspection of the site and subject to the proposed set back of development from the edge of watercourses and the use of the fencing type proposed with mammal passes it is not considered that there would be any significant effects arising. Evidence of the use of the site by badger were also noted however this species is not feature of interest for the site. Similarly bats, while being a protected species under the directive are not identified as a species of interest within the Lower River Shannon SAC.
- 8.7.8. Overall therefore I do not consider that the proposed development is likely to have significant effects on the Lower River Shannon SAC site in the light of the conservation objectives of the site.
- 8.7.9. The site specific conservation objectives for the ***River Shannon and River Fergus Estuaries SPA*** (site code 004077) are to maintain or restore to favourable conservation status the following species and habitats which are features of interest for the site
- Cormorant (*Phalacrocorax carbo*)
 - Whooper Swan (*Cygnus cygnus*)
 - Light-bellied Brent Goose (*Branta bernicla hrota*)

- Shelduck (*Tadorna tadorna*)
- Wigeon (*Anas penelope*)
- Teal (*Anas crecca*)
- Pintail (*Anas acuta*)
- Shoveler (*Anas clypeata*)
- Scaup (*Aythya marila*)
- Ringed Plover (*Charadrius hiaticula*)
- Golden Plover (*Pluvialis apricaria*)
- Grey Plover (*Pluvialis squatarola*)
- Lapwing (*Vanellus vanellus*)
- Knot (*Calidris canutus*)
- Dunlin (*Calidris alpina*)
- Black-tailed Godwit (*Limosa limosa*)
- Bar-tailed Godwit (*Limosa lapponica*)
- Curlew (*Numenius arquata*)
- Redshank (*Tringa totanus*)
- Greenshank (*Tringa nebularia*)
- Black-headed Gull (*Chroicocephalus ridibundus*)
- Wetland and Waterbirds

8.7.10. With regard to potential effects on the European site arising from the proposed development I note that the appeal site is located outside of the boundary of the SPA and that no direct impacts therefore arise. There are limited works proposed in terms of construction that could potentially impact on groundwater and the main areas of potential impact and connectivity with the SPA site relate to potential surface water contamination and the potential impact that the development might have on feeding or foraging areas for birds which are qualifying interests for the site. Mitigation during construction and design in the form of set back from watercourses

and the Brickhill stream and the use of best construction methods including silt fencing are set out in the application documentation and the implementation of these measures would, in my opinion be such that there would not be any significant pollution impacts arising and no impact on water quality that would impact on the conservation objectives for the site.

- 8.7.11. With regard to foraging and feeding, the NIS screening assessment submitted sets out the results on wintering bird surveys undertaken as part of the Irish wetland bird survey (2010/2011). These results indicate that the nearest recorded sub sites to the appeal site are c. 0.8km away to the south east and the south west with the main species observed being lapwing and golden plover. I also note the discussion contained at Item 7(d) of the response to further information submitted by the applicant to the Planning Authority and do not consider that the location and type of habitat which would be impacted by the proposed development would result in a significant loss of habitat for species of conservation importance.
- 8.7.12. With specific regard to whooper swan, I note the fact that available information indicates that the whooper swan population was particularly loyal to a number of sites rarely being recorded outside of these locations and also that the sites recorded in this study (Robinson et al, 2004) correspond with those identified by the Irish Whooper Swan Study group (IWSSG) and recorded in the AA Screening submitted by the applicant. While the appeal site might be seen to be generally consistent with the preferred wintering habitat of whooper swan which is lowland open farmland around inland wetlands, I consider that the available information indicates that the site is not an important roosting or foraging site for whooper swan.
- 8.7.13. On the basis of the information available, including that submitted by the first party as part of the response to further information request issued by the Planning Authority, I am satisfied that the proposed development would not be likely to have significant effects on the River Shannon and River Fergus Estuaries SPA (site code 002165) in the light of its conservation objectives.

8.8. Ecology

- 8.8.1. The Planning and Environmental report submitted with the application and the additional information provided during the course of the assessment of the proposal by the Planning Authority presents an appropriate level of detail in relation to the ecological impacts of the proposed development. This was compiled from desktop and site surveys. The habitats of highest value namely the treelines and hedgerows will be retained except at limited crossing points. The development also involves measures which will strengthen and protect the hedgerows. I agree with the assessment conclusions in general and consider that the impacts on habitats is acceptable.
- 8.8.2. With regard to birds, the report notes that the atlases for breeding and wintering birds show the presence of a number of species within the hectads (10km by 10 km squares) that are closest to the site. As set out in the Appropriate Assessment screening at 8.7 above, I do not consider that any Annex I species are likely to be significantly effected. On the basis of the information available, and having regard to the size and location of the proposed development I do not consider that the proposed development would have a significant negative impact on existing bird populations. The area of the site is relatively small and there are significant other foraging lands available in close proximity to the site. Disturbance by the construction phase of the development is likely to be relatively short term, (approximately 3 months).
- 8.8.3. The potential impact on badgers and otters was addressed at 8.7 above and on the basis of the information presented I do not consider that the site is a location that accommodates otter holts. Badger was recorded on the site and two active setts were identified along the northern boundary of the proposed development site. I note the proposed fencing and provision of passes for mammals as set out in the response to further information at planning authority stage and also note the fact that the measures proposed were considered by the NPWS who do not consider that the proposal is unacceptable subject to the preparation and submission of a method statement for the avoidance of impacts on setts during the construction phase.
- 8.8.4. I note that there was no evidence recorded during the field survey of the presence of other mammals. Such other species including vole and rat are likely to occur,

however the nature of the proposed development is such that it is not likely to impact significantly on such species.

- 8.8.5. With regard to bats, the proposed development would not result in the severing of existing hedgerows and flight paths and there are limited mature trees along the boundaries or within the site that would be potential roosts. There are no bat conservation international (BCI) records for bats within the appeal site and the overall significance of the site for bat activity is considered to be low.
- 8.8.6. The site is currently improved agricultural grassland and is of relatively low value in terms of flora species diversity. No habitats or species that correspond to Annex I habitat are located within or in the immediate vicinity of the site. The linear habitats that do occur in the location including mature hedgerow and drainage ditches plus the Brickhill Stream will not be significantly impacted by the proposed development.
- 8.8.7. Overall therefore it is not considered that the proposed development will have a significant adverse impact on ecology on site or in the general area of the site.

8.9. Other Issues

- 8.9.1. With regard to **traffic**, a number of objectors to the planning authority questioned the appropriateness of the local road to the north of the site (L-7124) as a means of accessing the site for **construction traffic**. Specific concerns were expressed regarding the capacity and suitability of this road to accommodate construction traffic. I note these concerns however the volume and nature of the construction material and traffic generated by a development of the form proposed is such that in my opinion it can be accommodated by the L-7124. I note the recommendations of the roads section of the council that a condition relating to the maintenance of the L-7124 be attached and consider it appropriate that such a condition would be attached to any grant of permission and that the developer would be required to submit a construction management plan that would include details of the proposed arrangements for deliveries to the site.
- 8.9.2. I note the fact that the applicant submitted additional details with regard to the construction access to the site from the L-7124 and proposals for the bridging over

the existing roadside drain in this location. These measures are considered to be acceptable and works should be undertaken to the detailed requirement of the planning authority.

- 8.9.3. Wider construction access is proposed to be via the N18 as detailed in section 9 of the Planning and Environmental Report and is available via junction 5 to the east which is the Cratloe access or from the west at junction 6. The general construction access arrangements proposed are considered acceptable.
- 8.9.4. Condition No.16 attached to the Notification of Decision to Grant Planning Permission required a **financial contribution** of €42,000. This figure has been calculated on the basis of the contribution per MW of wind energy as per the adopted s.48 development contribution scheme and is consistent with the approach used in other solar farm permissions granted by the Board. It is recommended that a similarly worded condition should be attached to any grant of planning permission issued by the Board.
- 8.9.5. Condition No. 17 requires the submission of a cash deposit, **bond** or other security to the value of €10,000. This condition and bond amount relates specifically to the reinstatement of the public road rather than the reinstatement of the site. As set out above, it is recommended that a bond in respect of road repair and reinstatement would be required especially given the nature of the L-7124. The issue of a requirement for a more general bond for site reinstatement given the relatively new nature of the form of development has been raised by the appellants. In response the Planning Authority state that a bond was not sought as there is no element of public area within the development. Given the temporary nature of the proposed development I would have some concerns with this approach and consider that there is a case to be made that a bond should be required in order to ensure future decommissioning and restoration of the site. I would not agree with the planning authority that there is not a case for a bond on the grounds that there is no public access and note the fact that bonds are common in the case of wind farm and quarry developments that there would be a requirement for a bond to cover decommissioning and site clearance. I also note that a condition requiring the submission of a bond to cover site reinstatement has been attached by the Board in other grants of permission for solar farm developments including Refs. PL04.244539 and PL26.244351. In view of the above it is recommended that in the event of a

grant of permission that a specific condition requiring a bond for site reinstatement and decommissioning would be attached.

8.9.6. With regard to the **time period for which the permission** would be valid I note that the application is for a 10 year permission rather than the normal 5 year period. Given the fact that the construction period is relatively short at approximately 3 months and that there is no clear impediment to the implementation of any permission in terms of grid connection or other similar constraint, I do not consider that a clear case has been made as to why permission should be granted for a 10 year period. This issue is not addressed in detail in the submitted Planning and Environmental report however I note that at 3.4.10 of that report it is stated that a grid application for connection to the Cratloe substation was deemed complete by ESB Networks in October, 2015. The use of 10 year permissions creates uncertainty for third parties as to when if at all a development will be undertaken and I do not consider that the nature of the current proposal is such as to warrant a 10 year permission. I also note that UK (BRE) Guidance on large scale ground mounted solar PV systems makes reference at Paragraph J to a general period of 3 years for permissions. I therefore consider that in the event of a grant of permission that there is not a clear basis for the granting of a 10 year permission and that this is clarified by way of condition.

8.9.7. Regarding **site drainage**, on the basis of observations at the time of inspection of the site and photographs of the site provided with the application it is apparent that the site is wet with some areas of surface water retention. The site boundaries are characterised by a significant concentration of watercourses. However, the proposed development will not alter the surface water regime in any way. On completion of the proposed development rainfall would continue to percolate to ground as it does at present and no additional surface water discharges over and above the existing scenario would be generated by the proposed development. Condition 13 of the Notification of Decision to Grant Permission required that surface water not be allowed to flow into any watercourse and sets out measures to ensure the protection of watercourses during construction of the proposed development. Subject to these measures I am satisfied that there will not be any issues of water pollution arising.

- 8.9.8. The proposed development will not result in any additional risk of **flooding** as there is not a potential for the concentration of rainfall arising from the proposed solar PV structures and discharge of water from the site will not increase. The application is accompanied by a Flood Risk Assessment Report and this report is augmented by further details submitted by the applicant in response to the request for additional information. The results of the CFRAMS study indicate that the site is not located within flood risk zone A and the conclusions of the FRA are that the risk of flooding is low and that Flood Risk category for the site is C. The proposed development is considered to be acceptable within such an area.
- 8.9.9. Reference has been made by third party objectors to the Planning Authority to **potential health impacts** of a development of this nature. The applicant has refuted the arguments made in relation to electrical and magnetic fields caused by a development of this nature, particularly in relation to EMFs being similar to those which already exist in houses. The proposed electrical control unit and the inverter control unit are located in excess of 350 metres from the closest houses that are not connected with the first party and c.150 metres from the house on the lands owned by the property owner. These separation distances will, in my opinion, ensure that there will be no significant impact on occupants of nearby houses.
- 8.9.10. The issue of **local consultation** was raised by observers at planning authority stage and it is contended that the layout as submitted for planning permission is different from that which was indicated in the consultation process undertaken. This would appear to be borne out by the fact that the copy of the consultation document submitted by the applicants indicates a layout that is different from that subsequently submitted for planning permission. The Planning and Environmental Report does however indicate a series of iterations of the proposed layout and it is stated that the revised layout was to increase separation distance to the dwellings to the north west of the site (including that of the third party appellant). In addition, I would note that there is nothing in the planning acts which requires prior local consultation in relation to an application of this type and scale.
- 8.9.11. There are no **recorded sites or monuments** within the site area. Whilst the site area is of a significant scale, the method of construction will involve little by way of ground disturbance particularly with a requirement by condition that screwed or piled foundations are utilised for the supports for the panels. I note the fact that there are

a number of monuments in the vicinity including a ringfort located c. 225 metres to the south east and other structures c. 1km to the west. I also note the fact that the submission from the DAU on archaeology, dated 4th July, 2016, recommends that an Archaeological Impact Assessment would be undertaken and that an archaeologist would be retained to oversee all sub surface works. The retention of a project archaeologist on site is also a requirement of Condition No.9 attached to the Notification of Decision issued by the Planning Authority and, in the event of a grant of permission, it is my opinion that the attachment of a condition along the lines of that requested by the DAU is appropriate.

8.9.12. The ***impartiality of the design team*** has been questioned by the third party appellants and it is requested that the Board would undertake an impartial assessment of the proposed development. In response, the first party has detailed the design team involved, their experience and qualifications and note that now that the proposal is the subject of appeal it will be up to the Board to carry out its own assessment. The above assessment reflects my consideration of the issues raised and the planning merits of the proposed development. The independent planning or environmental assessment to accompany planning applications as suggested by the first party is not provided for in the Irish planning system.

9.0 Recommendation

9.1. I recommend that the decision of the planning authority to grant permission be upheld for the reasons and considerations below and subject to the attached conditions.

10.0 Reasons and Considerations

Having regard to the provisions of the current development plan for the area and to the regional and national policy, it is considered that, subject to compliance with the conditions set out below, the proposed construction of a solar farm would not seriously injure the visual or residential amenities of the area, or the ecology of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

In reaching its decision, the Board noted and concurred with the Inspector's view that the Environmental Impact Assessment was not required in respect of this development, and that the development would not be likely to have a significant impact on the environment. The Board also noted the Inspector's analysis under the heading of Appropriate Assessment, and agreed with the Inspector that, having regard to the separation distance between the subject site and the nearest European sites – the River Shannon and River Fergus Estuaries SPA (site code 004077) and the Lower River Shannon SAC (site code 002165) - the development, by itself or in combination with other plans or projects, would not be likely to have a significant effect on these European sites, in view of the site's conservation objectives. The Board, therefore, adopted the Inspector's conclusions in relation to these two matters.

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 23rd day of September, 2016, 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 development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be a maximum of 5 years from the final grant of planning permission.

Reason: In the interests of clarity and having regard to the nature of the proposed development, specifically its scale and the availability of a grid connection, it is not considered that a 10 year permission is justified.

3. All structures including foundations hereby authorised shall be removed not later than 25 years from the date of commissioning of the development, and the

site reinstated unless planning permission has been granted for their retention for a further period prior to that date.

Prior to commencement of development, a detailed restoration plan, providing for the removal of the solar arrays, including all foundations, anchors, fencing and all lighting and CCTV poles and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority. 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.

4. (a) The landscaping proposals shall be carried out within the first planting season following commencement of construction of the solar pv array. All existing hedgerows (except at the proposed new entrance) shall be retained. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted.
- (b) Additional screening and/or planting shall be provided so as to ensure that there is no glint impact on adjoining houses as a result of the development. Upon commissioning of the development and for a period of two years following first operation, the developer/operator shall provide detailed glint surveys on an annual basis to the planning authority in order to confirm that no such glint impact has taken place, and shall provide such further mitigation measures, as the planning authority may specify in writing, to ensure that this is achieved.

Reason: To assist in screening the proposed development from view and to blend it into its surroundings in the interest of visual amenity, and to mitigate any glint impact from the proposed development upon adjoining residential amenities.

5. The solar panels shall be fixed in place by way of driven pile or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission.

Reason: In the interest of the long term viability of this agricultural land, and in order to minimise impacts on drainage patterns and surface water quality.

6. CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the public road.

Reason: In the interest of residential amenity and traffic safety.

7. 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 access arrangements, times of deliveries to the site, noise management measures and off-site disposal of construction waste. The plan shall also include a construction method statement to ensure the avoidance of impacts on badgers.

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

8. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation

from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the residential amenities of property in the vicinity.

9. All cables associated with the development shall be located underground. Prior to the commencement of development, details of the external finishes of the electricity sub station and the power inverter units, and of all fencing, shall be submitted for the written agreement of the planning authority.

Reason: In the interest of visual amenity.

10. Water supply and drainage arrangements, including the 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.

Reason: In the interests of traffic safety and orderly development.

11. 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.

12. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that 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,

- (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
- (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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 site and to secure the preservation and protection of any remains that may exist within the site.

13. 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 the value of €10,000 (ten thousand euro), to secure the satisfactory reinstatement of public roads in the vicinity of the site coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement.

Reason: To ensure satisfactory reinstatement of public roads in the vicinity of the site on completion of the proposed development.

14. 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 upon 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.

15. The developer shall pay to the planning authority a financial contribution of €42,000 (forty two thousand euro) 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 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. The application of any indexation required by this condition 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.

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.

Stephen Kay
Inspectorate

16th March, 2017