

Inspector's Report ABP 301028-18

Development	Solar PV farm
Location	Fiddane, Ballyhea, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	17/5799
Applicant	IGP Solar 8 Ltd.
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	3 rd Party v. Grant
Appellants	Fiddane Solar Action Group
Observers	
Date of Site Inspection	23/07/18
Inspector	Pauline Fitzpatrick

1.0 Site Location and Description

The site, which has a stated area of 67.8 hectares, is in the townland of Fiddane c. 3.2km to the south of Dromina, c. 3.3km to the north of Churchtown, 5km west/north-west of Ballyhea and 6.5 km to the south-west of Charleville in north County Cork. It comprises of in the region of 20 fields in agricultural use with falls from north to south/southeast. The field boundaries are, to a large extent, delineated by hedgerows. There are a number of agricultural tracks throughout. The lands adjoining are in agricultural use with a commercial coniferous woodland to the east.

The site is currently served by four accesses from the local road with farm buildings located within the north-western corner.

One off housing is evident along the local road L1307 (also referenced as L1322 by the applicant) to the north of the site. The road was noted to be relatively lightly trafficked on day of inspection with mature hedgerows along same.

Ardglass Stream is located close to the western site boundary with the Oakfront River adjacent to the eastern site boundary. It is located c.600 metres north of Annagh Bogs which is part of the Blackwater River SAC.

2.0 Proposed Development

- 2.1. The application was lodged with the planning authority on the 13/0717 with further plans and details received 15/11/17 and 22/12/17 following requests for further information (F) and clarification of FI dated 05/09/17 and 11/12/17 respectively.
- 2.2. The proposal is seeking permission for a solar farm with a maximum installed capacity of up to 30.6 MW. The main elements of the proposed development can be summarised as follows:
 - Solar PV modules (total number estimated to be 87,536).
 - Underground cabling and ducting
 - 14 no. transformer stations
 - 38kV ESB networks control room
 - Boundary security fencing (mammal accessible)

- Site entrance via existing farm access in the north-west corner.
- CCTV
- Landscaping
- Temporary construction compound near access
- 2.3. The PV modules are ground mounted on galvanised steel support structures/frames in an east to west alignment which are fixed at an angle of up to 30 degrees facing south. The panels will have a maximum height above ground of 2.1 metres.
- 2.4. The farm buildings on site are to be retained.
- 2.5. Connection to Charleville 110kV substation via. c. 3.8km underground 38kV line along the local road.
- 2.6. The application, as amended, is accompanied by:
 - Letter of consent from landowners
 - Drawings and Photomontages
 - Planning Statement
 - Environmental Impact Assessment Screening Report
 - Flood Risk Assessment
 - Landscape and Visual Impact Assessment
 - Construction Environmental Management Plan
 - Transport Management Plan
 - Environmental Noise Assessment
 - Glint and Glare Assessment
 - Geophysical Survey and Archaeological Impact Assessment Report
 - Screening for Appropriate Assessment
 - Biodiversity Management Plan
 - Landscape Management Plan

3.0 Planning Authority Decision

3.1. Decision

Grant permission subject to 64 conditions. Of note:

Condition 2: 10 year permission

Condition 3: (a) 30 year duration

(b) submission of restoration plan

Condition 7: Revised landscaping plan to be submitted with existing buildings,

construction compound and reinstatement of roadside hedgerow delineated thereon.

Condition 9: revised site plan of construction compound and associated plans to be submitted

Condition 32: Noise limits

Condition 34: Noise and Dust Management System to be put in place.

Condition 40: Preconstruction bat survey

Condition 43: Buffer zone around each watercourse and marsh habitats to be delineated prior to commencement of development.

Condition 44: No construction related waste to be stored or used to infill lands within the Blackwater River SAC.

Condition 46: Archaeological monitoring

Conditions 47 & 48: Buffer zones to be established as outlined in the Archaeological Impact Assessment report and details provided 15/11/17. Subsequent to completion of development the buffer zone around the recorded Archaeological Monument to be retained. Planting within this buffer zone shall be limited to shallow rooted plants and/or grass.

Condition 49: relocation of wheel wash.

Conditions 50 - 52: site entrance requirements

Condition 53: Road conditioning survey to be undertaken prior to commencement of development.

Condition 58: Strengthening of the road for at least 30 metres to the east and 20 metres to the west of the site entrance prior to commencement of development.

Conditions 61-63: security for satisfactory reinstatement of site on cessation of project, completion of landscaping and restoration of the public roads post construction.

Condition 64: section 48 financial contribution.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The 1st Planner's report dated 05/09/17 notes that the scale of the proposal is particularly large. Each development shall be assessed on its merits. The introduction of a new element would alter the landscape character and the magnitude of change would be large. The substantial separation distances from sensitive receptors and the road network to the south is noted. The significance of the visual impact generally lessens with distance given the wider viewpoint context, along with such factors such as the landscape backdrop, topographical changes, hedgerows and trees. Further photomontages from the Ballyhoura Way to the east and north of Churchtown and from the north-east required. Supplemented and additional hedge and tree planting will be required to the north which may necessitate modifications to the solar array layout. A landscaping plan is required. Details of the nearest dwellings in the glint and glare study and the assessment therein require amendment. It should address potential impact on the adjoining equine enterprise. Number of CCTV points needs to be clarified. The contents of the other internal technical reports (summarised below) including further information requests are noted. The proposed M20 motorway is a considerable distance to the east and would not be impacted by the proposal. A request for further information is recommended. The Senior Planner in a report dated 05/09/17 endorses the report. He recommends that the visual assessment and viewpoints should address the impact of ancillary works including fencing, internal roadways etc.

The 2nd Planner's report dated 11/12/17 following FI notes that permission is required for the removal of the farm buildings. Revised plans for the construction compound with the buildings in situ required. The majority of the revised

photomontages did not illustrate a discernible difference from the original. The most significant impact would be from viewpoint 1 to the north. Additional screen planting will be required. Additional photomontage V17 is taken from a clear vantage point on the L1320 to the east of Churchtown. The development would be visible on the hillside. Whilst the development would result in a change in the landscape character it is considered that the visual impact is mitigated by distance and the extent of the panoramic frame. On balance, having regard to the scale of the development, the topography, the site characteristics, the landscape character and degree of magnitude of change in the landscape it is considered that the proposal would not seriously injure the visual amenities of the area subject to additional landscaping. A revised landscaping plan is required showing retention of existing farm buildings and boundary treatment to north of compound. Clarification of FI recommended. The Senior Planner's report dated 11/12/17 endorses the report and recommends a request for clarification of FI.

The 3rd Planner's report dated 26/01/18 following clarification of FI considers that the applicant has addressed the key issues and that any outstanding matters can be dealt with by condition. A grant of permission subject to 63 conditions recommended. The A/Senior Planner in a report dated 26/01/18 endorses the recommendation and recommends a grant of permission subject to 64 conditions.

3.2.2. Other Technical Reports

The 1st Environmental report dated 3/08/17 recommends further information including revised site layout plan showing all waterbodies and private water sources within the site and details of how the site will be served by water during the construction phase; all existing and proposed tracks; means of traversing watercourses and measures to prevent discharge of soiled water; measures to control vegetation; how the site is to remain available for agricultural purposes and location of transformer stations. The report dated 27/11/17 following FI states that the information submitted indicates that there would be little risk of impact on water quality once operational. Grass will be managed by cutting or grazing by sheep at low levels of intensity. No objection subject to conditions. The report dated 18/01/18 following clarification of FI has no additional comment.

A 2nd report titled Environment Report dated 05/09/17 recommends further information on management of waste and details of all existing and proposed tracks on the site. The report dated 05/12/17 following FI has no objection subject to conditions. The report dated 19/01/18 following clarification of FI has no additional comment.

A 3rd report titled Environment Report dated 05/09/17 recommends further information on noise sensitive locations in the vicinity, details of plant and equipment with potential to generate noise, details of the model and input data used to produce the predicted noise levels and mitigation capacity of measures during construction phase. The report dated 08/12/17 following FI has no objection subject to conditions.

Veterinary Department in a report dated 04/09/17 states that effects of glint and glare may affect an existing equine enterprise to the northwest. Mitigation measures to be detailed.

Heritage Unit in a report dated 04/09/17 states that the main issue from an SAC perspective is the potential for impact on water quality as a result of construction. The Construction and Management Plan is noted. Further details are required on the grid connection. The further information required by the Environment Office as summarised above is noted. Thus, there is insufficient information to complete a Habitats Directive Screening conclusion. A revised screening report and construction and environment management reports required. The potential for the proposal to have impacts on mammals can be ruled out. Additional details of the site compound, proposed biodiversity enhancement measures, buffers from drains, extent of marsh habitat along southern boundary and proposed planting required. The 2nd report dated 11/12/17 following FI is satisfied that the proposal will not have significant impacts on the Blackwater SAC. A condition should be attached requiring a preconstruction bat survey on the farm complex. The two stone buildings onsite that host bat roosts will be retained. A schedule of conditions detailed. The 3rd report dated 24/01/18 following clarification of FI notes that the stone barn that has a potential bat roost is to be retained and refers to his previous report.

The 1st Area Engineer's report dated 04/09/17 recommends further information on details of extent of existing tracks within the site and new tracks to be provided.

Section of the local road is in need of strengthening. A bond will be required to safeguard the condition of the road. Prior to commencement a road conditioning survey required. Submission of a detailed traffic management plan prior to commencement of development. Submission of details on cable installation and agreement with ESB re. grid connection to ESB station at Charleville. After commissioning of development the applicant should be required to employ a road surfacing contractor to strengthen the road surface for 40 metres either side of the entrance. Further information recommended on extent of modification of roadside boundary at entrance, sight lines, public consultation with residents, details of proposed wheel wash and cleaning of road during construction. The 2nd report dated 11/12/17 following FI recommends a layout plan indicating turning movements and manoeuvring of HGVs without the removal of structures in the area of the construction compound, details of loading/unloading of shipping containers to be used in construction compound, water supply and quantity of water required and details of office/canteen. The 3rd report dated 26/01/18 following clarification of FI has no objection subject to conditions.

Archaeologist in a report dated 05/09/17 recommends further information on nature, date and extent of certain identified anomalies/features.

3.3. Prescribed Bodies

Irish Aviation Authority has no observations.

Inland Fisheries Ireland in a report dated 17/08/18 is not opposed in principle to the development. It recommends that certain aspects be considered including drainage network to mimic current drainage regime of the lands, mitigation measures to be employed during construction to prevent discharge of polluting matter to surface waters, effective bridging of watercourses if required, and appropriate storage of fuel oils etc.

An Taisce states that a strategic national and regional strategy is required for solar farm development. The Council should ensure optimum site suitability.

3.4. Third Party Observations

The submissions received by the planning authority are on file for the Board's information. The issues raised relate to size of proposal, proximity to Annagh Bogs, adequacy of ecological assessment, impact on flora and fauna, impact on residential amenities, visual impact, increase in flooding, adequacy of public consultation, location of substation, adequacy of local road, glint and glare, disruption during construction, devaluation of property, health risks, fire risk, absence of policy provisions, loss of agricultural land, water demand and potential impact on proposed Cork to Limerick motorway.

4.0 **Planning History**

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

5.0 Policy Context

5.1. National Policy

5.1.1. National Planning Framework

Objective 55 – promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

5.1.2. Government White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015 – 2030', published in December 2015.

The White Paper sets out a framework to guide energy policy between now and 2030. It includes an objective to 'accelerate the development and diversification of renewable energy generation' and increase the country's output of electricity from renewable sources'. It states that this will be achieved through a number of means including wind, solar PV and ocean energy.

Section 137 - Solar photovoltaic PV technology is rapidly becoming cost effective for electricity generation, not only compared with other renewables but also compared with conventional forms of generation. The deployment of solar energy in Ireland has the potential to increase energy security, contribute to our renewable energy targets

and support economic growth and jobs. 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.

5.2. Regional Policy

The Regional Planning Guidelines for the South-West Region 2010-2022 recognises that the region has a key role to play in the attainment of the national renewable energy targets. 'The guidelines support the sustainable development of renewable energy generation subject to the sustainable development of local areas and the protection of areas of high scenic amenity. Possible effects on Natura 2000 Sites, including effects on water supply and hydrology, wildlife disturbance, habitat loss and species mortality associated with collisions should be an essential consideration when planning for renewables and these should be considered at the local or project-level stage. (Section 5.6.32)

5.3. Local Policy

Cork County Development Plan 2014

Sections 9.4.13 to 9.4.18 refer to solar energy in which it is noted that in other jurisdictions there are some larger scale electricity generating schemes using this method where climatic conditions allow. With technological advances it is possible that these larger scale installations may become practical in Cork and if this occurs careful consideration will need to be given to their scale, location and other impacts.

As per Appendix E the site is within Landscape Character Type 5: Fertile Plains with Moorland Ridge. It is not within an area designated as being a High Value Landscape (Figure 13.2).

Objective GI 6-1 Landscape

- (a) Protect the visual and scenic amenities of County Cork's built and natural environment.
- (b) Landscape issues will be an important factor in all land-use proposals, ensuring that a proactive view of development is undertaken while maintaining

respect for the environment and heritage generally in line with the principle of sustainability.

- (c) Ensure that new development meets high standards of siting and design
- (d) Protect skylines and ridgelines from development
- (e) Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows etc.

Objective GI 6-2 Ensure that the management of development throughout the County will have regard to the value of the landscape, its character, distinctiveness and sensitivity as recognised in the Cork County Draft Landscape Strategy and its recommendations, in order to minimise the visual and environmental impact of development, particularly in areas designated as High Value Landscapes where higher development standards (layout, design, landscaping, materials used) will be required.

5.4. Natural Heritage Designations

Annagh Bogs which is c. 550 metres to the south of the site is part of the Blackwater River (Cork/Waterford) SAC (site code 002170).

6.0 The Appeal

6.1. Grounds of Appeal

The 3rd party appeal by Cunnane Stratton Reynolds on behalf of Fiddane Solar Action Group, which is accompanied by supporting detail, can be summarised as follows:

6.1.1. Policy Provisions

- There is a lack of national, regional and local policy guidance.
- The proposal should have been assessed against the recommendations set out in the 2016 research paper 'Planning and Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland'.

6.1.2. Environmental Impact Assessment

- A project of this size should be subject to EIA
- Proposed internal access roads would exceed the 2000 metre threshold set out in Section 10 (d) Part 2, Schedule 5 of the Regulations. The view that a site track is materially different to a road as expressed by the Council planner (who makes reference to the Board's decision under ref. PL26.247217) is not accepted. The definition as given in the Roads Act is noted. The tracks will be used in the same way a road would be.
- The proposal must be considered as an infrastructure project as per Section 10(b)(iv) Part 2 of Schedule 5. The site is greater than 10 hectares in area. Regard is had to the interpretation of definitions of project categories of Annex I and II of the EIA Directive. Given the nature of the proposed development which, if permitted, would connect to the national grid and power home and businesses, could be considered to be related to urban development.
- Section 3(a) Part 2 Schedule 5 which refers to industrial installations for the production of electricity, steam and hot water not included in Part 1 with a heat output of 300 megawatts or more may also be relevant
- The proposed development was not assessed against the criteria for determining whether a development would or would not be likely to have significant effects on the environment as set out in Schedule 7 of the Planning and Development Regulations.
- In view of the absence of guidance in terms of the applicability of EIA requirements for solar farm developments, screening needs to be carefully carried out. The screening exercise undertaken by the applicant and the planning authority are considered to be deficient.
- The proposal should have been screened in the context of Directive 2014/52/EU. The applicant should have consulted the EPA's draft guidelines which note that when determining if a project is of a type covered by the Directive it may be necessary to go beyond the general description of the project and to consider the component parts and/or processes arising

from it. If any such part of the process are significant and, in their own right fall within a class of development covered by the Directive, the project as a while may fall within the requirements of the Directive.

6.1.3. Connection to National Grid

- As the proposal should have been subject to EIA the O'Grianna ruling with respect to grid connection and cumulative impacts is relevant. The Daly v. Kilronan Windfarm case is also relevant.
- The laying of the cable under the public road also raises the question of road ownership and trespass.

6.1.4. Strategic Infrastructure Development

- There is no evidence that the applicant has considered whether the proposal is SID under section 182A or section 37A of the Planning and Development Act, 2000, as amended. The applicant should have applied to the Board for pre-application consultation.
- 6.1.5. AA Screening and Ecological Assessments
 - The validity of the ecological assessment must be questioned given that site surveys were not carried out at the optimal time.
 - There are streams running along the boundaries of the site and are noted in the CEMP. They should have been identified and considered in the AA Screening.
 - There is significant concern as to the potential impact on Annagh Bogs to the south. The area is very challenging in terms of forest establishment. Any increase in water flowing into the area will exacerbate the situation and is likely to increase tree mortality.
- 6.1.6. Glint and Glare
 - There are concerns of the impact on the adjoining equine enterprise.
- 6.1.7. Substation location and future use of Construction Compound
 - The substation is to be located c. 250 metres from the appellant's family home and 40 metres from the farm land.

• The future use of the compound, particularly for battery storage, is queried.

6.2. Applicant Response

The submission, which is accompanied by supporting documentation, can be summarised as follows:

- 6.2.1. Procedural Issues
 - The appellant is not a 'person' capable of making an appeal as per section 127(1) of the Act. The appeal is not properly constituted.
 - Early engagement with local residents and councillors was undertaken.

6.2.2. Policy

- The Planning and Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes is a research paper, only, and is not adopted policy or guidance.
- Regard is had at national level to the National Planning Framework, Ireland's Transition to a Low Carbon Energy Future 2015-2030 – White Paper, Climate Action and Low Carbon Development Act 2015, Green Paper on Energy 2014 and National Renewable Action Plan 2010.
- It is an objective of the Regional Planning Guidelines to promote renewable energy development
- The County Development Plan refers to utility scale solar energy.
- The absence of bespoke national guidelines does not preclude the assessment and granting of permission for such proposals. Precedent has been set with regard to the question of prematurity – Element Power Ireland Ltd. v. An Bord Pleanala (2017) (EHC 550), PL93.246902 and PL03.247632 referenced.

6.2.3. Need for EIA

- A comprehensive screening exercise was undertaken.
- EIA Directives and Irish legislation transposing same into national law do not apply in the present case.

- The draft EPA guidelines are not relevant.
- The proposed development is not listed in Annex I or II of the EIA Directive or Schedule 5 of the Planning and Development Regulations.
- Appeals to the Board for comparable development did not require EIA.
- There is only 1 no. new track proposed between the access to the control room. Once operational traffic will be limited to occasional maintenance works and security visits.
- The issue of tracks was assessed and determined not to be 'road' in case ref. PL26.247217.
- Solar farm is not an industrial process. This was assessed and determined not to be an industrial installation for the production of electricity, steam and hot water.
- 6.2.4. Strategic Infrastructure Development
 - The proposal does not constitute SID
 - No solar farm to date has been determined to be SID.
- 6.2.5. Site Suitability
 - The site is suitable for the scale of development in a rural location with a low density of properties and outside any area sensitive to policy (landscape) and ecological constraints.
 - Other solar farm schemes of over 100 acres have been granted permission on appeal. The scheme refused permission under ref. PL26.247217 is not comparable to the subject case.
 - The site's topography is able to comfortably absorb and assimilate the proposal into its host landscape. It respects its character, sensitivity and value in accordance with the designation within the Draft County Cork Landscape Strategy. The proposed mitigation measures will reduce any impacts further.
 - Only intermittent views of the proposal would be available within 500 metres before planting. The theoretical visibility decreases beyond this distance due

to rising topography to the north and insignificant overall height of the solar farm.

- The additional design changes as part of the further information submission resulted in an enlarged exclusion zone for the known archaeological feature to the west of the site and landscaping proposals. This will result in practically no visibility.
- Some changes in the character of the immediate landscape will occur due to the presence of the solar farm but is considered to be restricted to the immediate vicinity of the site.

6.2.6. AA Screening and Ecological Assessment

- Surveys were undertaken in the months of October 2016 and September 2017. Whilst the botanical survey was later than the optimal time for general habitat survey, identification of species was still possible. This did not create a difficulty for the overwhelming proportion of vegetation within the site given the nature of the site for agricultural use which is typically of a mono-crop type with 99% of biodiversity located within existing hedgerows, none of which are to be removed.
- The Board could condition further surveys in spring and summertime however it is not considered necessary in this instance. Condition 40 requires an additional bat survey.
- The prevailing habitat is improved agricultural grassland.
- A marsh identified by the ecological assessments shall be avoided with a 20 metre buffer to be maintained.
- There is considerable opportunity for biodiversity enhancement. A Biodiversity Management Plan accompanies the application. It is proposed to monitor the site twice a year and record species.
- There will be no loss to the Natura 2000 site in integrity or function.
- The Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Inland Fisheries Ireland had no objection to the proposal.

- There are extensive measures proposed within the preliminary CEMP that will protect the watercourses from any risk of pollution or contamination.
- All panels will be kept 10 metres away from any watercourse.
- No significant stripping of over burden material is required for the solar panels and will only be undertaken for the invertor cabin, control room and possibly within the compound.
- The planning authority has attached conditions to ensure the local environment is adequately protected. Conditions 14-26, 30, 31, 42-45, 55 & 59 deal with prevention of water pollution.
- Water supply is to be from the nearby farm.
- The wheel wash will be self-contained.
- The application is accompanied by a Flood Risk Assessment. The panels will not be located within Flood Zones A or B.
- There will be no loss of existing permeable ground either beneath or adjacent to the solar arrays. There will be no net increase in discharge rate or runoff volume with corresponding response times generally remaining as per the existing situation.
- Surface water runoff from DNO substation structures shall be discharged to appropriately designed soakaways.
- The underground cable to the Charleville 110kV substation would cross two minor watercourses via the existing bridges and would not involve any works within the watercourses.
- 6.2.7. Residential Amenities
 - The nearest dwelling is 55 metres from the proposed development.
 - Setbacks of between 120 and 170 metres are proposed from transformers to the nearest dwellings (not benefitting from the proposal).
- 6.2.8. Connection to National Grid
 - It is proposed to connect the solar farm to the 110kV substation in Charleville.
 A 38kV ESBN compound will be required.

- As the proposal is not subject to EIA the requirements following the O'Grianna judgement is not relevant.
- The issues of road ownership and trespass have no bearing on the appeal. Section 34(13) of the Planning and Development Act is clear that a person shall not be entitled solely by reason of a permission under this section to carry out any development.
- A grant of permission does not relieve the developer of other legal obligations.

6.2.9. Loss of Agricultural Land

- There is no Irish equivalent of the Agricultural Land Classification system in England nor is there any alternative qualitative land grading assessment used in the planning system.
- There is no policy which precludes the development of solar farms on agricultural land.
- The proposal represents a form of agricultural diversification.
- It will allow for continued agricultural use such as grazing by small livestock.
- Whilst the loss of agricultural land would occur for a period of 30 years it would not be a permanent loss.

6.2.10. Glint and Glare

- Glint and glare effects are not predicted for dwellings and road users following implementation of the proposed mitigation measures.
- Reflections effects to the equine enterprise to the west would be insignificant following implementation of mitigation measures. Reflections would only be possible towards the western parts of the equine enterprise because the terrain is elevated compared to the solar farm boundary. Reflections would be of comparable intensity to those from still water and less intense than those from glass and other common outdoor surfaces. Reflections would coincide with direct sunlight which is significantly more intense than any reflections from a solar panel.
- The applicant is unaware of glare from solar farms adversely impacting equine interests. There are no formal rules pertaining to glint and glare

impacts on horses and no formal requirement for the assessment of impacts on animals.

- The Planner's report makes reference to the fact that the Veterinary Inspector has no objection.
- 6.2.11. Substation Location and Future use of Construction Compound
 - The substation (labelled as DNO) is sensitively located behind the proposed construction compound and existing farm buildings. It will be 183 metres from the dwelling to the north-east, 240 metres from the dwelling on the opposite side of the road, also to the north east, and 272 metres from the dwelling to the west.
 - There are no plans for battery storage at the site. Any such proposal would require planning permission.

6.3. Planning Authority Response

The recommendation to grant permission was informed by the assessments of the Area Engineer, the Senior Executive Engineer, the Archaeologist, Heritage Officer, Environmental Officers, Veterinary Officer and Conservation Officer.

6.4. **Response to Applicant's Submission**

The applicant's response to the appeal was circulated for comment.

The submission by Cunnane Stratton Reynolds of behalf of the appellant can be summarised as follows:

- The EIA screening report failed to take account of the cumulative impacts. There are two wind farm sites in close proximity.
- There is strong opposition to the proposal.
- The site, within the character area Fertile Plain with Moorland Ridge, is identified as having a very high landscape value and sensitivity. The County Plan notes that these types of landscapes are considered to be the most valuable and therefore it is proposed to designate then as High Value Landscapes.

- The planning status of the grid connection has not been adequately addressed.
- The applicant does not have the consent of the relevant owners of the road.
 The validity of the application is queried.
- It is noted that the laying of cables is considered to be exempt development under Class 26 Part 1 Schedule 2 of the Planning and Development Regulations 2001 (as amended). It has not been demonstrated that this exemption can be applied in this case.

6.5. Section 131 Response

The appeal was circulated to prescribed bodies for comment. A response was received from the Department of Culture, Heritage and the Gaeltacht

It recommends that the exact wording of conditions 46, 47 and 48 be retained in this instance to ensure that the archaeological requirements are understood by the relevant professional and the appropriate archaeological mitigation is employed in order to preserve the integrity and setting of the monument and any subsurface archaeological features within the site.

7.0 Assessment

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

- 1. Principle of Development
- 2. Requirement for Environmental Impact Assessment
- 3. Ecology
- 4. Residential Amenity
- 5. Drainage
- 6. Visual Impact
- 7. Glint and Glare
- 8. Other Issues
- 9. Appropriate Assessment

7.1. Principle of Development

- 7.1.1. The proposed development is supported by national, regional and local policies in terms of renewable energy. Objective 55 of the National Planning Framework seeks to promote renewable energy and generation at appropriate locations within the built and natural environment, whilst paragraph 130 of 'Transition to a Low Carbon Energy Future 2015-2030 - White Paper on Energy Policy' recognises that solar energy will become more cost effective as technology matures and that it will be an integral part of the mix of renewables going forward. At a regional level it is an objective of the South West Regional Planning Guidelines to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network. At a local level, whilst there is support for solar energy production as a renewable resource, due to the emerging nature of the technology at the time of the plan preparation specific objectives with respect to same or identification of areas considered suitable/unsuitable for solar farms were not included. Therefore, in the absence of a 'plan-led' approach, applications are to be considered on their individual merits and subject to normal planning considerations.
- 7.1.2. The appellant makes reference to the document titled '*Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland*' prepared by Sustainable Energy Authority of Ireland in 2016. Whilst noted this document does not comprise adopted policy or guidance.
- 7.1.3. The development would be sited on agricultural land. I note that the UK has a grading system for land, ranging from Grade 1 (most productive) to Grade 5 (most marginal). There is no such grading system in Ireland and specifically there is no policy which precludes the development of solar farms on agricultural land.

7.2. Requirement for Environmental Impact Assessment

Solar farms are not a class of development that is listed in Parts 1 or 2 of Schedule 5 of the Planning and Development Regulations, 2001, as amended. With regard to other classes of development cited by the agent for the appellants I note the following;

Class 3(a) of Schedule 5, Part 2: Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.

I submit that this development type relates to a form of combined heat and power plant. The development, therefore, does not fall within this class.

Class 10(b)(iv) of Schedule 5, Part 2:Infrastructure Projects – urban development which would involve an area greater than20 hectares elsewhere.

I submit that a solar farm is not an urban development and does not fall within this class.

Class 10(dd) All private roads which would exceed 2000 metres in length.

Save for a short track between the access, proposed construction compound and ESBN control building, which is less than 100 metres, no additional tracks over those that already existing on the site are proposed. I submit that the track is materially different from a road as defined under the Roads Act 1993. The development, therefore, does not fall within this class.

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

Article 92 of the Planning and development Regulations 2001, as amended, defines subthreshold development for the purposes of EIA as 'development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. As solar farm development is not a development set out in Schedule 5, the subject development is not 'sub-threshold development' for the purpose of EIA and EIAR is not required for the development.

7.3. Residential Amenity

7.3.1. The site is located within a rural area characterised by sporadic one off housing along the local road network. The nearest properties are those to the north along

the local road with a separation distance of approx. 50 metres from the site boundary to the nearest dwelling not occupied by one of the landowners, with the nearest solar array being set back approx. 70 metres from same. Save for one location in the north-west corner the solar arrays are set back from the roadside boundary.

- 7.3.2. A 5 metre wide buffer of semi-mature tree planting along the north and western boundaries with further planting along the eastern boundary and in gaps in existing hedgerows is proposed which will screen the development from view. I address visual impact in further detail below.
- 7.3.3. It is estimated that the construction period would be in the region of 16 weeks and it is inevitable that potential negative impacts to the local population may occur particularly in terms of noise and traffic. However, these impacts will be temporary. As noted above the additional traffic generated during the operational phase would be minimal.
- 7.3.4. An Environmental Noise Assessment accompanies the application and was amended by way of further information. The panels, in themselves, would not generate noise. The main noise sources would be from the transformer/invertors which will be within containers which will have insulating properties and are located at a remove from the nearest dwellings. Having regard to the low level of noise that will be generated, the separation distance to dwellings and the fact that the solar farm would operate during daytime, only, other noise sources such as traffic and farm machinery will contribute to the noise environment, I consider that impacts would be negligible and insignificant.
- 7.3.5. In terms of the construction period mitigation measures including temporary hoardings along the boundary of the proposed site with nearby noise sensitive receivers, notification of residents of timing and duration of various stages of construction etc and reduction of hours of construction activity directly adjacent to sensitive receivers are recommended. The measures are considered reasonable.
- 7.3.6. The impact of the proposal on the equine enterprise to the north-west of the site is raised. Whilst noise will arise during the construction phase the period is temporary in duration. Noise is not considered to be a factor during the operational phase. Issues in terms of glint and glare are addressed below.

7.4. Drainage

- 7.4.1. The site consists of in the region of 20 fields with a number of field drains that discharge into the Oakfront River to the east and to the Ardglass Stream to the west of the site. I note that a 10 metre buffer from all drains and ditches and a 20 metre buffer from the small marsh area identified along the southern boundary are to be maintained.
- 7.4.2. From the Preliminary Flood Risk Assessment (PFRA) mapping produced by the OPW the south-eastern most corner of the site may potentially fall within an indicative fluvial flood zone associated with the Oakfront River with an area of potential indicative pluvial flooding in the north-east corner. No solar panels are proposed within these areas.
- 7.4.3. The construction process for the solar farm is considered to be relatively low impact from a geotechnical perspective. The metal uprights supporting the solar arrays will be driven into the soil without any separate foundations. Therefore, there will no significant changes to the topographical profile of the soil or to the characteristics of the soil that would affect drainage patterns. During rainfall events runoff from the angled panels will be to the permeable surface below. There will be no net increase in discharge rates or runoff volume from the site. The additional access track is to be constructed to have a permeable surface. The only impermeable areas would be those created by the substation and invertor stations which would be a small percentage of the overall site area. The applicant is proposing to install soakaways adjacent to each of these structures to discharge rainwater from their roofs to ground.
- 7.4.4. The potential for silt laden run off to enter adjoining watercourses during construction works is dealt with in the Construction Environmental Management Plan.
- 7.4.5. On the basis of the information provided it is reasonable to conclude that the proposed development will not impact upon the prevailing drainage conditions or water quality in the area.
- 7.4.6. Water supply for the construction compound for the duration of the construction phase will be provided from an existing well located with the adjoining landowner's farm. The wheel wash shall be self-contained and will not require the discharge of wash waters to receiving water bodies at the site.

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7.5. Visual Impact

- 7.5.1. The subject site covers an area of 67.8 hectares in a relatively low lying landscape in agricultural use. The highest point of the site is along the local road to the north with falls to the south.
- 7.5.2. As per the current County Development Plan the site, whilst noted to be within a landscape character type Fertile Plain with Moorland Ridge, is not designated as a High Value Landscape. The general area is characterised by an undulating topography with medium sized field patterns and mature hedgerows.
- 7.5.3. The potential landscape and visual impact of the scheme is considered in the Landscape and Visual Impact Assessment report that accompanied the application which is supported by photomontages. This is supplemented by way of further information with additional photomontages from the south, including views from the Ballyhoura waymarked way. Following an inspection of the site from points in the immediate vicinity and further afield I submit that the said photomontages are reasonable and provide a useful aid in the assessment of the potential visual impact.
- 7.5.4. Whilst the development will be visible from the immediate surrounds and from points along the local road immediately to the north, the topography of the site and the existing mature vegetation both in terms of roadside hedgerows and coniferous woodland plantations near the site to the east and south, preclude open views either in the immediate environs or from further distances. Any views would be intermittent. I would submit that the existing landscape consisting of a setting which is a working rural landscape would, following mitigation, have a low visual impact. The Board will note the intention of the applicant to retain existing hedgerows within and abounding the site as well as proposals to reinforce the existing site boundaries with further planting. In addition, a 5 metre wide buffer of semi-mature tree planting is proposed along the north and western site boundaries with further planting the eastern boundary and in gaps in existing hedgerows which will further screen the development from view.
- 7.5.5. Whilst there is no doubt that the proposed development would change the local landscape from a visual perspective, in my view the established landscape is capable of absorbing change. Having regard to the mitigation measures proposed I

am satisfied that the proposed development would not adversely impact on the landscape and visual amenities of the area including those from adjoining properties.

7.6. Glint and Glare

- 7.6.1. I note that the proposed development does not include tracking panels and that the panels are instead fixed in one orientation, facing due south. Solar PV panels, in order to be efficient, need to absorb as opposed to reflect, solar irradiation and therefore have an anti-reflective coating.
- 7.6.2. A Glint and Glare analysis accompanies the application which was supplemented by further details at further information stage. Analysis was undertaken for dwellings within 1km of the site which equated to 23 properties. Analysis was also undertaken for the equine enterprise which bounds the site to the west. The analysis states that whilst glint and glare effects would be geometrically possible at 14 properties to the north of the site in the 'bare ground' scenario (which does not consider screening from terrain or hedgerows) when due regard is had to same and to the proposed planting none will be affected.
- 7.6.3. An assessment of road locations also concludes that due to the screening provided by hedgerows and trees road users would not be impacted by glint and glare.
- 7.6.4. In terms of the equine enterprise the details provided in the further information response are supplemented by further comment in the appeal response. It is stated that reflections are theoretically possible early in the morning between March and October. The proposed screening would eliminate views of the panels from the eastern portion of the holding. Some views may remain from the western portion because the terrain is elevated above the solar farm boundary. The intensity of glare from solar panels is comparable to reflections from water. Any instances of glare would coincide with direct sunlight which is significantly more intense than reflected light from a solar panel.
- 7.6.5. Overall, I accept the findings of the report that no significant nuisance is predicted to surrounding dwellings/enterprises or along surrounding roads from glint and glare.

7.7. Cultural Heritage

A Cultural Heritage/Archaeological Impact Assessment accompanies the application. There is one recorded monument within the site located along the western site boundary (ringfort ref. CO007-071). An exclusion zone is proposed to be maintained to protect same. In addition, a further 7 no. exclusion zones are proposed to protect possible remains identified during the geophysical survey. Archaeological monitoring is proposed during the construction phase. I note the submission from the Department of Arts, Heritage and the Gaeltacht recommending that the wording of the conditions 46-48 be replicated should the Board be disposed to a favourable decision

7.8. Ecology

7.8.1. In support of the proposed development, the applicant submitted an Appropriate Assessment Screening report which included details of site surveys. The site is c.550 metres from Annagh Bogs which forms part of the Blackwater River (Cork/Waterford) SAC (site code 002170).

The flora as identified is synonymous with a managed agricultural landscape with no protected species identified. The fauna identified would also be common within such an agricultural landscape. Whilst the applicant acknowledges that the surveys undertaken in the months of October 2016 and September 2017 were later than the optimal time for general habitat survey and flowering period of protected plants it is contended that identification of species was still possible. I consider this to be a reasonable view and the timing of the surveys does not create a material difficulty in view of the fact that the site is in managed agricultural use. 99% of biodiversity is located within existing hedgerows, none of which are to be removed. No bat survey was conducted with information taken from the Bat Conservation Ireland database which does not identify any bat roosts within 10km of the site. The evaluation of the site suggests the presence of bats. In terms of potential roosting sites the existing farm buildings in the north-west corner are to be retained. I note that the Council's Heritage Officer recommends a bat survey prior to commencement of development and which would included by way of condition.

- 7.8.2. The existing hedgerow network is to be retained and augmented as part of the proposal. Wildflower/wild seed planting, in addition to measures such as hibernation areas for various species are proposed, which will serve to enhance the biodiversity of the site are also detailed. A Biodiversity Management Plan accompanies the application. During the operational phase access by mammals will be maintained by suitably designed fencing.
- 7.8.3. Given the location of the site in an area characterised by similar lands and habitats and the mitigation measures to be incorporated I consider that the impacts on the ecology of the site would be acceptable.

7.9. Access and Traffic

- 7.9.1. A Traffic Management Plan accompanies the application.
- 7.9.2. The site is to be accessed from local road L1307 which bounds the site to the north at an existing farmyard access. The road in the vicinity can accommodate two way vehicular traffic and was noted to be relatively lightly trafficked on day of inspection. The 80kph speed limit applies. The site is approx. 5.5km to the west of the N20 Cork Limerick National Primary Road. Sightlines of 90 metres in both directions from a setback of 2.4 metres can be attained subject to removal of the hedgerow for a distance of 8 metres, with consent from the respective landowner submitted in support.
- 7.9.3. Of particular concern is the construction period which is anticipated to last in the region of 12 weeks with 858 HCV trips in total. The preferred route for such HCV traffic is from the N20 via Ballyhea.
- 7.9.4. The peak traffic flows are likely to occur during phase 2 (weeks 4-11) corresponding the main construction and installation period. It is estimated that this period would result in an average of 60 vehicle trips per week and average of 12 vehicles a day.
- 7.9.5. In addition it is estimated that up to 50 construction staff would be on site during peak construction resulting in a further 15 to 25 trips during the morning and evening peaks.
- 7.9.6. The management plan for the construction phase includes details of temporary signing strategy, vehicle arrival/departure strategy and timing restrictions. The

planning authority by way of condition requires a road condition survey to be undertaken prior to commencement of development, road strengthening for short distances either side of the proposed access and a bond to ensure the satisfactory reinstatement of the road following the construction period. I consider that a condition requiring an appropriate bond/security would be appropriate to cover these requirements.

- 7.9.7. I consider, subject to the traffic management plan and construction management plan, that the proposed construction traffic can be accommodated on the local road network. Whilst the additional traffic and management measures will inconvenience local road users and residents of dwellings in the vicinity the impacts are considered acceptable having regard to the limited duration of the works.
- 7.9.8. The operational phase of the solar farm would generate limited vehicular movements associated with maintenance and security. Having regard to the established use of the existing access and the low level of operational traffic that would arise as a result of the operation of the proposed development, I do not consider that a material intensification in the use of the access would arise. Its use during the operational phase is therefore acceptable.

7.10. Other Issues

- 7.10.1. Solar farms are not a development class set out in the 7th Schedule for which consideration would be required in terms of Strategic Infrastructure Development. I also note that such type development does not entail 'transmission' as per Section 182A(1) of the Planning and Development Act, 2000, as amended. Transmission is defined as the transport of electricity by means of high voltage lines of 110kV or more and electric plant. The ESBN control building is to be 38kV.
- 7.10.2. Whilst there is a difference of opinion regarding the level of public consultation in relation to the project, it is clear that local residents were aware of the application and engaged in the process by making their views known through written submissions to the Planning Authority in the first instance and to the Board at appeal stage.
- 7.10.3. It is anticipated that the development will connect to the existing 110kV substation at Charleville via a c. 3.8km long 38kV underground cable to be laid along public roads.

The appellants contend that the applicant does not have sufficient legal interest to make the application on the basis that evidence of consent from the respective landowners to lay the grid connection along the local road has not been submitted. The said connection does not form part of the application. I consider that sufficient detail has been provided on the grid connection to allow for an assessment of the proposal subject of the appeal. I note that a grant of permission does not, in itself, confer the right to implement the permission as set out under section 34(13) of the Planning and Development Act, 2000, as amended.

- 7.10.4. The period sought for the duration of the permission is 30 years. I note that the Board in previous decisions on solar farm development has specified a 25 year period. In the interests of consistency I recommend such a 25 year period be applied by way of condition
- 7.10.5. The potential future use of the construction compound is not before the Board for comment or adjudication. The development subject of the appeal does not propose the provision of battery storage.
- 7.10.6. The applicant has queried the validity of the application with reference to the appellant. The appeal has been accepted as valid.

7.11. Appropriate Assessment

An Appropriate Assessment Screening Report accompany the application

7.11.1. Project Description and Site Characteristics

The proposed development is as described in sections 1 and 2 above.

7.11.2. Relevant Natura 2000 Sites, Qualifying Interests and Conservation Objectives

Blackwater River (Cork/Waterford) SAC (site code 002170) is c. 550 metres to the south of the appeal site. The qualifying interests are:

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Perennial vegetation of stony banks
- Salicornia and other annuals colonising mud and sand

- Atlantic salt meadows
- Mediterranean salt meadows
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- Old sessile oak woods with Ilex and Blechnum in the British Isles
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior
- Freshwater Pearl Mussel
- White-clawed Crayfish
- Sea Lamprey
- Brook Lamprey
- River Lamprey
- Twaite Shad
- Salmon
- Otter
- Killarney Fern

Ballyhoura Mountain SAC (site code 002036) which is c.1km to the east of the appeal site. The qualifying interests are

- Northern Atlantic wet heaths with Erica tetralix
- European dry heaths
- Blanket bogs (* if active bog)

Details conservation objectives have been drawn up for both sites, the overall aim being to maintain or restore the favourable conservation status of habitats and species of community interest.

7.11.3. Assessment of likely effects

As the site is not within a designated site no direct impacts will arise.

In view of the separation distance and the site's location downslope of Ballyhoura Mountain SAC I consider it reasonable to conclude that the proposed development would not have significant effect on the qualifying interests of the designated site.

Annagh Bogs which is c.550 metres to the south of the site is within the Blackwater River SAC. The Ardglass Stream to the west and Oakfront River to the east discharge to the Blackwater SAC c. 662m and 1.9km downstream of the site respectively. The nearest mapped qualifying interests in the SAC are the whiteclawed crayfish c. 3km to the south and semi-natural woodland c. 8km to the south of the appeal site.

There is a hydrological connection between the site via the drainage ditches to the designated site. Field drains within the site discharge into the adjacent watercourses noted above. As a consequence there is potential for indirect effects from emissions to ground and surface water during the construction phase such as silt laden run off, hydrocarbons or other pollutants.

Taking into consideration the incorporation of best practice methods during the construction phase which are considered an integral part of the development to protect against sediment and hydrocarbon release, I would concur with the conclusions of the Screening report submitted that no indirect impacts are envisaged. In terms of the operational phase discharge from the development is to be to existing greenfield runoff rates. It is not proposed to remove any existing on site drainage ditches.

In terms of cumulative impacts I have regard to the rural character of the area dominated by agricultural uses and one off housing. I am not aware of any large planned or permitted development in the vicinity. The proposed development therefore is not considered to result in cumulative effects.

7.11.4. Screening Statement and Conclusions

In conclusion having regard to the foregoing and on the basis of the information available, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, 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 Blackwater River (Cork/Waterford) SAC (site code 002170) and Ballyhoura Mountains SAC (site code 002036) in view of the sites' Conservation Objectives and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

8.0 **Recommendation**

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

9.0 **Reasons and Considerations**

Having regard to:

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

it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual amenities of the area or the residential amenities of property in the vicinity, would not be likely to have significant effects on the environment, or the ecology of the area and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment Screening

The Board completed an Appropriate Assessment Screening exercise in relation to the potential effects of the proposed development on European Sites, taking into account the nature, scale and location of the proposed development, the receiving environment, the Appropriate Assessment Screening Report submitted with the application and the Inspector's report and submissions on file. In completing the screening exercise, the Board adopted the report of the Inspector and concluded that, by itself or in combination with other development in the vicinity, the proposed development would not be likely to have a significant effect on any European Site in view of the sites' conservation objectives.

10.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 17th day of November 2017 and 22nd day of December 2017, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of the development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interests of clarity

2. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this Order.

Reason: Having regard to the nature of the proposed development, the Board considered it reasonable and appropriate to specify a period of the permission in excess of five years.

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

(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the

solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.

(c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

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

4. 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.

 (a) Existing field boundaries shall be retained, notwithstanding any exemptions available and new planting undertaken in accordance with the Landscape Layout Drawing No. LA 001 REV04 submitted to the planning authority on the 15th day of November 2017.

(b) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development. Any trees or hedgerow that are removed, die or become seriously damaged or diseased during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of biodiversity, the visual amenities of the area, and

the amenities of dwellings in the vicinity.

 A bat survey shall be undertaken by a suitably qualified person and shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interest of wildlife protection.

 (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.

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

(c) Cables within the site shall be located underground.

(d) The inverter/transformer stations shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black slate or tiles

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

8. A revised layout plan of the construction compound delineating the buildings to be retained, car parking provision, location of wheel wash and location of stockpiles shall be submitted to the planning authority for written agreement prior to commencement of development.

Reason: In the interest of clarity and to ensure a proper standard of development.

 Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates every 100 metres along the perimeter fence and in accordance with standard guidelines for provision of mammal access (National Roads Authority 2008).

Reason: To allow wildlife to continue to have access across the site.

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

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

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

The assessment shall address the following issues:

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

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

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

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

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

11. Buffer zones shall be established around:

(a) Ringfort C0007-001 (buffer zone A) as shown on Figure 1

(b) Zones A – G as outlined in Zones of Exclusion on Figures 9, 12 – 16

in the Archaeological Impact Assessment Report received by the planning authority on the 15th day of November, 2017.

The buffer zones shall be delimited using appropriate temporary boundary fencing and signage.

A site layout showing the location of the buffer zones supported by photographic evidence shall be submitted for the written agreement of the planning authority prior to commencement of development. No constructions works, stockpiling of topsoil etc., or any development, landscaping and/or planting shall take place within the designated buffer zone. No trees, plants etc. shall be removed from this buffer zoned.

Subsequent to the completion of development the buffer zone shall remain around the Recorded Monument C0007-001. Planting within this buffer zone shall be limited to shallow rooted plants and /or grass.

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

Buffer zones shall be established around features T1, T2, T12, T13, T18, T23 and T33 as outlined in Figures 1 – 7, 12-13, 18, 23 and 33 in the Archaeological Impact Assessment report received by the planning authority on the 15th day of November, 2017.

The buffers zones shall be delimited using appropriate temporary boundary fencing and signage until the solar panels are installed. No ground works shall take place in the designated buffer zones.

A site layout plan showing the location of the buffer zoned supported by photographic evidence shall be submitted for the written agreement of the planning authority prior to commencement of development. **Reason**: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may existing within the site.

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

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

14. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or other security to secure the provision and satisfactory reinstatement of the local public road, if damaged by the transport of material to the site in connection with the development, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the development. 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 the satisfactory reinstatement of local roads.

15. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to

secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

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

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

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

Pauline Fitzpatrick Senior Planning Inspector

August, 2018