



An
Bord
Pleanála

Inspector's Report PL04.249377

Development

A 10-year permission for the construction of a Solar PV Energy development within a total site area of up to 8hA, to include one single storey electrical substation building, four electrical transformer / inverter station modules, one spare parts container, solar PV panels ground mounted on steel support structures, access roads, fencing and associated electrical cabling, ducting and ancillary infrastructure.

Location

Curraduff, Glenlara, Newmarket, Co. Cork.

Planning Authority

Cork County Council

Planning Authority Reg. Ref.

16/07215

Applicant(s)

Highfield Solar Limited

Type of Application

Permission

Planning Authority Decision

Refusal

Type of Appeal	First Party v. Decision
Appellant(s)	Highfield Solar Limited
Observer(s)	None.
Date of Site Inspection	30 th January, 2018
Inspector	Robert Speer

1.0 Site Location and Description

- 1.1. The proposed development site is located in the rural townland of Curraduff, Co. Cork, approximately 2km southwest of Newmarket and c. 8.8km northwest of Kanturk, where it occupies a hillside position to the east of the River Dalua and Anne's Bridge. The surrounding area is primarily agricultural and is characterised by an undulating rural landscape interspersed with individual farmsteads and one-off rural housing, although the Glenlara electrical substation adjoins the application site to the immediate southeast.
- 1.2. The site itself has a stated area of 8.0 hectares, is irregularly shaped, and presently comprises a series of agricultural fields set as improved grassland / pasture which are enclosed by a combination of drainage ditches and mature hedgerows and bisected by a small stream. To the northeast it is bounded by a private access track which serves the adjacent substation whilst the remaining boundaries adjoin agricultural lands. Access to the site is presently obtained via an existing field gate which opens onto a larger splayed entrance arrangement serving the substation access. The site topography is generally characterised by a gradual fall south-eastwards towards the River Dalua.

2.0 Proposed Development

- 2.1. The proposed development consists of the construction of a solar PV energy development (Maximum Export Capacity: 3-4 MW) within a total site area of 8 No. hectares and includes for the following:
 - Ground-mounted solar photovoltaic panels set within galvanised metal framework racks elevated above the ground surface and assembled in south-facing rows (arrays) east to west over the development area. The panels will be fixed at an angle of 22-30° to the horizontal whilst the lower edge of the array will be approximately 0.7m in height over ground with the highest edge c. 3.2m. The panels will be situated in an elevated position to allow air flow around the modules which will also encourage vegetation to grow beneath them.

The metal support structures will utilise piles driven into the ground thereby removing the need for deeper foundations.

- 1 No. single storey electrical substation building.
- Assorted electrical infrastructure including 4 No. electrical transformer / inverter station modules.
- A spare parts container.
- 2 No. temporary construction compounds.
- Access roads, fencing, CCTV, and associated electrical cabling, ducting, and ancillary infrastructure.

2.2. The proposal has sought a 10-year permission.

N.B. The application documentation also refers to an indicative routing for a grid connection between the proposed development and the ESN Newmarket substation to the northeast by means of an underground cable which will generally follow existing private and public roads for a distance of c. 1.7km and potentially involve the crossing of the River Dalua by way of Horizontal Directional Drilling (Please refer to Appendix 2: '*Indicative Grid Connection Route: Figure 2.7*').

3.0 Planning Authority Decision

3.1. Decision

3.1.1. Following the receipt of a response to a request for further information, on 14th September, 2017 the Planning Authority issued a notification of a decision to refuse permission for the proposed development for the following 2 No. reasons:

- On the basis of the information available to the Planning Authority, the Planning Authority is not satisfied that the proposed solar farm development and associated grid connection would not cause significant pollution of the River Dalua, which forms part of the Blackwater River Special Area of Conservation (cSAC) and the granting of permission would be contrary to Objective HE 2-1 of the Cork County Development Plan, 2014. Furthermore, the Planning Authority is not satisfied that the solar farm project, if permitted, on its own or in combination with other plans or projects, would not adversely

affect the integrity of the European site. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area and would be contrary to the requirements of the Habitats Directive.

- The proposed vehicular access to the site would join a public road at a point where sightlines are restricted. The Planning Authority is not satisfied on the basis of the submissions made on the application, that the traffic likely to be generated by the proposed development would not endanger public safety by reason of traffic hazard.

3.2. Planning Authority Reports

3.2.1. Planning Reports:

The initial report prepared by the case planner (as supplemented by that of the A / Senior Executive Planner) indicated that there was no objection in principle to the proposed development, subject to the consideration of all other relevant planning issues, and subsequently recommended that further information be sought in respect of a number of items, including additional photomontages, archaeological concerns, traffic movements, the need for a site specific Draft Construction and Environmental Management Plan (to include water protection measures), and details of any construction works at Anne's bridge (if applicable) and any associated impacts etc.

Following the receipt of a response to a request for further information, a series of further reports were prepared which ultimately concluded that in light of recent case law, the proposed solar array and the grid connection should be considered as a single project for the purposes of appropriate assessment (and environmental impact assessment). Accordingly, as the preferred route for the grid connection would require directional drilling under the River Dalua, which is within a Special Area of Conservation, it was considered that it should be subjected to Natura Impact Assessment. However, as the grid connection would involve works outside of the scope of the subject application, there were concerns as regards the legality of seeking a Natura Impact Statement with regard to same. Therefore, on the basis that it could not be ruled out that the development in question would not give rise to significant impacts on a Natura 2000 site, it was recommended that permission be refused for the proposed development.

3.2.2. Other Technical Reports:

Environment (Mr. Frank O'Flynn): No objection on environmental grounds, subject to conditions.

Environment (Mr. Andrew McDonnell): No objection on environmental grounds, subject to conditions.

Environment (Ms. Jean Sayers): No objection on environmental grounds pertaining to waste management, subject to conditions.

Area Engineer: States that whilst there is no overall objection to the proposed development, it is recommended that further information should be sought with regard to the adequacy of the sightlines available from the proposed entrance arrangement onto the public road, the traffic movements associated with the development, the management of traffic during the construction works, surface water drainage, and the provisions to be made for water supply and foul sewage disposal during the construction stage.

Heritage Unit: An initial report assessed the impact of the proposed development on various ecological considerations, including local biodiversity, mammals, birds, and bat species, and also noted that the application site was hydrologically connected to the Blackwater River Special Area of Conservation by way of an unnamed stream which discharges to the River Dalua. In this regard it was stated that the proposal would not give rise to any significant impact on habitats of high ecological importance or lead to a net loss of biodiversity, would not result in the loss of habitats that affect the use of the site by passerine or annexed bird species, and would not impact on Annex IV bat species. However, it was considered that further details were required of the gaps proposed at the base of the perimeter security fencing that are intended to allow terrestrial mammals to commute freely. With regard to Natura 2000 sites, it was stated that given the separation distance between the proposed development site and the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area, in addition to the lack of suitable hen harrier foraging habitats on site, the proposal would not have any significant effect on the SPA. In reference to the Blackwater River Special Area of Conservation, it was considered that further information was required in relation to the buffer zones from watercourses and surface water disposal etc. given the hydrological connection

between the application site and the SAC in order to screen out any impacts. Accordingly, it was recommended that further information should be sought with regard to the submission of a Draft Construction and Environmental Management Plan (to include site specific water protection measures), the location of soil deposit areas etc., the details of the proposed mammal gates, and the provision of a new hedgerow along the northern site boundary.

Following consideration of the applicant's response to a request for further information, a further report was prepared which noted that the submitted Construction and Environmental Management Plan included reference to directional drilling under the River Dalua as part of the grid connection works whilst the updated Appropriate Assessment Screening Report stated that this methodology was the preferred option. In this regard the Heritage Unit noted that the precise location of the drilling had not been identified whilst the Department of Culture, Heritage and the Gaeltacht had concerns in relation to the suitability of the riverbed to accommodate any such drilling works. Therefore, given the inclusion of a proposal to undertake directional drilling under the River Dalua as part of the grid connection works to the Newmarket substation, it was recommended that the applicant should submit a Natura Impact Statement of the proposal which should include modelling of the likelihood of any failure of the bed around the borehole. It was also recommended that the site specific Draft Construction and Environmental Management Plan should be revised to take account of any measures proposed in the NIS as regards the directional drilling proposals.

Archaeologist: An initial report noted that the proposed development site contained Recorded Monument Ref. Nos. CO022-044 (*fulacht fiadha*) & CO022-04401 (*fulacht fiadha*) and that it was also situated adjacent to Ref. No. CO022-043. It subsequently stated that whilst the proposed development had been designed to provide a buffer from the 2 No. archaeological sites in the south-eastern corner of the site, no details of the extent of these buffers had been provided. Similarly, no details had been submitted of the buffer from the archaeological site located on the adjacent lands to the immediate northwest. The report also noted that a number of other archaeological features were identified in the geophysical survey conducted on site and that the nature of some of these items was unclear. It was accepted that 4 No. additional potential burnt mounds had been identified and that the evidence for them

as archaeological sites was considerable, however, the other potential features were unclear. Three of the four additional potential burnt mounds are located in the middle of the development and given the archaeology of the surrounding area it was considered likely that they comprise burnt mounds / *fulacht fiadha* which should be preserved *in situ*. The remaining potential features would require archaeological testing in order to establish if they are archaeological in nature (*N.B.* The presence of a large number of *fulacht fiadha* / burnt mounds in the area indicates a significant amount of human activity in the area during the Bronze Age and thus increases the archaeological potential of the unidentified features). In addition to the foregoing, it was noted that no details had been provided of the impact of the proposed development on Anne's Bridge (a Recorded Monument which is also included in the National Inventory of Architectural Heritage) despite an acknowledgement that mitigation measures would be required in order to ensure that no negative impacts would arise. Accordingly, it was recommended that further information should be sought as follows:

- A redesign of the development around the potential burnt mounds identified in the geophysical survey with a detailed ground plan identifying a buffer zone of 20m around these features and from the outer limits of Recorded Monument Nos. CO022-044, CO022-04401 & CO022-043.

or

Archaeological testing of all potential archaeological features identified in the geophysical survey and those locations where extensive subsurface excavations are required (e.g. access roads & cable trenches).

- Details of construction works at Anne's Bridge, including the identification of any potential negative impacts, both direct and indirect, on the bridge, in addition to an outline of appropriate mitigation measures so as to avoid any negative impact on same.

Following consideration of the applicant's response to a request for further information, a further report was prepared which stated that there was no objection to a grant of permission for the proposed development, subject to conditions.

Engineering: Recommends that clarification be sought as regards the availability of sightlines measured from a point set back 4.5m from the edge of the public road

given the anticipated volumes of HGV and light goods traffic during the construction phase, the methodology for the disposal of surface water from the proposed substation, details of the proposed swales and check dams, and details of the proposed grid connection (including the route of same).

3.3. Prescribed Bodies

3.3.1. *Inland Fisheries Ireland*: States that the following matters should be considered in the assessment of the subject application:

- The design of any drainage network catering for hardstanding areas or new structures should mimic the existing drainage regime of the lands in order to avoid any long-term environmental impacts on receiving waters.
- During the construction phase, the applicant should be required to employ effective mitigation measures to avoid the discharge of polluting matter such as silt, fuels and oils to receiving surface waters.
- The discharge of silt-laden waters to fisheries streams due to insufficient silt control measures can clog salmonid (salmon and trout) spawning beds and can also precipitate further riverbank erosion downstream. Inevitably, this can lead to the loss or degradation of valuable habitat. Therefore, it is important to incorporate best practice in order to minimise the discharge of silt / suspended solids to waters. Silt traps, if appropriate, should be constructed at locations that will intercept runoff from the site.
- Fuel oils etc. should be stored on a sheltered, dry, elevated site well removed from aquatic zones. The refuelling of vehicles should only be undertaken in a designated area situated away from aquatic zones and fuel oils must not, under any circumstances, discharge into an aquatic zone.

3.3.2. *Commission for Energy Regulation*: No comment.

3.3.3. *An Taisce*: States that a national and regional strategy should be put in place for the development of solar arrays and that the Planning Authority should ensure optimum site selection having regard to the need to protect biodiversity, sensitive areas, archaeological heritage, and good tillage land. In addition, it was noted that the subject site would appear to be located off Scenic Route No. S17 and, therefore, the

Planning Authority should have regard to Objectives GI 7-1 and GI 7-2 of the Cork County Development Plan.

- 3.3.4. *Department of Culture, Heritage and the Gaeltacht*: States that it cannot be ruled out that the underground electricity cable, which forms part of the development, will cross the River Dalua i.e. the Blackwater River (Cork / Waterford) candidate Special Area of Conservation. It is also noted that the response to the request for further information has indicated that the decking within Anne's Bridge over the River Dalua may not be capable of accommodating the proposed cabling and, therefore, directional drilling may be required. In this regard reference is made to the Revised Appropriate Assessment Screening Report (August, 2017) which states that "*directional drilling beneath the cSAC is required to facilitate the UCG*", however, the report notes that the exact location of any such works has not been specified and that there has been no assessment of whether the substratum of the river is suitable for directional drilling. In the absence of detailed geotechnical information on the bed of the river and the type of directional drilling methods to be employed, the Department is of the opinion that the possibility of (a) there being subterranean obstructions to the drill-head, or (b) hydraulic fracturing ('frac-out') of drilling fluid onto the bed on the river, cannot be excluded.

Therefore, the Department recommends that an appropriate assessment of directional drilling under the River Dalua be carried out and that modelling of the likelihood of any failure of the bed around the borehole be completed as part of any such assessment.

3.4. **Third Party Observations**

None.

4.0 **Planning History**

4.1. On Site:

None.

4.2. On Adjacent Sites (southeast):

PA Ref. No. 052023. Was granted on 30th June, 2005 permitting the Electricity Supply Board permission for alterations to ESB 110kV station to include 110kV busbar and gantries, 1 no. additional 110kV to 38kV transformer, 110kV switchgear,

instrument transformers, surge arrestors and associated steel supports, foundations, bunding to proposed transformer and concrete bases and foundations associated with all steel supports, all at Curraduff, Newmarket, Co. Cork.

PA Ref. No. 067114 / ABP Ref. No. PL04.218815. Was granted on appeal on 5th December, 2006 permitting the Electricity Supply Board permission for an overhead electricity transmission line of single circuit 110kV construction from the existing Glenlara 110kV station in the townland of Curraduff to a point in the townland of Cumberduff. The total length of this overhead line is approximately 7.95km. The line will initially operate at 38kV. The Dromdeeven-Glenlara circuit will be completed by the construction of a 38kV line from the end point in Cumberduff to the proposed Dromdeeven windfarm. That line is the subject of a separate planning application. The proposed line will be erected over or in the vicinity of the following townlands: Curraduff, Coolagh, Meens, Meengorman, Tooreennamire, Tooreennaguppoge and Cumberduff, Co. Cork. The line will consist of three overhead wires and two additional shield wires supported on double woodpole structures whose poles are five metres apart and of average height of 19m. Where the line changes direction, lattice steel towers of either 17.75 or 20.75m height and with an average base area of five metres square will be used. The average distance between structures will be approximately 170m.

PA Ref. No. 089874. Was granted on 2nd March, 2009 permitting the Electricity Supply Board permission for alterations to the existing ESB 110kV Glenlara station comprising of 1 no. 110kV bay to include cable sealing ends, surge arrestors, line earth disconnects and lightning column, voltage and current transformers, circuit breakers, busbar-disconnects and associated site works, all at Glenlara ESB station, Curraduff, Newmarket, Co. Cork.

PA Ref. No. 155620. Was granted on 21st October, 2015 permitting EirGrid Plc. permission for alterations to and extension of existing 110kV substation consisting of: 110kV feeder bay on A1 busbar section to connect Ballynahulla to Glenlara 110kV circuit; 110kV Full Sectionalising Bay (circuit breaker plus current transformer); new Arc Suppression Coil; replacement of T142 31.5 MVA transformer with a 63 MVA transformer; installation of a new circuit breaker in 38kV sectionaliser; and equip 38kV line bay P8 and install cable chair. It will also be necessary to relocate an existing 38kV steel mast approximately 6.7m to the north of its present

location which will facilitate the extension of the compound fence to encompass an additional 66msq (20m x 3.3m) in the northwest corner of the substation compound and all associated site works. All at Glenlara 110kV Substation, Clonfert & Curraduff, Newmarket, Co. Cork.

4.3. On Adjacent Sites (northeast):

PA Ref. No. 047837. Was refused on 8th December, 2004 refusing Gerard Doody outline permission for a dwelling house at Curraduff, Newmarket, Co. Cork.

PA Ref. No. 054034. Was granted on 7th October, 2005 permitting Andrew & Brenda Hourigan permission for the construction of dwelling incorporating domestic garage at Curraduff, Newmarket, Co. Cork.

PA Ref. No. 144555. Was granted on 18th August, 2014 permitting Andrew & Brenda Hourigan permission for the construction of a detached domestic garage and permission for the retention of the existing dwelling at a revised location at Curraduff, Newmarket, Co. Cork.

4.4. On Sites in the Immediate Vicinity

PA Ref. No. 067722. Was granted on 22nd March, 2007 permitting Pdraig & Eoin Fitzgerald permission for 2 No. dormer dwelling houses at Curraduff, Newmarket, Co. Cork.

PA Ref. No. 0613493. Was granted on 28th March, 2007 permitting Con O'Connor permission for the construction of a slatted dairy unit, silage base and soil water tank at Clonfert, Newmarket, Co. Cork.

PA Ref. No. 175776. Was granted on 3rd October, 2017 permitting Tim McAuliffe permission to construct a detached domestic garage / store at Curraduff, Newmarket, Co. Cork.

4.5. Other Relevant Files:

PA Ref. No. 032838. Was granted on 10th September, 2003 permitting the Electricity Supply Board permission for the construction of 1.3km and 0.76km of overhead 38kV line at Clonfert, Co. Cork.

ABP Ref. No. PL04.RL3531. Referral by Cork County Council as to whether the grid connection and associated works for the purposes of conducting generated

electricity between windfarms to substations at Newmarket, Kanturk, Co. Cork, and Ballynahulla, Co. Kerry, is or is not development or is or is not exempt development. No decision to date.

5.0 Policy Context

5.1. National and Regional Policy:

5.1.1. Project Ireland 2040: National Planning Framework:

Chapter 3: Effective Regional Development:

Section 3.4: Southern Region:

Key future planning and development and place-making policy priorities for this Region include:

- Harnessing the potential of the region in renewable energy terms across the technological spectrum from wind and solar to biomass and wave energy, focusing in particular on the extensive tracts of publicly owned peat extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy.

Chapter 9: Realising Our Sustainable Future:

National Policy 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.

Chapter 10: Implementing the National Planning Framework:

Section 10.3: Public Capital Investment – The National Development Plan and National Strategic Outcomes:

National Strategic Outcome 8: Transition to Sustainable Energy:

- New energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that

energy. State-owned commercial enterprises are significant players in the energy market, which is subject to an EU regulatory framework. Promotion of renewable energy is supported by policy in the form of a public service obligation levy.

- The diversification of our energy production systems away from fossil fuels and towards green energy such as wind, wave, solar and biomass, together with smart energy systems and the conversion of the built environment into both generator/consumer of energy and the electrification of transport fleets will require the progressive and strategic development of a different form of energy grid.
- The development of onshore and offshore renewable energy is critically dependent on the development of enabling infrastructure including grid facilities to bring the energy ashore and connect to major sources of energy demand. We also need to ensure more geographically focused renewables investment to minimise the amount of additional grid investment required, for example through co-location of renewables and grid connections.
- Ireland benefits from interconnection with the UK gas pipeline network and while there are two gas pipelines with two separate entry points into the island of Ireland, both pipelines are connected through a single facility in Moffat, Scotland. In addition, our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices.

5.1.2. **The Government White Paper ‘Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030’:**

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 competitive for electricity generation, not only compared with other renewables but also compared with conventional forms of generation.

The deployment of solar 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. 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.

5.1.3. **The South West Regional Planning Guidelines, 2010-2022:**

Chapter 5: Transport and Infrastructure Strategy:

RTS-09: Energy and Renewable Energy:

It is an objective to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network. National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.

It is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the Region will promote the development of renewable energy resources in a sustainable manner. In particular, development of wind farms shall be subject to:

- the Wind Energy Planning Guidelines
- consistency with proper planning and sustainable development
- criteria such as design and landscape planning, natural heritage, environmental and amenity considerations.

It is an objective of the guidelines to promote the sustainable provision of renewable energy from tidal, wave and pumped storage

developments together with bioenergy resources, as critical elements of the long-term secure energy supply throughout the region.

5.1.4. **The Draft Regional Spatial & Economic Strategy for the Southern Region (2018):**

Volume 1:

Chapter 5: Environment:

Section 1: Resource Efficiency & Transition To A Low Carbon Economy:

The National Renewable Energy Action Plan (NREAP), the Offshore Renewable Energy Plan and the National Energy Efficiency Action Plan (NEEAP) bring the targets set at EU level into national policy and set out the detailed approach within each area of energy generation and use. There is significant potential for action to ensure we meet the targets set for the state through development of wind, wave and tidal energy, solar, hydro, bio-energy, combined heat and power systems targets. Support for further development in these areas will be advanced by the forthcoming Renewable Electricity Guidelines, which will also address the important issue of access to the Grid system.

Chapter 8: Water and Energy Utilities:

Section 8.2: Strategic Energy Grid:

RPO 214: Electricity Infrastructure:

It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the region and strengthen all-island energy infrastructure and interconnection capacity.

RPO 211: New Energy Infrastructure:

It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by EirGrid, ESB Networks and other key energy agencies (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 213: Renewable Energy Generation and Transmission Network:

Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network).

5.2. Development Plan:

5.2.1. Cork County Development Plan, 2014:

Chapter 4: Rural, Coastal and Islands:

Section 4.5: *Greenbelts:*

RCI 5-8: Greenbelts around Settlements

- a) Retain the identity of towns, to prevent sprawl, and to ensure a distinction in character between built up areas and the open countryside by maintaining a Greenbelt around all individual towns.
- b) Reserve generally for use as agriculture, open space or recreation uses those lands that lie in the immediate surroundings of towns. Where Natura 2000 sites occur within Greenbelts, these shall be reserved for uses compatible with their nature conservation designation.
- c) Prevent linear roadside frontage development on the roads leading out of towns and villages.

- d) The local area plans will define the extent of individual Greenbelts around the ring and county towns and any of the larger villages where this approach is considered appropriate. They will also establish appropriate objectives for the Greenbelts generally reserving land for agriculture, open space or recreation uses.

N.B. The proposed development site is located within the greenbelt for the town of Newmarket.

Chapter 9: Energy and Digital Economy:

Section 9.1: *Energy:*

ED 1-1: Energy:

Ensure that through sustainable development County Cork fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the county to assist in meeting renewable energy targets

Section 9.2: *Renewable Energy*

Section 9.4: *Other Renewable Energy: Solar Energy:*

The three main forms of solar energy are; Passive Solar (e.g. Building Design), Solar Thermal (e.g. direct solar water heating) and Active Solar (e.g. generation of electricity through photovoltaic cells).

There is significant potential through careful building design to generate heat from solar energies such as Passive Solar Design and Solar Thermal Water Heating. The use of passive solar design will reduce carbon emissions while solar water heating will generate carbon free heat.

Photovoltaic (PV) is the generation of electricity from light. In essence, photovoltaic systems use daylight (not necessarily direct sunlight) to convert solar radiation into electricity. The technology can be used for domestic as well as larger industrial or commercial applications

At present the main potential in Cork for this form of electricity generation is by adding a small number of panels to an individual building and at this scale these proposals have only localised impacts.

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.

The Council will support and facilitate the development of solar energy, encourage passive solar design and solar water heating in new buildings and in retrofitting buildings. In addition, where possible, the installation of solar power in public buildings, including schools will be encouraged.

Section 9.6: *Transmission Network:*

ED 6-1: Electricity Network:

Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage and distribution network infrastructure.

Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards.

Facilitate where practical and feasible infrastructure connections to wind farms and other renewable energy sources subject to normal proper planning considerations.

Proposals for development which would be likely to have a significant effect on nature conservation sites and/or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.

Chapter 13: Green Infrastructure and Environment:

Section 13.5: *Landscape*

Section 13.6: *Landscape Character Assessment of County Cork:*

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 and historic walls or other distinctive boundary treatments.

GI 6-2: Draft Landscape Strategy:

Ensure that the management of development throughout the County will have regard for 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 minimize 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.

Section 13.7: Landscape Views and Prospects:

GI 7-1: General Views and Prospects:

Preserve the character of all important views and prospects, particularly sea views, river or lake views, views of unspoilt mountains, upland or coastal landscapes, views of historical or cultural significance (including buildings and townscapes) and views of natural beauty as recognized in the Draft Landscape Strategy.

GI 7-2: Scenic Routes:

Protect the character of those views and prospects obtainable from scenic routes and in particular stretches of scenic routes that have very special views and prospects identified in this plan. The scenic routes identified in this plan are shown on the scenic amenity maps in the CDP Map Browser and are listed in Volume 2 Chapter 5 Scenic Routes of this plan.

GI 7-3: Development on Scenic Routes:

- a) Require those seeking to carry out development in the environs of a scenic route and/or an area with important views and prospects, to demonstrate that there will be no adverse obstruction or degradation of the views towards and from vulnerable landscape features. In such areas, the appropriateness of the design, site layout, and landscaping of the proposed development must be demonstrated along with mitigation measures to prevent significant alterations to the appearance or character of the area.
- b) Encourage appropriate landscaping and screen planting of developments along scenic routes which provides guidance in relation to landscaping. See Chapter 12: Heritage Objective HE 46.

5.2.2. Kanturk Mallow Municipal District Local Area Plan, 2017:

Chapter 2: Local Area Strategy

5.3. Natural Heritage Designations

5.3.1. The following Natura 2000 sites are located in the vicinity of the proposed development site:

- The Blackwater River (Cork/Waterford) Special Area of Conservation (Site Code: 002170), approximately 700m southeast of the site.
- The Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site Code: 004161), approximately 2.8km west-northwest of the site.

- The Lower River Shannon Special Area of Conservation (Site Code: 002165), approximately 10km northwest of the site.

6.0 The Appeal

6.1. Grounds of Appeal

- The subject application has only sought permission for the development of a solar farm (the extent of which is shown on the submitted particulars). The cable route for connection to the national grid does not form part of the application. Moreover, as no grid offer has been issued by ESBN to date, the applicant does not yet know which substation or by what route the proposed solar farm is to be connected to the grid (whilst the proposed development is located immediately adjacent to the Glenlara substation, for the purposes of completeness, a grid route was indicated to the more removed Newmarket substation within the submitted Appropriate Assessment Screening Report).
- Notwithstanding that the subject application has not sought permission for a grid connection, the case planner has stated that due to the potential impacts on the Blackwater River candidate Special Area of Conservation, which have been screened out by the applicant's ecologist and could be avoided in their entirety depending on the connection point and the cabling method, permission cannot be granted for the proposal as any condition pertaining to works on the grid connection would be unenforceable.

In response, it is submitted that the Planning Authority could have dealt with this matter in a similar manner to that previously adopted by the Board when it imposes the following condition:

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

Examples of such conditions have been included in ABP Ref. Nos. PL27.246527, PL93.246902, PL26.247176, PL03.247632, PL14.246850 & PL26.244351.

- Whilst the report of the Assistant Senior Planner has asserted that recent case law effectively serves to oblige planning authorities to consider projects involving grid connections in their entirety and thus the proposed solar farm and its grid connection should be assessed as a single project for the purposes of appropriate assessment (AA) and environmental impact assessment (EIA), it is submitted that any such obligation only applies to EIA projects and that the subject proposal does not involve development requiring EIA.
- On the basis that the subject proposal does not require EIA, it is not necessary to seek permission for the grid route / connection in conjunction with the solar farm. Accordingly, the application should be determined on its merits and in isolation from the grid route. Should it be deemed at a later date that permission is required for the grid connection, this can be addressed separately once the final connection point is known. Such a scenario would not amount to 'project-splitting' on the basis that the development does not require EIA.

McGovern J. clarified any doubts relating to his judgement in *O'Grianna (No. 2)* in the subsequent case of *North Kerry Wind Turbine Awareness Group v. An Bord Pleanala [2017] IEHC 126* wherein he stated:

'I am satisfied that this case [O'Grianna No. 2] disposes of any issue raised by the applicant under that ground and there is no necessity that a grid connection must be included in the planning application for the purposes of seeking consent in order for an EIA to be carried out; rather the EIA requires information on the grid connection to enable a full EIA to be carried out and for the Board to assess the likely significant impact of the wind farm and the grid connection as a whole.'

- Whilst it is asserted that the initial reason for refusal has considered works outside the scope of the planning application, details of a potential grid connection were submitted to the Planning Authority. In this respect the Board is advised that the applicant attempted to indicate the likely point of connection to the grid i.e. the Newmarket 38kV substation (please refer to

Figure No. 2.7: '*Indicative Grid Connection Route*' provided as part of the original application).

Notwithstanding that this indicative route lies outside the site boundary, the Planning Authority sought further information with regard to the works involved for same. In response, it was indicated that the design for the grid connection had not been finalised by ESB Networks and that the options were as follows:

- The Glenlara substation immediately adjacent to the site.
- The Newmarket substation via the route indicated.

Whilst it is preferable to connect to the Glenlara substation, the applicant is aware of ongoing upgrading works at this substation that may / may not allow for the connection of the proposed solar farm to same. Therefore, a '*worst-case*' scenario based on distance from the substation was assumed which included for c. 2km of underground cabling works primarily along the public road with the route crossing a bridge over the River Dalua. Although ducting within the deck of the bridge had originally been proposed, on further inspection it was noted that the capacity of the decking to accommodate the required ducting was reasonably limited. Therefore, it is proposed that in the event of a grant of permission for the subject application, and on receipt of a grid connection offer to the Newmarket substation, this methodology for crossing the bridge will be surveyed in more detail. However, it is one of a number of options available for the river crossing which also include incorporating a section of overhead line and directional drilling beneath the structure of the bridge.

For the purposes of responding to the request for further information, the applicant detailed the crossing of the River Dalua by way of directional drilling and the proposed construction methodology detailed in the Draft Construction and Environmental Management Plan included for:

- The siting of delivery and reception pits to be a minimum of 25m from the Special Area of Conservation.
- The installation of silt curtains downslope of the proposed delivery and reception pits.

- In advance of any excavation works to facilitate the directional drilling operation, the placement of temporary silt traps and check dams in any roadside drains in the vicinity of the delivery and reception pits.
- The stockpiling of materials during construction in suitably designated areas away from watercourses with adequate measures to prevent surface water runoff.

Details of the construction methodology and mitigation measures for these works were assessed as part of the Revised Appropriate Assessment Screening Report and the Ecological Impact Statement. The Draft Construction and Environmental Management Plan was also intended to be used as a reference to finalise more detailed arrangements for the project prior to the commencement of construction. On appointment of a contractor this draft document would be further developed into a detailed CEMP for written agreement with the Planning Authority.

- The consultants (Wetland Surveys Ireland) that prepared the initial ecology studies are familiar with the proposed construction methodology and the site itself. From a review of the Revised Appropriate Assessment Screening Report and the Ecological Impact Statement, which incorporate the river crossing details, it is their opinion that the works can be screened out:

'Directional drilling beneath the cSAC is required to facilitate the UGC route. Works associated with the river crossing may potentially lead to the runoff of unconsolidated material in surface water runoff, which in the absence of appropriate controls, could impact on downstream aquatic receptors. It is considered that best construction practice and the various controls (specified in a site-specific CEMP) to protect downstream water quality are adequate to ensure such impacts will not arise. The works associated with directional drilling will be undertaken a sufficient distance from the cSAC that impacts on terrestrial habitats and species of the cSAC are not foreseen. The development of the remaining UGC route will be confined to the road corridor and impacts on the cSAC are not foreseen'.

'In conclusion, it has been determined that the proposed development is not directly connected with or necessary to the management of European Sites.

Secondly, it can be objectively concluded that there are not likely to be any significant effects on the Natura 2000 network of sites resulting from the proposed solar PV farm development and accordingly it is considered that there is no need to prepare a Natura Impact Statement / Appropriate Assessment, in this instance’.

- In response to the submission by the Department of Culture, Heritage and the Gaeltacht that there is an ‘absence of detailed geotechnical information’, it is submitted that clarification of further information could have provided the details required and thus negated any need for a full ‘Appropriate Assessment’.

Whilst it is acknowledged that the response to the request for further information was lodged two days before the expiration of the 6-month deadline, it is the applicant’s understanding that Article 33(3) of the Planning and Development Regulations, 2001, as amended, allows for up to an additional 3 No. months, as agreed with the Planning Authority, within which time further information could have been furnished to satisfy the Department’s request. Article 33(3) does not appear to stipulate when the additional three months must be requested and, therefore, it is submitted that such an extension would have been permissible. In the absence of such an extension, the applicant has not been afforded sufficient time to properly consult with its ecologist and to clarify the queries raised by the Department and the Planning Authority.

- The sightlines available at the existing entrance onto the public road are considered to be adequate when consideration is given to the temporary nature of the increased traffic levels and its established use by large agricultural vehicles and maintenance traffic accessing the Glenlara 110kV substation.
- The site layout plan submitted in response to the request for further information details that sightlines of 80m are available in both directions, albeit from a relaxed ‘X’ distance of 2.4m as opposed to the 4.5m requested by the Planning Authority. Technical Document TD41/95 states the following with regard to the ‘X’ distance:

'Normally, an "X" distance of 4.5m shall be provided for a direct access where use in the design year is forecast not to exceed 500 AADT. The choice of set back distance is related to the forecast traffic using the access. For lightly used accesses, for example those serving a single dwelling or a small cul-de-sac of a half a dozen dwellings, the set back "X" may be reduced to 2.4m. The 2.4m set back relates to normally only one vehicle wishing to join the trunk road at one time. The 4.5m covers the situation where two light vehicles may want to accept the same gap in the trunk road traffic. Where in the case of lightly used accesses the site conditions are particularly difficult, then the set back "X" may be reduced to 2.0m as a Relaxation'.

The operational stage of the proposed development is only likely to generate c. 10-15 No. light goods vehicles per year and, therefore, it is clear that an "X" distance of 2.4m can be applied (please also refer to Table 5.4 of TII Publications, DN-GEO-03060, *'Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)'*, April, 2017).

- It is considered that an 'X' distance of 2.4m is reasonable considering the short construction period and the commitment to implementing construction traffic management measures, including (but not limited to):
 - Construction signage in compliance with Chapter 8 of the Traffic Signs Manual.
 - One-way delivery route to remove the potential for laden and unladen HGVs crossing on the local road network.
 - The presence of a banksman at the site entrance for all scheduled HGV deliveries.
 - All deliveries to be unloaded within the site compound resulting in no vehicles parking or dwelling on the local road at the site entrance.
- The extremely limited volume of traffic associated with surrounding renewable energy developments (all of which are larger in terms of scale and projected construction traffic volumes than the subject proposal) has previously been considered by the Board. It is of further relevance to note that in its

understanding of the limited nature of operational traffic and readily available construction traffic management practices, the Board considered these positions and relaxations in the context of access points to national roads in the case of the Ballinclay, Tomfarney North and Drumroe East examples provided. Accordingly, it is submitted that the perceived risk in relation to the subject proposal is considerably lower than the following examples:

- ABP Ref. No. PL27. 246527 (Ballycooleen Solar Farm): Inspector's Report: *'I would also note that the construction period is a temporary period and therefore traffic levels would not be an ongoing issue given that the operational phase is likely to consist of maintenance only'*.
- ABP Ref. No. PL26. 246321 (Ballinclay Wind Farm): Inspector's Report: *'In regard to access on the local road, I am satisfied that the one way system for construction traffic provides for an acceptable level of access off and onto the N30 and that the construction works are temporary in nature. After construction and during operation ongoing maintenance will use the existing vehicular access from the L8017. Such traffic levels are likely to be of a very low level and have no adverse impact in regards to traffic safety . . . I am satisfied that based on the temporary nature of construction and subject to adequate traffic management the proposal would be acceptable in the context of traffic safety'*.
- ABP Ref. No. PL26. 247179 (Tomfarney North Solar Farm): Board Order: *'The Board had regard to the very low level of operational traffic that would arise as a result of the proposed development'*.
- ABP Ref. No. PL93.246902 (Drumroe East Solar Farm): Inspector's Report: *'While there will be a significant amount of traffic during the construction period, including possibly oversized loads during the operational period, it seems unlikely that traffic would be any more than would be normal for an agricultural operation. It may, indeed, be less'*.

6.2. Planning Authority Response

None.

6.3. Observations

None.

6.4. Further Responses

None.

7.0 Assessment

From my reading of the file, inspection of the site and assessment of the relevant local, regional and national policies, I conclude that the key issues raised by the appeal are:

- The principle of the proposed development
- Environmental impact assessment (screening)
- Visual impact / landscape considerations
- Traffic implications
- Archaeological implications
- Impact on residential amenity
- Glint and glare
- Grid connection
- Ecological considerations
- Appropriate assessment

These are assessed as follows:

7.1. **The Principle of the Proposed Development:**

- 7.1.1. From a broader perspective, it is apparent that the development of solar energy will aid in the achievement of Ireland's international, European and national obligations as regards the reduction of greenhouse gas emissions and the provision of energy from renewable resources. In this regard I would refer the Board at the outset to the Government's White Paper entitled '*Ireland's Transition to a Low Carbon Energy Future, 2015-2030*' which sets out a framework for a transition to a low carbon

energy system which will provide for a secure supply of competitive and affordable energy. More particularly, Paragraph 137 of the aforementioned paper specifically states that *‘Solar photovoltaic PV technology is rapidly becoming cost effective for electricity generation . . . and has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs’*.

The *National Planning Framework: ‘Project Ireland 2040’* similarly aims to reduce the national carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation as well as targets for greenhouse gas emissions reductions. For example, National Policy Objective 55 aims to *‘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’*. These objectives are given further expression at a regional level by reference to the South West Regional Planning Guidelines, 2010-2022 which seek to support the sustainable development of renewable energy resources (please also refer to the recently published Draft Regional Spatial & Economic Strategy for the Southern Region).

- 7.1.2. In a local context, the provisions of the Cork County Development Plan, 2014 are also in favour of the development of renewable energy and specifically state that the Council will support and facilitate the development of solar energy before acknowledging that careful consideration will need to be given to the scale, location and potential impact of large-scale solar energy installations such as that proposed. Further credence is lent to the possible suitability of the wider area for the development of solar energy given the potential availability of a grid connection via the nearby Newmarket or Glenlara substations whilst it is also of relevance to note the planning history of the surrounding area as regards the on-going development of wind energy and the improvement of the national grid infrastructure.
- 7.1.3. With regard to the siting of the proposed development on agricultural lands, whilst the UK’s *‘Planning guidance for the development of large scale ground mounted solar PV systems’* (BRE National Solar Centre) advocates an approach whereby such developments should ideally utilise previously developed land, brownfield land, contaminated land, industrial land or lower quality agricultural land (based on a grading system defined by the Agricultural Land Commission), there is no current

policy provision in Ireland which would serve to preclude the development of solar farms on agricultural lands of any quality.

- 7.1.4. Therefore, on balance, it is my opinion that there is a positive presumption in favour of developments such as that proposed in light of Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable resources, however, whilst I am amenable to the principle of the proposed development, any such applications should be assessed on their individual merits and subject to normal planning considerations.

7.2. **Environmental Impact Assessment (Screening):**

- 7.2.1. The construction of a solar PV array does not involve a class of development which is prescribed for the purposes of Section 176 of the Planning and Development Act, 2000, as amended, as set out in Parts 1 & 2 of Schedule 5 of the Planning and Development Regulations, 2001, as amended. Accordingly, there is no requirement for the applicant to submit an Environmental Impact Assessment Report in this instance.

7.3. **Visual Impact / Landscape Considerations:**

- 7.3.1. The construction of large-scale commercial solar arrays necessitates development sites of considerable size and extent and, therefore, such schemes may appear visually prominent in the surrounding landscape. Accordingly, in order to assess the visual impact of the subject proposal it is necessary to consider the site context having regard to the site location and the wider sensitivity and landscape value of the surrounding area.
- 7.3.2. In a local context, the proposed development site is located on the western side of a small valley (with the lands falling east / south-east towards the Dalua River) where it occupies a relatively elevated position on the eastern slope of a hillside in an area which is primarily agricultural and characterised by an undulating rural countryside interspersed with individual farmsteads and one-off rural housing. When viewed from vantage points located on the eastern side of the valley, the site is typical of the surrounding landscape, although it is readily identifiable from several vantage points to the northeast and from within the village of Newmarket.

- 7.3.3. In terms of a broader landscape classification, it is of relevance to note that the wider landscape type within which the subject site is located has been classified as *'Broad Marginal Middleground Valleys'* as per the landscape character mapping set out in the County Development Plan, 2014. In this respect I would advise the Board that although the Draft Cork County Landscape Strategy, 2007 has indicated that these landscapes are considered to be of a *'high'* value and a *'high'* sensitivity (whilst being of *'local'* importance), it is notable that the subject lands have not been categorised as a *'High Value'* landscape in the Development Plan and, therefore, it would appear that the Planning Authority has determined that this particular landscape is of a lesser value than has been suggested in the Draft Landscape Strategy with the result that it could potentially have a higher capacity to absorb development without giving rise to significant visual intrusion. Furthermore, although the subject site is located in relatively close proximity to Scenic Route No. S17 (*Road West of Newmarket*) as identified in the Development Plan, it will not be overtly visible from same, whilst the description of Scenic Route No. S17 (*Views of rolling landscape & the Glenlara and Owenkeel river valleys*) contained in Table 5.1: *'Scenic Routes'* of the Plan states that the surrounding landscape is only of *'medium'* value.
- 7.3.4. In the context of assessing the subject proposal, I would also draw the Board's attention to the *'Landscape & Visual Appraisal'* contained in Appendix 4 of the *'Supplementary Documentation'* provided with the initial planning application, which includes an analysis of the visual impact of the proposed development and its effect on landscape character, in addition to the *'Landscape & Visual Update: Supplementary Viewpoint Assessment'* (including additional photomontages) received by the Planning Authority on 18th August, 2017 in response to a request for further information. In this regard the case has been put forward in the first instance that the design process has been informed by the potential landscape and visual impacts and thus reflects efforts to avoid, minimise and mitigate any adverse impacts as far as possible. Moreover, whilst acknowledging that the Draft Cork County Landscape Strategy, 2007 states that the *'Broad Marginal Middleground Valleys'* landscape type is considered to be of a *'high'* value and sensitivity, it has been asserted that a site specific analysis of the local landscape has concluded that it is of a *'medium / low'* sensitivity (thereby corresponding with Table 5.1 of the Development Plan) and thus is not particularly vulnerable or fragile to the potential

change attributable to the proposed development. The analysis also considers the visual impact of the proposed development when viewed from various vantage points within the surrounding area at intervals of 1, 4 & 12 years post-construction (through the use of photomontages). In effect, it has been submitted that although views of the proposed development may be available from within the zone of theoretical visibility detailed in Figure L3, the overall visual and landscape impact of the proposal will be limited and localised. In this regard reference has also been made to the screening of the proposal that will be provided through the retention and future maintenance (and maturing) of the existing boundary hedgerows (at a minimum height of 3-3.5m) as well as the planting of new hedgerows along those open sections of the site perimeter in order to further reduce the visibility of the proposal.

7.3.5. Having conducted a site inspection, and following a review of the available information, whilst I would concede that the proposed development will be visible to some extent, having regard to the surrounding topography, the specifics of the site context, and the presence of intervening features such as roadside boundary hedgerows etc., in addition to the mitigation to be provided by way of the planting / landscaping proposals set out in the application documentation, in my opinion, the overall visual impact of the proposal will be within acceptable limits, will not unduly detract from the value of the wider landscape, and will not adversely impact on the appreciation of those views available from Scenic Route No. S17. In this regard I am not convinced that the application site is overtly prominent when taken in a wider context and I would further advise the Board that although longer distance views of the proposed development will be available from certain vantage points along roadways on the opposite side of the valley, intervening features such as existing buildings and roadside vegetation will serve to limit any such views. From positions closer to the site, the overall scale and extent of the development will not be readily apparent whilst any views of the arrays will be obscured for the most part by roadside & boundary hedging.

7.3.6. Therefore, having regard to the site context, including its location outside of any scenic or sensitive landscape designation and within an area which seemingly has a higher capacity to absorb development without giving rise to significant visual intrusion, the design, scale and height of the proposed development, the nature of

the prevailing topography, and the existing and proposed planting / screening measures, I am satisfied that the proposed development will not unduly impact on the character of the wider landscape or the visual amenities of the local area.

7.4. **Traffic Implications:**

- 7.4.1. The proposed development will be accessed from the local road network via an existing agricultural field gate which opens onto the adjacent splayed entrance arrangement serving the neighbouring ESB Glenlara 110kV substation, with a new service roadway to be laid within the site boundary parallel to the existing access road to the substation. In this regard it is regrettable that the original site layout plan submitted with the initial application was of insufficient quality to clearly identify the specifics of the proposed entrance arrangement, however, in response to concerns raised by the Planning Authority as regards the adequacy of the available sightlines, an amended drawing of the proposed site entrance was subsequently submitted on 18th August, 2017 which sought to demonstrate that the sight distance onto the public road was sufficient to accommodate the likely traffic volumes and turning movements associated with the proposed development. In support of these access proposals, the applicant has sought to emphasise the traffic management arrangements which will be put in place during the construction phase of the development (e.g. the use of a banksman for deliveries etc. at the site entrance) and has further submitted that operational traffic levels will be considerably less than those associated with the current agricultural use of the site. In particular, it was submitted that a relaxation in the required sight distance would be appropriate and that sightlines of 80m were available in both directions onto the public road when measured from a point set back 2.4m from the near edge of the carriageway. However, notwithstanding these proposals, the Engineering Department of the Local Authority concluded that the volumes of HGVs and light goods vehicles likely to arise during the construction phase necessitated the achievement of sightlines of 80m from a position set back 4.5m from the edge of the roadway and this subsequently informed the decision to refuse permission.
- 7.4.2. In response to the foregoing, the grounds of appeal have sought to reiterate the temporary nature of the increased traffic levels associated with the construction stage, the intention to implement various traffic management measures during the construction works, the historical use of the existing entrance by large agricultural

vehicles and other traffic visiting the adjacent substation, and the circumstances set out in Technical Document TD41/95 whereby a relaxation in the 'X' distance (i.e. the point from which sightlines are measured) is permissible. Reference has also been made to the position adopted by the Board in its determination of previous appeals pertaining to solar PV development wherein it has been held that the traffic impact of same is of limited significance.

7.4.3. Having reviewed the available information, including the anticipated construction traffic volumes set out in Appendix 'F' (the updated Traffic Management Plan) of the response to the request for further information, and noting the existing usage of the site entrance for agricultural purposes (and that of the adjacent access by maintenance traffic visiting the Glenlara 110kV substation), in addition to the various traffic management measures which will be put in place in order to ensure the safe operation of the site access in light of the increased traffic volumes during the construction phase, it is my opinion that a relaxation of the 'X'-distance is permissible in this instance and that the sightlines available from the proposed entrance are within acceptable limits. Furthermore, in respect of the on-going operation and maintenance of the proposed development I would anticipate that the traffic levels associated with same would be very low and would not impact on public safety.

7.4.4. In relation to the wider traffic impact of the proposed development, whilst I would acknowledge the limited carriageway width of the local roadway between the site entrance and Anne's Bridge, having regard to the limited traffic volumes and speeds along this section of roadway, the temporary duration of the construction works and the associated traffic movements, and the proposed traffic management / control measures, including the utilisation of a one-way system for both laden and unladen delivery vehicles during the construction phase in order to mitigate potential disruption / congestion, it is my opinion that the surrounding road network has sufficient capacity to accommodate the additional traffic volumes consequent on the proposed development and that the subject proposal does not pose a risk to traffic / public safety.

7.5. **Archaeological Implications:**

7.5.1. With regard to the archaeological heritage implications of the proposed development, it can be confirmed from a review of the available information that there are 2 No.

recorded archaeological monuments within the south-eastern confines of the application site (i.e. RMP No. CO022-044: 'Fulacht fia' & CO022-044001: 'Burnt mound') whilst there is a further such feature located immediately beyond the north-western site boundary (RMP No. CO022-043: 'Fulacht fia'). In this respect I would refer the Board in the first instance to the Archaeological Assessment which accompanied the initial planning application wherein it is stated that the layout of the proposed development has been designed to take cognisance of the need to preserve the aforementioned archaeological features through the maintenance of a buffer zone from same. This was subsequently clarified by the developer in response to the request for further information issued by the Planning Authority which confirmed that a buffer zone of 20m will be maintained between the proposed works and the aforementioned archaeological monuments. It is of further relevance to note that as there are no visible surface traces remaining of any features associated with RMP Nos. CO022-044, CO022-044001 & CO022-043, the proposed development will not have any visual impact on same.

7.5.2. In terms of the potential for the proposed development to impact on previously unknown sub-surface archaeological features, the initial Archaeological Assessment was supplemented by a geophysical survey which recorded a number of unidentified responses that could potentially be of archaeological interest (*N.B.* Other linear and curvilinear features detected were considered likely to correspond to former field boundaries as evidenced by reference to historic mapping of the area whilst the numerous parallel trends were deemed to be indicative of ridge / furrow cultivation associated with more recent ploughing activities). Accordingly, in response to a request for further information, the applicant undertook a programme of archaeological test trenching on site in order to further investigate those unidentified subsurface remains recorded in the geophysical survey in addition to those areas of the site where extensive ground disturbance would be required to accommodate the construction / installation of the proposed access roads and cable trenches. Notably, no archaeological features or artefacts were recorded in any of the test trenches excavated within the footprint of the proposed development.

7.5.3. Therefore, on the basis that a buffer zone of at least 20m will be maintained between the proposed works area and each of the recorded monuments located both on site and within neighbouring lands, and as the archaeological investigations conducted

on site (including test trenching) have confirmed that the proposal will not impact on previously unrecorded sub-surface archaeological features, I would concur with the findings of updated archaeological assessment received by the Planning Authority on 18th August, 2017 (as subsequently accepted by the County Archaeologist) that there is no need for any further archaeological investigation on site. Moreover, I am satisfied that the proposal will not give rise to any undue impact on features of archaeological interest subject to the imposition of a suitable condition in any decision to grant permission with regard to the maintenance of the required buffer zones.

N.B. Whilst reference has been made to the potential archaeological implications of the indicative grid connection route given that this could potentially involve the laying of cabling within the decking of Anne's Bridge, which is a recorded archaeological monument i.e. Ref. No. CO022-270 (and is also included in the National Inventory of Architectural Heritage), these works do not form part of the subject application and thus I do not propose to comment further on the archaeological impact of same.

7.6. Impact on Residential Amenity:

- 7.6.1. Given the overall design, height and nature of the proposed development, its operation is unlikely to give rise to any significant impact on the residential amenity of nearby properties by reason of overshadowing, noise or nuisance etc. whilst the proposed landscaping measures will serve to mitigate the potential impact of any glint / glare effects.
- 7.6.2. With regard to the potential impact of the construction of the proposed development on the residential amenities of surrounding property, whilst I would acknowledge that the works involved could give rise to some degree of disturbance / inconvenience to local residents, given the limited nature and scale of the development, and as any constructional impacts will be of an interim nature, I am inclined to conclude that such matters can be satisfactorily mitigated by way of condition.

7.7. Glint and Glare:

- 7.7.1. In assessing the potential for glint and glare attributable to the proposed development it should be noted in the first instance that the proposal under consideration does not incorporate tracking panels and that the arrays will be mounted in a fixed position and orientated to face due south. Furthermore, solar

photovoltaic panels, given the very nature of their design, need to absorb (as opposed to reflect) solar radiation and are therefore finished in an anti-reflective surface (*N.B.* Appendix 4 of the Supplementary Documentation provided with the application includes a '*Glint & Glare Technical Note*' wherein it is stated that the level of light reflected from a solar panel surface is less than that reflected from ordinary glass and is very similar to that from still water such as a lake. In this regard I would advise the Board that a number of solar reflection studies referenced in previous solar energy developments determined on appeal have also detailed that solar panels have previously been found to reflect approximately 5% of light (the same as water) whereas surfaces such as snow and white concrete reflect a considerably higher percentage of light.

- 7.7.2. The subject application has been accompanied by a study entitled '*Carraduff Lower Solar Farm: Consideration of Potential Glint and Glare*' prepared by Charlotte Peacock Associates Ltd. on behalf of the applicant (please refer to Appendix 4 of the Supplementary Documentation) which should be read in conjunction with the '*Landscape & Visual Appraisal*' provided with the application. This assessment details the basic principles as regards the behaviour of light reflected from a panel surface and states that glint effects as a result of a solar farm development are generally not observed north of the northernmost part of the site or to the immediate south of the site as the panels are installed to face southwards and thus the angle of the sun during times when glint may occur would not result in reflected light at an angle which would be seen by receptors in these areas. By extension, it is stated that glint effects are generally experienced to the east, west, southeast and southwest of a solar energy development, although the extent of any such affected areas will vary depending upon the site topography (and any intervening features).
- 7.7.3. Section 3 of the study proceeds to consider the site-specific context of the subject proposal and asserts that no receptors located to the north or immediately south of the proposed development will experience glint effects, including those properties identified as Dwelling Nos. 3, 5, 6 & 7 in Figure 'L2' of the Landscape & Visual Impact Assessment, Viewpoint Nos. 2, 3, & 4 as detailed in Figure 'L4' of that document (this would appear to be a mistaken reference to Figure 'L3'), and Newmarket town to the northeast. It is also reiterated that no glint effects can be experienced by receptors that do not have direct visibility of the site (e.g. where there

are intervening features such as vegetation or buildings between the development and the receptor) and in this regard reference is made to the Zone of Theoretical Visibility (Figure 'L3') contained in the Landscape & Visual Appraisal which assumes a 'bare earth' scenario and indicates that visibility to the west of the site will be less than 1km as a result of the rising topography thereby screening views from positions further west (*N.B.* Existing trees and vegetation along road and field boundaries will serve to further reduce the visibility of the site and the potential for glint effects at properties located to the west of the proposal). The report subsequently acknowledges that Dwelling House Nos. 1, 2 & 4 will be located within a 'potential glint area' and have been shown by the Zone of Theoretical Visibility to have potential views of the development (on the assumption of 'bare ground'), however, it is stated that views of the development from House Nos. 1 & 2 will be largely screened by existing outbuildings / vegetation thereby reducing the likelihood of any significant glint to the tops of those panels along the north-western site boundary which will in turn be mitigated by the proposed growth of the existing hedgerow along that boundary. With regard to Dwelling House No. 4, it is noted that views of the development from the main windows of that property will be at very oblique angles due to the north-easterly orientation of the dwelling with the result that any glint effects would be limited to those originating from the north-eastern field and from along the north-western boundary of the field which could be mitigated further by the proposed growth of the boundary hedgerow.

- 7.7.4. In terms of the potential for glint / glare effects within the wider site surrounds, it has been suggested that although views of the development will be theoretically possible within 5km of the site to the east, these will be primarily available within 2km of the site and will generally be mitigated by the presence of intervening features such as existing roadside / field boundaries and topographical considerations.
- 7.7.5. The study thus concludes by stating that any glint effects attributable to the proposed development are unlikely to be of significance given the nature of the receptors in the vicinity and the potential timing of any such effects (glint effects are experienced some time in the early morning or early evening). It is further stated that due to the latitude of the application site and the fact that the proposed solar farm will not be entirely flat, glint may occur on a number of days before the spring equinox and after the autumn equinox, although this will be during times when the majority of

vegetation in the area will have foliage thereby providing screening of any significant glint effects. In addition, the case has been put forward that even during the short periods when glint may occur and trees etc. have no foliage, the actual branches and tree / hedgerow structure will continue to provide mitigation by way of screening thereby reducing any potential impact on sensitive receptors.

7.7.6. On balance, whilst I am amenable to accepting the findings of the '*Carraduff Lower Solar Farm: Consideration of Potential Glint and Glare*' that the proposed development will not have a significant impact on the residential amenity of nearby sensitive receptors, subject to the implementation of the mitigation measures detailed in the application documentation (i.e. the retention, planting and future maintenance of trees and hedgerows along the site boundaries to a height of 3.0m - 3.5m), it is regrettable that the analysis does not include any site-specific geometric reflection calculations whilst there would appear to have been no express consideration given to the potential impact of glint / glare on road users.

7.8. **Grid Connection:**

7.8.1. The proposed development does not include for a connection to the electricity grid, however, the documentation submitted with the initial application provides details of an indicative routing for a grid connection between the proposed development and the ESN Newmarket substation to the northeast (Please refer to Appendix 2: '*Indicative Grid Connection Route: Figure 2.7*' of the 'Supplementary Information'). In this regard it has been submitted that although a connection to the electricity grid is expected to be available in relatively close proximity to the proposed development, access to the grid infrastructure is outside of the control of the developer and is managed by ESB Networks, the Distributor Operator (DSO) and Eirgrid, the Transmission System Operator (TSO). Furthermore, whilst the developer has engaged in the process of securing a grid connection with applications having been submitted to the DSO which will result in the issuance of a connection offer in due course, it has been acknowledged that the timelines for delivery of electricity grid infrastructure can be lengthy thereby resulting in sequencing issues between consents for generation assets and the delivery of grid infrastructure.

7.8.2. At this point, I would draw the Board's attention to the '*Appropriate Assessment Screening Report*' which accompanied the initial planning application wherein some

further clarity is provided as regards the indicative grid connection. This document states that the indicative grid connection between the proposed development and the ESBN Newmarket substation to the northeast will comprise an underground cable which will generally follow existing private and public roads for a distance of c. 1.8km. Notably, the works associated with the installation of this underground cable are to be confined to the existing road corridor whilst it has also been submitted that the crossing of the River Dalua at Anne's Bridge is capable of supporting the underground grid connection within the decking of the existing bridge (i.e. no in-stream or bank-side works are envisaged).

7.8.3. However, in response to a request for further information issued by the Planning Authority, the applicant has sought to emphasise that permission has not been sought for the grid connection route as part of the subject application. Moreover, it has been asserted that the grid connection design has not been finalised by ESB Networks to date and that the options for connection to the grid are:

- The Glenlara substation immediately adjacent to the site; or
- The Newmarket substation via the route shown in the 'Appropriate Assessment Screening Report'.

7.8.4. Notably, with regard to the latter option (i.e. the indicative route shown in Appendix 2: '*Indicative Grid Connection Route: Figure 2.7*' of the 'Supplementary Information'), this response has stated that on further inspection the capacity of the decking of Anne's Bridge to accommodate the ducting required for the grid connection is reasonably limited. However, it has been submitted that the proposal to lay the cabling within the existing road corridor at the bridge is only one of several options available for the river crossing. Others include incorporating a short section of overhead line or horizontal directional drilling beneath the structure of the bridge with suitable set back distances from the River Dalua.

7.8.5. In the grounds of appeal, the applicant has further emphasised that the subject proposal has not sought permission for a grid connection. It has also been asserted that as the development in question does not necessitate environmental impact assessment, concerns with regard to 'project-splitting' do not arise and thus there is no need to consider the grid connection in the assessment of the subject application.

7.8.6. Given that the construction of a solar PV array does not involve a class of development which is prescribed for the purposes of Section 176 of the Planning and Development Act, 2000, as amended, and as the grid connection does not form part of the subject application (although an option for same has been considered as part of the applicant's screening exercise for the purposes of appropriate assessment), and as the location (i.e. either the Glenlara or Newmarket substations) and nature of any such connection (including its route, construction, and methodology) has not been finalised, I do not propose to comment further on this matter other than to clarify that any grant of permission for the subject application should 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.

7.9. **Ecological Considerations:**

7.9.1. Having regard to the current use of the subject site as improved grassland, it is clear that the lands in question are of low ecological value with limited significance from a biodiversity perspective and, therefore, I am in broad agreement with the contents of the ecological impact assessment which has accompanied the application. However, I would accept the necessity of providing for the movement of mammals etc. through the site by ensuring the provision of suitable openings at appropriate intervals within the perimeter boundary fencing.

7.10. **Appropriate Assessment:**

7.10.1. From a review of the available mapping, including the data maps from the website of the National Parks and Wildlife Service, it is apparent that whilst the proposed development site is not located within any Natura 2000 designation, it is situated approximately 800m west-northwest of the Blackwater River (Cork / Waterford) Special Area of Conservation (Site Code: 002170), c. 2.6km east-southeast of the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area (Site Code: 004161), and c. 9.8km southeast of the Lower River Shannon Special Area of Conservation (Site Code: 002165). In this respect it is of relevance to note that it is the policy of the planning authority, as set out in Objective No. HE 2-1: '*Sites Designated for Nature Conservation*' of Chapter 13 of the Cork County Development Plan, 2014, to protect all natural heritage sites, both designated or proposed for designation, in accordance with National and European

legislation. In effect, it is apparent from the foregoing provisions that any development likely to have a serious adverse effect on a Natura 2000 site will not normally be permitted and that any development proposal in the vicinity of, or affecting in any way, the designated site should be accompanied by such sufficient information as to show how the proposal will impact on the designated site. Therefore, a proposed development may only be authorised after it has been established that the development will not have a negative impact on the fauna, flora or habitat being protected through an Appropriate Assessment pursuant to Article 6 of the Habitats Directive. Accordingly, it is necessary to screen the subject proposal for the purposes of 'appropriate assessment'.

7.10.2. In terms of assessing the potential direct, indirect or secondary impacts of the proposed development on the conservation objectives of the aforementioned Natura 2000 sites, it should be noted at the outset that due to the location of the proposed works outside of any Natura 2000 designation, and the separation distances involved, it is clear that the subject proposal will not directly impact on the integrity of any European Site (such as by way of habitat loss or reduction). However, having reviewed the available information, in light of the nature and scale of the proposed development, the specifics of the site location relative to certain Natura 2000 sites, and having regard to the prevailing site topography, in my opinion, by employing the source / pathway / receptor model of risk assessment, it can be determined that particular consideration needs to be given to the likelihood of the proposed development to have a significant effect on the conservation objectives of the Blackwater River (Cork / Waterford) Special Area of Conservation and the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle Special Protection Area. In this regard it is of particular relevance to note that the subject site is situated c. 1km upstream of the Blackwater River (Cork / Waterford) Special Area of Conservation and drains towards same via a series of ditches / streams which ultimately discharge into the River Dalua i.e. it will be necessary to consider the potential implications for downstream protected habitats etc. arising from any potential change in flow rates or any deterioration in water quality attributable to the proposed works given the hydrological connectivity between the application site and the SAC.

7.10.3. Having reviewed the available information, including the screening exercise which accompanied the initial planning application, and following consideration of the 'source-pathway-receptor' model, it is my opinion that given the nature, design and scale of the proposed development, including the limited extent and depth of the necessary ground / excavation works, the site location outside of any Natura 2000 designation, the limited ecological value of the lands in question, the separation distances involved between the site and nearby designations, the proposed surface water drainage arrangements whereby runoff will be allowed to drain naturally to existing channels and to percolate through the ground with no increase in runoff volumes, and the intention to adhere to best practice construction techniques (including those pertaining to the prevention of water pollution), the proposed development is unlikely to have any significant effect in terms of the disturbance, displacement or loss of habitats or species on the ecology of the aforementioned Natura 2000 sites. Therefore, I am inclined to conclude that the proposed development would not be likely to significantly affect the integrity of the foregoing Natura 2000 sites and would not undermine or conflict with the Conservation Objectives applicable to same.

7.10.4. However, for the purposes of clarity, I would advise the Board that the foregoing conclusions have been drawn specifically on the basis of the development as proposed in the subject application and thus do not take account of any works that may be required outside of the site (i.e. the future grid connection), and it is this aspect of the wider scheme which has given rise to difficulties in the Planning Authority's assessment of the proposal pursuant to Article 6 of the Habitats Directive. In summary, the applicant's response to the request for further information issued by the Planning Authority indicated that there may not be sufficient capacity / depth within the decking of Anne's Bridge over the River Dalua to accommodate the ducting required for an underground grid connection to the existing ESNB substation in the village of Newmarket. Within this response it was stated that the grid connection design had not been finalised by ESB Networks and that the options for connection to the grid were:

- The Glenlara substation immediately adjacent to the site; or
- The Newmarket substation via the route shown in the 'Appropriate Assessment Screening Report'.

7.10.5. Although it was reiterated that the grid connection did not form part of the subject application, it was stated that a 'worst-case' scenario had been considered in the (updated) Appropriate Assessment Screening Report which comprised the laying of an underground grid connection along existing private and public roads to the Newmarket substation with the crossing of the River Dalua to be achieved by way of horizontal directional drilling beneath the structure of Anne's Bridge with suitable set back distances from the river (notwithstanding that other options available for the river crossing would include the incorporation of a short section of overhead line). The proposed methodology for this directional drilling beneath the bridge and the Special Area of Conservation was subsequently considered in the updated Appropriate Assessment Screening Report and Ecological Impact Assessment (taking account of the surface water drainage measures and methodology detailed in the accompanying Draft Construction Environmental Management Plan included in Appendix 'H'). This updated screening exercise noted that the installation of the underground grid connection would be carried out in accordance with the ESBN Ducting Specification Manual and best industry practice and also referenced the various controls to be put in place during the construction stage in order to safeguard downstream water quality (as set out in the Draft Construction Environmental Management Plan). It subsequently concluded that the series of environmental protection measures incorporated into the design of the project would be adequate to safeguard downstream water quality and thus the overall development (including the aforementioned grid connection option) would not be likely to give rise to a significant effect on any European site.

7.10.6. In its response to the foregoing, the Planning Authority has placed a considerable emphasis on the contents of the submission received from the Department of Culture, Heritage and the Gaeltacht wherein it is noted that a crossing of the River Dalua (i.e. the Blackwater River (Cork / Waterford) candidate Special Area of Conservation) by the underground electricity cable cannot be ruled out and that directional drilling may be required in this regard. It is further noted that the exact location of any such works has not been specified by the applicant and that there has been no assessment of whether the substratum of the river is suitable for directional drilling. Therefore, in the absence of detailed geotechnical information on the bed of the river and the type of directional drilling methods to be employed, the

Department has indicated that it is not satisfied that the possibility of (a) there being subterranean obstructions to the drill-head, or (b) hydraulic fracturing ('frac-out') of drilling fluid onto the bed on the river, can be excluded and thus an appropriate assessment of directional drilling under the River Dalua should be carried out with modelling of the likelihood of any failure of the bed around the borehole to be undertaken as part of any such assessment. These conclusions were accepted by the Planning Authority which then raised concerns as regards the appropriateness / legality of seeking a Natura Impact Statement in respect of works which go beyond the nature and scope of the proposal under consideration. In this regard reference is made to the implications of the judgements of the High Court in respect of *O'Grianna v. An Bord Pleanala [2014] IEHC 632* and *Patrick Daly v. Kilronan Wind Farm Limited and, by order, Derrysallagh Wind Farm Limited [2017] IEHC 308* which each refer to the issue of grid connections in the context of wind energy developments prescribed for the purposes of Section 176 of the Planning and Development Act, 2000, as amended, and aim to give proper effect to the requirements of the EIA Directive. Accordingly, the Planning Authority ultimately chose to refuse permission for the subject application on the basis it was not satisfied that the proposed solar farm development and '*its associated grid connection*' (as stated in the first reason for refusal) would not cause significant pollution of the River Dalua which forms part of the Blackwater River (Cork / Waterford) candidate Special Area of Conservation. Moreover, it was stated that the Planning Authority was not satisfied that the proposed development, if permitted, on its own or in combination with other plans or projects, would not adversely affect the integrity of the European site and thus would be contrary to the requirements of the Habitats Directive.

7.10.7. Having reviewed the available information, and given the rationale for the decision of the Planning Authority in its screening of the subject proposal pursuant to Article 6 of the Habitats Directive, with particular reference to the parallels seemingly drawn from the judgements of the High Court in respect of *O'Grianna v. An Bord Pleanala [2014]* and *Patrick Daly v. Kilronan Wind Farm Limited and, by order, Derrysallagh Wind Farm Limited [2017]*, in my opinion, it is of relevance in the first instance to reiterate that the proposal under consideration does not involve a class of development which is prescribed for the purposes of Section 176 of the Planning and Development Act, 2000, as amended, as set out in Parts 1 & 2 of Schedule 5 of the Planning and

Development Regulations, 2001, as amended. In *O’Grianna v. An Bord Pleanala*, the High Court quashed the decision of the Board in granting planning permission for a wind farm in Co. Cork on the grounds of ‘project-splitting’ and held that the Board had failed to ensure that the grid connection had been considered as part of the Environmental Impact Assessment process prior to the granting of permission for the turbines and ancillary works. In essence, the High Court judgement was based on the conclusion that the wind farm and the grid connection constituted a single project, and that both elements together would have to be subject to EIA, in order to comply fully with the terms of the Directive i.e. to ensure that the cumulative impact of the grid connection works were assessed in conjunction with the wind farm. Given that the subject development does not require the carrying out of environmental impact assessment, the issue of ‘project-splitting’ does not arise and thus I would caution against drawing direct parallels between the subject proposal and those cases considered in *O’Grianna* and *Daly*.

7.10.8. However, I would accept that in screening the proposed development for the purposes of ‘appropriate assessment’ as required by the Habitats Directive, the underlying intention of the requirement for the development to be considered ‘in-combination’ with other plans and projects is to take account of cumulative effects, and as these effects often only occur over time, plans or projects that are completed, approved but uncompleted, or proposed (but not yet approved) should be considered in this context. In my opinion, it is this aspect of the wider ‘project’ and the need for a future grid connection which gives rise to difficulties, particularly as it involves works beyond the nature and extent of the subject application, the precise nature of which are unknown.

7.10.9. The initial planning application detailed an ‘indicative’ routing for a grid connection between the proposed development and the ESNB substation at Newmarket with an intention to install the required cabling within the decking of Anne’s Bridge over the River Dalua, however, this did not form part of the application itself. Subsequently, in response to a request for further information, the applicant asserted that the grid connection design has not been finalised by ESB Networks and that there were options for connection to the grid at both the Glenlara substation immediately adjacent to the site and the Newmarket substation. With regard to the latter option, it was further stated that the laying of the cabling within the existing road corridor at the

bridge was only one of several options available for the river crossing in that a short section of overhead line could be utilised as an alternative or horizontal directional drilling utilised beneath the structure of the bridge.

Whilst the updated 'Appropriate Assessment Screening Report' provided with the response to the request for further information includes consideration of the potential use of horizontal directional drilling to cross the Blackwater River (Cork / Waterford) candidate Special Area of Conservation, the applicant has sought to emphasise that this is a 'worst-case' scenario which was included for the purpose of completeness whereas the preferred option (as stated in the grounds of appeal) would be for connection to the Glenlara substation given its proximity to the proposed development, although it is noted that ongoing upgrading works at this substation may or may not allow for connection of the proposed solar farm.

In my opinion, there is a considerable degree of uncertainty as regards the location and nature of any future grid connection to serve the development for which permission has been sought. In this regard, whilst I would be inclined to concur with the determination by the Planning Authority (and the recommendation of the Department) that any proposal to cross the River Dalua by way of horizontal directional drilling would likely necessitate Stage 2 Appropriate Assessment and the preparation of a Natura Impact Statement, it would appear that there are other options for the grid connection which may or may not require such an assessment. At this point, I would suggest that there is no clear final design / proposal for connection of the proposed solar farm to the national grid and thus it would seem somewhat unreasonable to determine that the specific development under consideration, when taken in combination with only one possible set of works, could adversely impact on a Natura 2000 site, particularly when the works in question do not form part of the subject proposal.

Whilst I would acknowledge the need to consider the 'precautionary principle', it must be questioned if it is appropriate in this instance to speculate on the 'likely significant effects' attributable to certain development works (i.e. the grid connection) which are neither existing, permitted, or necessarily proposed. The subject application has not sought permission for a grid connection and it is clear that there are a number of options open to the applicant as regards the precise means of connection to the national grid. Therefore, pending the finalisation of the route and methodology for the

grid connection whereby the likely effects on Natura 2000 sites associated with same can be suitably assessed, I am inclined to suggest that the refusal of the subject proposal for reasons related to the possible impact of works that are neither existing, permitted or definitely proposed, and which may never come to fruition, is unreasonable and unnecessary (*N.B.* Any future grid connection would, in itself, be subject to appropriate assessment at which point any likely significant impacts in combination with the proposed solar farm could be assessed).

Accordingly, it is reasonable to conclude on the basis of the information available, 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, in particular, specific Site Codes: 002170 & 004161, in view of the relevant conservation objectives and that a Stage 2 appropriate assessment (and the submission of a NIS) is not therefore required.

N.B. In the event the Board does not concur with the foregoing conclusion, it may wish to consider a refusal of person, or alternatively, to seek the submission of a Natura Impact Assessment by way of further information.

8.0 Recommendation

- 8.1. Having regard to the foregoing, I recommend that the decision of the Planning Authority be overturned in this instance and that permission be granted for the proposed development for the reasons and considerations and subject to the conditions set out below:

9.0 Reasons and Considerations

- 9.1. Having regard to the provisions of the current Development Plan for the area and to the national policy objectives, 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 amenities of the area, the residential amenities of the area or the ecology of the area, and would be acceptable in terms of pedestrian and traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 18th day of August, 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 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 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 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.

5.

- 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, and of visual and residential amenity.

6.

- a) Existing field boundaries shall be retained, notwithstanding any exemptions available and new planting undertaken in accordance with the plans submitted to the planning authority on the 18th day of August, 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 residential amenities of property in the vicinity.

7. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals at regular intervals along the perimeter of the site shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates designed generally 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, in the interest of biodiversity protection.

8. The developer shall facilitate the archaeological appraisal 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.

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

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

10. 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.

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

application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

Robert Speer
Planning Inspector

30th January, 2019