



An
Bord
Pleanála

Inspector's Report

ABP-317952-23

Development

A ten year planning permission for a solar energy and battery storage development with a total site area of 87 hectares

Location

Gartlandstown, Crookedwood, Co. Westmeath

Planning Authority

Westmeath County Council

Planning Authority Reg. Ref.

2360178

Applicant(s)

Neoen Renewables Ireland Limited

Type of Application

Planning Permission

Planning Authority Decision

Refusal

Type of Appeal

First Party Appeal

Appellant(s)

Neoen Renewables Ireland Limited

Observer(s)

Crookedwood, Collinstown,
Castlepollard Action Group
John Cogan
Cllr Denis Leonard

Colm De Burca

John Burke and Susie Whyte, Alan and
Rosanna Broderick, John and Anne
Morrissey, Val Brennan and Aisling
Keogh, Deirdre Keogh, Noel and
Maureen Orme, Jill Whyte, Cormac
Finnerty, Elizabeth Connery, Ken
Fallon and Fiona Foy, Katie Johnston

Val Martin

Katie Mulligan

Sandra Kennedy

Inland Fisheries Ireland

Date of Site Inspection

10th January 2024

Inspector

Susan Clarke

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1.0 Site Location and Description

- 1.1. The appeal site, measuring 87ha, is located in the townland of Gartlandstown, approximately 1.5km from Crookedwood settlement and approximately 11km from Mullingar town. The application site is divided into two separate solar array parcels of land located to the north and south of the R394 Regional Road. The northern parcel, which forms the larger land parcel, is located to the east of the R394 and to the north and west of the L1731 local road. It consists of eleven improved grassland fields and a small woodland plantation. The topography varies from 100mOD to 74mOD in a south-east direction. The fields are generally separated by hedgerows and intermittent tree planting. The southern section of the site is located to the south-west of the larger land parcel and is located to the south of the R394. Its topography varies from 89m OD to 59m OD in a south-western direction. It comprises eight fields, mainly supporting agricultural improved grassland. Both parcels of land will contain solar arrays, while the northern parcel will also contain the battery storage element of the development. The two parcels are connected by a corridor to the north and west of the R394 to the west of its junction with the L1731.
- 1.2. The boundary to the Lough Derravaragh Special Area of Conservation (SAC) and Natural Heritage Area (NHA) are located c. 300m from the western corner of the site. Lough Derravaragh is a designated Ramsar site. The Lough Lene SAC is located approximately 4km to the north-east and the Lough Owel SPA and SAC is located approx. 7km to the south-west. A small section of the site is located within the Lough Derravaragh High Amenity Area. The Bishops Lough Stream flows immediately east of the northern parcel of lands and to the south of the south-western parcel of the site before flowing into Lough Derravaragh. The Moneen Stream flows parallel to the western boundary of the southern parcel of land.
- 1.3. The area is characterised by agricultural lands with one-off rural dwellings and farm buildings. The wider area is relatively undulating and hilly. A protected monument, a ringfort-rath (WM012-014), is located within the application site.

2.0 Proposed Development

- 2.1. The proposed development subject to this appeal constitutes the provision of a solar farm over two land parcels comprising a total area of 87ha (which have been described

above) and battery storage facility. The solar farm constitutes the provision of the following:

- photovoltaic solar panels on steel mounting frames;
- electrical inverters;
- electrical power stations;
- underground electrical and communications cabling;
- containerised battery energy storage facility;
- the upgrade of an existing site entrance and development of a new site entrance;
- on-site access tracks;
- a temporary construction compound;
- security fencing and security gates;
- pole-mounted security cameras; and
- all associated and ancillary site development, landscaping and reinstatement works.

2.2. It is proposed that the solar energy development will provide for an electrical capacity of approximately 60-megawatts (MW), while the energy storage facility will have an electrical capacity of approximately 50MW.

2.3. The solar panels, which will be dark blue/black in colour with an anti-reflective coating to maximise light absorption, will each measure approximately 2.5m x 1.1m. Generally, the panels will sit c. 0.8m above the ground at the lowest point, and c. 3.2m above the ground at the highest point. This may vary slightly across the array as the angle of the panels will be refined to account for local ground conditions and topography. The frames are constructed of steel and aluminium and will be angled to maximise sunlight capture (generally 20-degrees from horizontal but will be dependent on local ground conditions, topography, and supplier specifications). The frames will have a matt surface finish. It is proposed to anchor the solar panel frames with screw-piled fixings. However, if required, pile driven frames or frames placed on pre-cast concrete foundations may be utilised if ground conditions dictate. All cabling on site will be underground.

- 2.4. Inverters will be affixed to the rear of the solar panels with each panel connected to the inverter by electrical cabling. In addition, individual transformer units and power stations will be required. An ancillary energy storage facility (ESS), comprising approximately 56 no. energy storage containers, will also be required.
- 2.5. Electrical and communications cabling will also be installed beneath the L394 to facilitate the connection of the southern parcel solar array to the northern parcel of land where the electricity substation is to be located. Note the substation (nor grid connection) does not form part of the subject application.
- 2.6. A total of c. 6,450m of new on-site access track will be required for construction purposes and for access within the solar array and energy storage system during the operational phase, while c. 510m of existing on-site access will also be upgraded and utilised.
- 2.7. The proposed development site will be served by 2 no. access points; the southern parcel to be accessed from the R394 via an existing access point and the northern section will be accessed from the L1731 local road via a new access point. It is proposed to close all other existing access points to future use onto the L1731 from the site.
- 2.8. A ten-year permission and a 35-year operational period have been sought in relation to the proposed development.

3.0 Planning Authority Decision

3.1. Decision

In their decision dated 9th August 2023, Westmeath County Council (WCC) refused permission for the proposed development for the following reasons:

1. *It is Council's policy objective as set out within the Westmeath County Development Plan 2021-2027 to 'protect the landscapes and natural environments of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted' (CPO 13.8). It is also Council's policy objective to 'protect high amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place' (CPO 13.20). Accordingly, and in the absence of satisfactory documentation*

submitted with this application to the contrary, it is considered that to permit the proposed development would materially contravene these policy objectives by reason of its overall scale and siting. The proposed development located within a scenic and culturally sensitive undulating and rolling landscape character and which is **partially located within a designated High Amenity Area** is not consistent with the criteria set out in Policy Objective CPO 10.151 of the Westmeath County Development Plan 2021-2027 and **would if permitted give rise to a visually obtrusive form in an open, undulating and attractive rural area.** Notwithstanding landscape mitigation measures, would be unduly prominent from the serving regional and local road network.

In this regard, the proposed development, if permitted would be seriously injurious to the visual amenities of the area, would adversely impact upon the character of the landscape, would be contrary to policy objectives CPO 9.24, CPO 12.4 and CPO 13.8 of the Westmeath County Development Plan 2021-2027 and would therefore be contrary to the proper planning and sustainable development of the area. (Bold: My emphasis.)

2. *In the absence of sufficient details submitted to the contrary and in applying the precautionary principle in identifying operational phase pathways for likely significant effects which includes hydrological connection from the site to Lough Derravaragh which may result in indirect effects, collision risks of Whooper Swans and displacement effects from the large area of solar arrays and potential effects arising from glint and glare, it is considered that the proposed development may pose a risk of significant effects on the conservation objectives and integrity of Lough Derravaragh SPA, (a Natura 2000 site). The proposed development would therefore be contrary to the EU Habitats Directive and the proper planning and sustainable development of the area.* (Bold: My emphasis.)
3. *Having regard to the overall siting and layout proposed, the ecological value of the surrounding area and matters raised by both the Department of Housing, Local Government and Heritage and Inland Fisheries Ireland in particular, and in the absence of sufficient details to the contrary, it is considered that the proposed development may have an adverse ecological impact and would therefore be contrary to Council's policy objective CPO12.25 of the Westmeath County*

Development Plan 2021-2027 and would be contrary to the proper planning and sustainable development of the area. (Bold: My emphasis.)

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planning Report (dated 9th August 2023) prepared by WCC recommended the refusal of the proposed development (without recourse to a further information request), noted the internal reports, submissions and prescribed bodies reports made in relation to the proposed development as well as summarising the relevant third-party submissions. The Planning Report also notes the following:

- There is no national guidance available on the appropriate location and design of solar farms.
- The Applicant should clarify the number of transformer units and specification of these units.
- The siting of the proposed substation compound and battery storage facility together with proposed security boundary treatment located on an elevated highly visible part of the northern parcel landholding raises concern.
- Concern is raised in relation to the proposed number, height and impact from the CCTV poles.
- Justification for the location of the substation compound has not been provided.
- The arrangement/siting of the solar array immediately adjoining mature hedgerows and tree planting located within the northern parcel of lands is queried.
- Significant manipulation of the undulating and scenic landscape is required by way of provision of extensive on-site access tracks throughout the site comprising a total length of 6.45km (not including an existing 510m agricultural track).
- The landscaping proposal will irreversibly and adversely impact the receiving landscape by interrupting and partially blocking both long and short distance views.

- The proposal is considered wholly inappropriate and would form a prominent and obstructive feature in the landscape and adversely impact its character. As such the proposal conflicts with CPO 10.151 and CPO 13.20. Refusal is recommended on the basis.
- The proposal will be visually prominent when viewed by nearby residents and depreciate the value of residential property in close proximity of the site.
- The proposal would be contrary to CPO 6.7 and CPO 13.76 and refusal is recommended on this basis.
- A dedicated amphibian survey was not carried out but the authors note that the drains that separate field 3 and 4 and the drain with field 5 have the potential to support the common frog and smooth newt.
- Further information is required in order to fully assess and address the ecological issues raised with the DoH LG, IFI and WCC Environment report.
- The Applicant has not satisfactorily demonstrated compliance with CPO 12.25 and a refusal is recommended in this regard.
- There are no details provided in relation to the direct discharges, including their locations.
- Inadequate information has been provided to assess and drainage drawings and details of the interceptor and outfall point are required.
- No Resource Waste Management Plan was submitted with the application.
- An updated CEMP is required to address the IFI concerns.
- The decommissioning plan is not considered detailed enough in order to fully assess the application.
- No lighting plan has been submitted with the application.
- A stream that borders both parcels of land discharges to the SPA waters and therefore there is a potential pathway for effect to be transmitted to Lough Derravaragh.
- There is no detail provided as to the proposed method of bridge crossing over the River Deel should the grid connection be provided to the Bracklyn wind

farm. However, it is stated that the screening for the grid connection is premature as the works do not form part of the application.

- The AA has not applied the precautionary principle in identifying operational phase pathways for likely significant effects.
- The proposed development may pose a risk of significant effects on the conservation objectives and integrity of Lough Derravaragh SPA and the proposed works either alone or in combination with other plans and/or projects by way of loss, fragmentation, disruption, disturbance to habitats, species or habitats of species that are of conservation interest cannot be rule out. In the absence of such information, refusal is recommended.
- It is unclear from the plans submitted as to the extent of land re-contouring proposed to facilitate this large-scale development, notwithstanding same Schedule 7 of the Planning and Development Regulations, 2001 (as amended), sets out criteria for determining whether a sub-threshold development is likely to have significant effects on the environment and therefore would require an EIAR. Recommends that the applicant clarify this matter by way of further information.
- Concludes recommending permission is refused as per the reasons outlined in Section 3.1 above.

3.2.2. Other Technical Reports

District Engineer (18th July 2023): No objection, subject to condition.

Environmental Section (3rd August 2023): Recommends further information is requested in relation to potential noise impacts, surface water management including the proposed direct discharge to field drains, spoil management and the IFI concerns. Also recommends that Stage 2 NIS is prepared due to the hydrological link to Lough Derravaragh SPA. The Section raised no flooding concerns in relation to the proposal.

Fire Officer (20th June 2023): No fire safety certificate required.

3.3. Prescribed Bodies

- 3.3.1. IFI (20th July 2023): Similar comments raised in Observation made in respect of the First-Party Appeal. See Section 6.3.1 below.

3.3.2. DHLGH (19th July 2023): Raised a number of significant concerns, including *inter alia*:

- Archaeological Impact Assessment required as part of further information. Note that the site of Recorded Monument WM012-014----Class: Ringfort – rath is located within the application boundary.
- The Department recommends that the limitations of the timing of the field visits should be acknowledged, noting that at least one full season of surveys for both wintering and breeding birds should normally be carried out for such developments, paying particular attention to Special Conservation Interest (SCI) species and flight lines.
- The Glint & Glare Assessment should have assessed the impact of potential glint and glare from the solar installations on wildlife, including invertebrates and in particular on the Special Conservation Interest (SCI) species for the relevant European sites within the Zone of Influence including Lough Derravaragh SPA.
- The screening for AA and NIS has not applied the precautionary principle in identifying operational phase pathways for likely significant effects i.e. collision risks and displacement effects from the large area of solar arrays. The potential effects of glint and glare from the solar farm has not been adequately assessed and as such no operation monitoring programme is proposed.
- Emergency Response Plan should include potential issues that could arise during a fire.
- While the AA Screening report found that a possible grid connection to Bracklyn Windfarm would not have any potential effects on the River Boyne and River Blackwater SAC and SPA, no detail is provided with regard to the proposed method of bridge crossing over the River Deel within the SAC. Such screening is premature.
- The solar farm has the opportunity to enhance and incorporate biodiversity improvements, resulting in a net gain for biodiversity, especially in intensively managed, poor species diversity grassland such as those found on the proposed site.
- Any hedgerow removal should not take place during the bird breeding season.

- A biodiversity enhancement management plan should be requested.
- Recommends that further baseline ecological monitoring and enhancement programme is presented both prior to and during the operational phase of the solar farm, including repeated biodiversity surveys and monitoring of impacts on biodiversity.
- Recommends that any artificial lights at night should aim to reduce light levels, use warmer spectrum lighting, and sensor/timed settings.

3.3.3. HSE (13th July 2023): No observation to make in this instance.

3.4. **Third Party Observations**

3.4.1. There were 74 No. public submissions, including a number from local representatives, made to the Local Authority in respect of the proposed development. The key points raised are similar to those raised in the Observations submitted to the Board in respect of the First-Party Appeal. They are summarised in the Local Authority's Planner's Report under the following headings:

- Insufficient information submitted with the application.
- No public consultation.
- EIA - application should be accompanied by an EIAR.
- AA Screening - inadequate assessment.
- Planning Policy - onus on the applicant to provide a detailed locational and business justification for the industrial proposal in a rural area.
- Site Suitability - inappropriate site having regard to the character of the landscape. Would have an adverse effect on heritage and tourism.
- Glint and Glare - concerns for local residents and road users.
- Battery Storage - fire safety concerns raised.
- Ecology - profound impact on ecology and biodiversity.
- Sub-station Infrastructure - application is dependent on a separate permission being secured for the substation.
- Visual Amenity - seriously injure the visual and residential amenities of the area.

- Tourism - proposal will negatively impact on Lough Derravaragh's tourism potential.
- Hydrology/Surface Water - concerns that increased surface water run-off could cause flooding implications for neighbouring properties.
- Environmental Concerns – concerns in relation to silt and debris, pollutants and other sediments entering watercourses and surface water flows would impact adjacent residential properties and potentially Lough Derravaragh SPA.
- Traffic Hazard – shading caused by the proposed mitigation planting will cause a traffic hazard.
- Devaluation of properties.
- Boundary treatment/security cameras: proposals are unsightly.

4.0 Planning History

WCC Reg. Ref. 19/6316: Planning permission granted in July 2020 for the construction of an agricultural building to include a milking parlour, dairy & ancillary rooms, livestock handling facilities, livestock waiting yard and an underground slatted soiled water tank. Construction of two agricultural buildings to include livestock cubicles, straw bedding area and underground slatted slurry tank. Construction of two silage pits and dungstead. Construction of a roof over existing feed passage joining the existing straw bedding house with the existing slatted house. Construction of an overground slurry store. Construction of a livestock underpass and pre-cast soiled water tank. Alterations to existing agricultural entrance. Erection of a meal bin and water storage tank and all associated site works.

5.0 Legislative and Policy Context

5.1. International and National Policy and Guidance

REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022

This plan was prepared in response to the Russian invasion of Ukraine. It focuses on the need to end the EU's dependence on Russian fossil fuels and to tackle the climate crisis. Recovery and Resilience Facility is central to this plan. It includes the accelerated rollout of renewable energy. It amends the Directive on the Promotion of

the Use of Energy from Renewable Sources (Directive EU 2018/2001) to require that 45% of energy is from renewable sources. It notes that lengthy, complex administrative procedures are a key barrier to investment in renewable energy and its infrastructure. The Directive simplifies and shortens the length of the administrative permit granting processes in certain environmental-related aspects. This includes national plans for designated renewable go-to areas, that have been subject to SEA.

In these areas, the Directive states:

“Renewable energy projects that comply with the rules and measures identified in the plan or plans prepared by Member States, should benefit from a presumption of not having significant effects on the environment. Therefore, there should be an exemption from the need to carry out a specific environmental impact assessment at project level in the sense of Directive 2011/92/EU of the European Parliament and of the Council 24, with the exception of projects which are likely to have significant effects on the environment in another Member State or where a Member State likely to be significantly affected so requests.”

It confirms that:

Article 1(10) inserts a new Article 16d to ensure that plants for the production of energy from renewable sources, their connection to the grid, the related grid itself or storage assets are presumed to be of overriding public interest for specific purposes.

The following Article 16d on Overriding Public Interest is inserted:

“By [three months from entry into force], until climate neutrality is achieved, Member States shall ensure that, in the permit-granting process, the planning, construction and operation of plants for the production of energy from renewable sources, their connection to the grid and the related grid itself and storage assets are presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in the individual cases for the purposes of Articles 6(4) and 16(1)(c) of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1)(a) of Directive 2009/147/EC.”

It states that:

“Renewable energy sources are crucial to fight climate change, reduce energy prices, decrease the Union’s dependence on fossil fuels and ensure the Union’s security of supply. For the purposes of the relevant Union environmental legislation, in the necessary case-by-case assessments to ascertain whether a plant for the production of energy from renewable sources, its connection to the grid, the related grid itself or storage assets is of overriding public interest in a particular case, Member States should presume these plants and their related infrastructure as being of overriding public interest and serving public health and safety, except where there is clear evidence that these projects have major adverse effects on the environment which cannot be mitigated or compensated. Considering such plants as being of overriding public interest and serving public health and safety would allow such projects to benefit from a simplified assessment.’

The Climate Action and Low Carbon Development (Amendment) Act 2021

- 5.1.1. The Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act, 2021), commits Ireland to a legally binding 51% reduction in overall greenhouse gas emissions by 2030 and to achieving net zero emissions by 2050. As part of its functions the Board must, in so far as practicable, perform its functions in a manner that is consistent with the most recent approved climate action plan, most recent approved national long term climate action strategy, national adaptation framework, sectoral plans, furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State¹.

Climate Action Plan 2023

- 5.1.2. The Climate Action Plan 2023 (CAP 23) follows the commitment in the Climate Act, 2021 and sets out the range of emissions reductions required for each sector to achieve the committed to targets. CAP 23 supports the acceleration of the delivery of renewable energy onto the national grid with a target of achieving 80% of electricity demand being met from renewable energy by 2030. Towards this end CAP 23 sets a

¹ Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended) refers.

target of providing 5GW of solar energy by 2025, and a longer-term target of 8GW by 2030. Note that the Climate Action Plan 2024 was approved by Government in December 2023, and is currently subject to public consultation.

National Planning Framework

5.1.3. The National Planning Framework 2018-2040 (NPF) sets ten strategic outcomes, one of which (No. 8), is to Transition to a Low Carbon and Climate resilient society. In discussing this outcome the NPF states “New energy systems and transmission grids will be necessary for a more distributed, 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 to the major sources of demand.” The NPF states that this transition to a low carbon economy requires:

- A shift from predominantly fossil fuels to renewable energy sources,
- Increasing efficiency and upgrades of appliances, buildings, and systems.
- Decisions around development and deployment of new technologies relating to wind, smart grids, electric vehicles, buildings, ocean energy and bioenergy, and
- Legal and regulatory frameworks to meet the relevant demands and challenges.

5.1.4. The NPF states that the future planning and development of our communities at local level will be refocused to tackle Ireland’s higher than average carbon-intensity per capita and enable a national transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050 through harnessing our country’s prodigious renewable energy potential. National Policy Objective 55 seeks 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.*” The NPF goes on to note the following in relation to the role of rural areas:

“In meeting the challenge of transitioning to a low-carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting,

while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas.”

National Development Plan 2021-2030

- 5.1.5. The National Development Plan 2021-2030 (NDP) sets out Governments investment strategy and budget up to 2030. The NDP commits to increasing the share of renewable energy up to 80% by 2030 and acknowledges that this will require world-leading levels of wind and solar electricity penetration onto the national grid.

Framework and Principles for Protection of Archaeological Heritage, 1999

- 5.1.6. This document was prepared by the Department of Arts, Heritage, Gaeltacht, and the Islands and sets out the basic principles of national policy on the protection of the archaeological heritage. Section 3.0 of the Framework notes that: - archaeological heritage is a non-renewable resource; the first option should be a presumption in favour of avoidance of developmental impacts and that preservation in-situ is the preferred option; if removal cannot be avoided, preservation by record should be applied; carrying out an archaeological assessment where appropriate is the first step in ensuring that preservation in-situ and by record take place; and monitoring is another method of ensuring that preservation takes place.

NMS – Solar Farm Developments - Internal Guidance Document

- 5.1.7. The National Monuments Service produced an internal guidance document (IGD) specifically in relation to solar farm development as a supplement to the 1999 document set out above. This document acknowledges that solar development can occupy a large site but also have potentially relatively low levels of ground impact over much - but not all - of the development site. The IGD notes that any solar farm development application should be accompanied by an archaeological statement (including a field assessment of the entire site). It also notes that blanket requests for geo-physical surveys or test trenching by further information should not issue just due to the size of the site area, the document also notes that it may be acceptable to deal with areas of unclear archaeological potential by way of conditions on any grant of development requiring geo-physical survey and/or testing followed by avoidance or appropriate mitigation.

Food Vision 2030

- 5.1.8. Food Vision 2030 is a strategy produced by the Department of Agriculture, Food and Marine in August 2021; it sets out the 2030 vision for Ireland's Agri-Food sector which aims for Ireland to become a world leader in Sustainable Food Systems (SFS). The Agri-food sector grew substantially between 2010 to 2020 with Irish food and drink exports increasing by 60% from €8.9 billion in 2010 to €14.2 billion in 2020. Agriculture is recognised as having a key role in protecting Ireland's climate and environmental credentials as the sector is the largest contributor to Ireland's greenhouse gas emissions. The strategy notes that facing into the decade to 2030 the agri-food sector can make significant and urgent improvements in its environmental footprint. To realise this vision the strategy has adopted four high level missions for the sector to work towards in the period to 2030. Mission 1 of the strategy is to create "A climate smart, environmentally sustainable Agri-food sector". To achieve this mission seven goals have been created, the first of these is to "Develop a Climate Neutral Agri-Food System by 2050". The ten actions identified to achieve this goal includes Action 7 which states the sector must "Scale up renewable energy (RE) sources especially anaerobic digestion, biorefining and biomass supply, and solar PV, focus on energy efficiency and examine potential barriers to the roll-out of RE at farm level, including necessary support for microgeneration and access to the grid."

Flood Risk Management Guidelines

- 5.1.9. These Guidelines seek to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

5.2. Regional Planning Policy

- 5.2.1. The RSES transposes the policies and objectives of the NPF to a regional level. There are 16 no. Regional Strategic Outcomes (RSO's). RSO 8 is to build climate resilience. RSO 9 is to support the transition to low carbon and clean energy. The RSES notes in Section 4.8 that '*Energy production, including renewable energy in the form of wind, solar and biomass have to date largely been provided in rural areas and the location of future renewable energy production is likely to be met in rural areas*'. RPO 4.79 and 4.84 support renewable energy developments in rural areas.

- 5.2.2. Section 7.9 (Climate Change) is relevant to the proposed development. 'The Strategy supports an increase in the amount of new renewable energy sources in the Region. This includes the use of ... solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this Strategy'.
- 5.2.3. Section 10.3 – In the context of a move towards a more energy efficient society and an increase in renewable sources of energy, there is a need to set a policy approach which will address an increased demand for indigenous resources and increased security of supply. To meet our energy targets, we need to better leverage natural resources to increase our share of renewable energy. There is an established tradition of energy production in the Midland counties by state agencies, however national environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants in these counties.
- 5.2.4. RPOs 10.20 and 10.22 are also particularly relevant in relation to their support for the development of enhanced electricity supplies across the Island.

5.3. **Local Planning Policy**

Westmeath County Development Plan 2021 – 2027

- 5.3.1. Chapter 5 sets out details of **Economic Development and Employment** Strategy for the county. A key tenant of the economic development and employment strategy seeks a transition to a low carbon economy/green economy where there is a shift towards the use of renewable energy.
- CPO 5.59 seeks to support renewable energy initiatives that supports a low carbon transition.
 - CPO 9.34 seeks to support the rural economy and initiatives in relation to diversification, agri-business, rural tourism and renewable energy so as to sustain employment opportunities in rural areas.
- 5.3.2. Chapter 6 relates to **tourism** and contains a number of policy objectives in relation to lakes and waterways including:
- CPO 6.45: Facilitate increased access to Westmeath's lakes and waterways, from towns and villages where visitor services are located, with an emphasis

on providing a strong visitor experience associated with the lakes and waterways and their heritage and amenity value, including trails, bird hides, watersports facilities etc., subject to the protection of environmentally sensitive areas and the requirements of the Habitats Directive.

5.3.3. Chapter 9 relates to **Rural Westmeath**. Specifically, Section 9.11.1 relates to Farm Diversification. Key CPO include *inter alia*:

- CPO 9.34 seeks to support the rural economy and initiatives in relation to diversification, agri business, rural tourism and renewable energy so as to sustain employment opportunities in rural areas.
- CPO 9.36 states that the development and expansion of appropriate new businesses in rural areas will normally be encouraged where:
 - The scale and nature of the proposed new business are appropriate to the rural area and are in areas of low environmental sensitivity.
 - The development will enhance the strength and diversification of the rural economy.
 - The development involves the use of redundant or underused buildings that are of value to the rural area.

5.3.4. Chapter 10 of the Development Plan specifically relates to **transport, infrastructure and energy**. Section 10.22 relates to renewable energy sources and Section 10.24 relates to Solar Energy.

- CPO 10.89 seeks to ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.
- CPO 10.139 seeks to support local, regional, national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner having particular regard to the requirements of the Habitats Directive.
- CPO 10.140 seeks to facilitate measures which reduce emissions of greenhouse gases and support the implementation of actions identified in the

Westmeath County Council Climate Change Adaption Strategy 2019 – 2024 and any future amendments.

- CPO 10.141 seeks to promote and support the use of renewable forms of energy as a contribution towards energy demand in all new buildings where it is consistent with the proper planning and sustainable development of the area.
- CPO 10.149 seeks to support to Ireland's renewable energy commitments outlined in national policy by facilitating solar power where such development does not have a negative impact on the surrounding environment, landscape, historic buildings or local amenities.
- CPO 10.150 seeks to encourage and support the development of solar energy infrastructure, including solar PV, solar thermal and seasonal storage facilities.
- CPO 10.151 seeks to ensure that proposals for solar farms consider the following criteria:
 - The Landscape Character of the County.
 - Visual impact particularly on raised/elevated sites.
 - Zone of visual influence and visual impact of the structures.
 - Glint and glare report and potential impact on adjoining road networks and dwellings.
 - Road access and impact on road network serving the site during the construction phase (A pre and post construction impact report may be required).
 - Archaeological Impact.
 - Incorporation of security measures – use of CCTV/surveillance cameras and security fencing.
 - The suitability/strength of the grid and accessibility to it.
 - The suitability of the site, having regard to other land use policies, including the need to protect areas of important built and natural heritage.
 - Decommissioning of obsolete infrastructure and after-use.

5.3.5. Chapter 11 specifically relates to **climate action**. Section 11.8 relates to green infrastructure and Section 11.9 relates to clean energy. The plan seeks to reduce harmful emissions and achieve and maintain good air quality for all urban and rural areas in the region and to work with local authorities and the relevant agencies to support local data collection in the development of air quality monitoring and to inform regional air quality and greenhouse gas emissions inventory. In relation to clean energy, the plan recognises the contribution that wind and solar energy make to meeting national renewable energy targets. In this regard the development plan strongly supports the development of renewable energy resources.

- CPO11.1 seeks to support the implementation of achievement of European, national, regional and local objectives for climate adaptation and mitigation as detailed in the following documents, taking into account other provisions of the plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the climate mitigation and adaptation measures which have been outlined through the policy objectives of this plan including:
 - National Mitigation Plan (2017 and any subsequent versions).
 - National Climate Change Adaptation Framework (2018 and any subsequent versions).
 - Climate Action Plan (2019 and any subsequent versions).
 - Any regional decarbonisation plan prepared on foot of commitments including the emerging regional, spatial and economic strategy for the Eastern and Midlands Region.
 - Relevant provisions of any sectoral adaptation plans prepared to comply with the requirements of the Climate Action and Low Carbon Development Act 2015, including those seeking to contribute towards the national transition objective, to pursue and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of 2050.

- The Westmeath County Council Climate Change Adaption Strategy 2019 to 2024. Draft Ministerial Direction on the Westmeath County Development Plan 2021 – 2027.
- CPO 10.157 seeks to support the production of sustainable energy from renewable sources such as wind, solar, bio-energy and the development of waste to energy/Combined Heat and Power Schemes at suitable locations and subject to compliance with the Habitats Directive.
- CPO 10.106 seeks to ensure that a flood risk assessment is carried out for any development proposal within 200m of a watercourse and at risk of flooding, in accordance with the “Guidelines for Planning Authorities on the Planning System and Flood Risk Management” (DoEHLG/OPW 2009). This assessment shall be appropriate to the scale and nature of risk to the potential development.

5.3.6. Chapter 12 relates to **Natural Heritage and Green Infrastructure**.

- CPO 12.4 aims to protect and conserve Special Areas of Conservation, candidate Special Areas of Conservation, Special Protection Areas and candidate Special Protection Areas, designated under the EU Birds and Habitats Directives respectively.
- CPO 12.5 seeks to ensure that no plans, programmes, etc. or projects giving rise to significant cumulative, direct, indirect or secondary impacts on European Sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects).

Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

- CPO 12.6 seeks to ensure that any plan or project that could have a significant adverse impact (either by themselves or in combination with other plans and projects) upon the conservation objectives of any Natura 2000 Site or would

result in the deterioration of any habitat or any species reliant on that habitat will not be permitted.

Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

- CPO 12.8 requires an ecological appraisal for development not directly connected with or necessary to the management of Natura Sites, or a proposed Natura Site and which are likely to have significant effects on that site either individually or cumulatively.
- CPO 12.9 seeks to identify and provide appropriate buffer zones between Designated Sites and local biodiversity features and areas zoned for development.
- CPO 12.25 seeks to recognise that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve the biological diversity.

5.3.7. Chapter 13 addresses **Landscape and Lake Amenities**. The proposed development site is located within the Central Hills & Lakes Landscape Character Area. There is one protected view in proximity of the proposed development. This prospect (No. 26) is at the southern edge of Lough Derravaragh looking northwest onto the lake and away from the proposed development.

- CPO 13.2 seeks to protect the distinctiveness, value and sensitivity of County Westmeath's landscapes and lakelands by recognising their capacity to sustainably integrate development.
- CPO 13.8 seeks to protect the landscapes and natural environments of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted.

- CPO 13.12 requires a Landscape and Visual Impact Assessment for proposed developments with the potential to impact on significant landscape features within the county.
- CPO 13.20 seeks to protect High Amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place.

Section 13.23 relates to Lough Derravaragh and states *inter alia*: *Lough Derravaragh provides one of the enduring images of County Westmeath. It has associations with the Legend of Lír where four children were banished as swans for 300 years to Derravaragh. The lake is located on the identified Táin Trail (tourist driving/cycling route) and along the proposed northern sector of the Westmeath Way (walking route) and is scenically important. Development around this lake should be strictly controlled. ...The landscape around the lake has not been subject to undue development pressures and in general retains its rural character.*

The following policy objectives apply:

- CPO 13.73: Develop the cultural and recreational aspects of the Children of Lír Legend as a tourist attraction for the area.
- CPO 13.74: Enhance the amenity facilities and public access areas to Lough Derravaragh and improve the access point at Faughalstown, consistent with Habitat Management Plan objectives for the area.
- CPO 13.75: Support the implementation of actions contained in the Coolure Habitat Management Plan.
- CPO 13.76: Sustain the established appearance and character of views of Lough Derravaragh from the adjacent road network.

Chapter 14 addresses Cultural Heritage. There is a Ring-fort Rath (WM012-014) located within the site.

5.4. Natural Heritage Designations

Natura 2000 Sites (SAC & SPA)

- 5.4.1. The proposed development site is within 15km of six Special Protection Areas and nine Special Areas of Conservation.

Special Protection Area (SPA)	Distance from proposed development (as-the-crow-flies)
Lough Derravarragh (004043)	0.3km W
Lough Owel (004047)	7km SW
Garriskil Bog (004102)	10.6km NW
Lough Iron (004046)	11.2km W
River Boyne and River Blackwater (004232)	11.4km SE
Lough Ennell SPA (004044)	14.4km SW
Special Area of Conservation (SAC)	Distance from proposed development (as-the-crow-flies)
Lough Lene (002121)	3.9km NE
River Boyne and River Blackwater (002299)	6km E
Scragh Lough (000692)	6.2km SW
Lough Owel (000688)	7km SW
White Lough, Ben Loughs and Lough Doo (001810)	7.5km NE
Wooddown Bog (002205)	8km S
Lough Bane and Lough Glass (002120)	8.5km NE
Lough Ennell (000685)	14.4km SW
Garriskil Bog (000679)	10.6km NW

An Appropriate Assessment of the proposed development has been carried out in Section 8.0 of this report in relation to the potential impacts to arise on the Natura 2000 network.

Proposed Natural Heritage Areas (NHA and pNHA)

- 5.4.2. The Lough Derravaragh NHA (Site Code 000684) is located c.300m to the west of the proposed development site boundary. Wooddown Bog NHA (Site Code NHA 000694) is located 8km to the south of the site.

In addition, there are a number of pNHA in the vicinity including *inter alia*:

- White Lough, Ben Loughs and Lough Doo pNHA (site code 001810) 7.5km northeast
- Lough Glore pNHA (site code 000686) 7km northeast
- Lough Shesk pNHA (site code 000556) 12.5km northeast
- Lough Sheever Fen/Slevin's Lough Complex pNHA (site code 000690) 6.5 southeast
- Lough Owel pNHA (site code 000688) 7km southwest
- Scragh Bog pNHA (site code 000692) 6.3km southwest
- Ballynafid Lake And Fen pNHA (site code 000673) 6.5km south west
- Lough Iron pNHA (site code 000687) 11.2km west
- Garriskil Bog pNHA (site code 000679) 10.6km northwest.

6.0 First-Party Appeal

6.1. Grounds of Appeal

- 6.1.1. A First-Party Appeal was submitted to the Board on 5th September 2023 opposing the Local Authority's decision. The grounds of appeal can be summarised as follows:

- At the outset, the Appellant contends that the Planning Authority's concerns could have been addressed by way of a request for further information.

First Reason for Refusal

- The proposed development is largely located outside of the mapped Lough Derravaragh Area of High Amenity (AHA): only 8.5ha or less than 10% of the overall proposed development site of 87ha is within the ACA. As such, the proposal is not contrary to Policy Objective CPO 9.24.

- The proposed development represents an efficient and effective diversification of agricultural activities and, as a consequence, is heavily related to the continuation and sustaining of existing farming practices on the subject site. As such, the proposal is consistent with Sections 1.8 and 9.2 of the CDP.
- It is not evident as to why Policy Objective 12.4 has been referenced in the first reason for refusal as it relates to nature conservation and not to landscape or visual impact.
- A comprehensive Landscape & Visual Impact Assessment (LVIA) of the proposed development was prepared. The LVIA finds that the proposed development site is largely typical of productive rural landscapes found throughout Ireland and does not exhibit any notable degree of distinctiveness, rarity or scenic value. As a consequence of this highly contained and enclosed landscape, and the characteristics of the proposed development, the proposed development site and its environs are not highly sensitive. Accordingly, a landscape sensitivity rating of 'Medium-low' has therefore been applied.
- Contrary to the Planning Authority's Planning Report (p.30), the proposed development will avoid the requirement for significant re-profiling of terrain, with the proposed solar array following the natural contours of the existing topography. While more substantial earthworks will be required at the proposed Energy Storage System and the electricity substation to create level compounds/platforms, such interventions will be highly localised and will not affect the integrity or character of the wider landscape.
- The proposed landscape mitigation measures will also further serve to reduce the visibility of the proposed development. The proposed development will clearly not be unduly prominent from the adjacent regional and local road network.
- The Planning Authority has placed overly significant weight on the 'pre-mitigation scenario' as, following the establishment and maturation of the landscape mitigation measures, the proposed development will largely be imperceptible to road users.

- With respect to the reference to “materially contravene” in the first reason for refusal, the Appellant is of the view that this is simply loose terminology rather than formal reference to a material contravention and Section 37(2)(b) would obviously not apply in this instance. It is noted that the Planning Authority's Planning Report makes no reference to a material contravention applying in respect of this planning application.
- The rationale for reference to Policy Objective CPO 10.151 is unclear. Each of the criteria referenced in the Policy have been addressed. Should the Planning Authority have required any further information, a request for additional information could have been issued.

Second Reason for Refusal

- A full AA Screening Report together with an Ecological Impact Assessment and Water Environment Assessment were included with the planning application. These reports present a complete, comprehensive assessment of the potential construction, operation and decommissioning phase effects on all Natura 2000 sites within the zone of influence of the proposed development. A Natura Impact Statement is not required in this instance.
- There is no direct hydrological connectivity between the proposed development site, local surface water features and Lough Derravaragh SPA. However, due to the prevailing topography and having regard to the precautionary principle, for the purposes of assessment it was assumed that surface waters from the proposed development site indirectly drain to the Bishop's Lough Stream and an unnamed stream, thus creating a hydrological pathway to the Lough Derravaragh SPA. Accordingly, as part of the design of the proposed development, a set of surface water control design features was devised to intercept, treat and attenuate all surface waters arising from the proposed development and to return them to the existing environment in an appropriate manner and at greenfield runoff rates. These design features are standard to similar construction sites to ensure the protection of all surface waters and were not specifically proposed to avoid significant effects on Lough Derravaragh.

- With respect to the IFI's concerns regarding ground/soil erosion, it is contended that any erosion which may occur will be imperceptible and any silt/sediment runoff will be filtered by surrounding vegetation.
- No detergents will be utilised in the washing of panels, with clean water being brought to site for use in the cleaning process.
- The proposed development would not be contrary to the EU Habitats Directive.
- There is little evidence from Ireland, United Kingdom (UK) or Europe to suggest that avian species, including Whooper Swan and other waterbirds for which the Lough Derravaragh SPA is designated as qualifying species, are at any significant risk of collision with solar arrays, including; as suggested in the submission from the Department of Housing, Local Government and Heritage; by mistaking them for a lake or waterbody. While research studies have been undertaken to evaluate the risk of collision for avian species, these studies have generally been undertaken in the United States and South Africa where the design of solar arrays and characteristics/behaviour of avian species are markedly different to the Irish or UK context.
- No evidence of wetland and waterbird activity was identified at the proposed development site, while no such species were recorded flying over, or in the vicinity of, the site. The issue of collision risk has been previously considered, at length, by the Board in respect of numerous solar energy developments including Case References ABP-301321-18, ABP-300135-17 and PL26.247366. In these cases, the Board concluded that collision risk would not be significant.
- There is no risk of significant disturbance or displacement effects as a result of human activities or noise emissions during the operational phase.
- The proposed development site, comprising 87 hectares, represents an imperceptibly small proportion of the overall land available to Whooper Swan (and other wetland and waterbirds) for feeding purposes. Any displacement will be of a highly localised nature with individual birds not being required to travel substantial distances to locate alternative feeding grounds. Ornithological monitoring from the Coole Wind Farm records Whooper Swans regularly move

between Lough Bane, Lough Kinale, Derragh Lough, Lough Sheelin and Lough Derravaragh, and that the Lough Derravaragh population is highly mobile in the area to the north of the Lough. The proposed development site is located to the southeast of the Lough and is not located on a direct flight path between Lough Derravaragh and any of the above listed lakes.

- Any disturbance or displacement, even if it were to occur, would be localised in nature and would not significantly affect any avian species, including those associated with the Lough Derravaragh SPA. Accordingly, the operation of the proposed development will not adversely affect the conservation objectives of the Lough Derravaragh SPA and would not therefore be contrary to the EU Habitats Directive.
- There is no evidence to suggest that avian species are at significant risk of experiencing glint or glare effects from solar energy arrays. Where glint is experienced, this will be momentary and will not result in any noticeable effect on bird activity. Glare cannot be experienced by birds in flight as their orientation vis-à-vis the solar array will be constantly changing thus avoiding any possibility of a prolonged exposure to bright light. This issue was also raised in respect of Case Reference ABP-300135-17 but was not accepted by the Board.

Third Reason for Refusal

- The proposed development site was selected following the completion of a comprehensive and extensive environmental constraints analysis. The process followed has been successful in identifying a site location for the proposed development, while ensuring the protection of the local environment and is in accordance with CPO 12.25.
- Other than the minimal removal of hedgerow at the proposed site entrance to the northern parcel, all other hedgerows will be fully retained at the proposed development site. All hedgerow to be removed will be replaced with new hedgerow being planted at the site entrance but behind the sightline to ensure future visibility for traffic accessing the site. It is proposed that approximately 7.3km of existing hedgerows and treelines will be bolstered with additional intro-

hedgerow planting and approximately 850m of new hedgerows will be planted; while approximately 2,850m² of woodland species will also be planted.

- At its nearest point, the proposed development is located 25m from the Bishop's Lough Stream. The implementation of such generous separation distances ensures that there will be no disturbance to riparian habitats, no in-stream works will occur and provides for natural treatment and attenuation of surface water runoff (via vegetated surfaces) and the implementation of a detailed range of dedicated surface water management measures.
- The site layout has been designed such that no infrastructure will be placed within an area deemed to be at risk of flooding.
- The layout and design features of the proposed development will therefore result in a positive long-term ecological and biodiversity effect at the subject site and its environs.

Response to Submission from Department of Housing, Local Government & Heritage

- Given the absence of the likelihood for significant effects, it has not been the practice of the Board heretofore to request a full season of surveys for wintering and breeding birds for solar energy developments. An ecological desk study was conducted to identify potential receptors and pathways for effects to occur, and to inform the subsequent field surveys to be undertaken. It was assessed that the majority of these receptors could be appropriately evaluated during fieldwork undertaken during the winter season; including birds, bats, aquatic species, mammals and invertebrates; and that the timing of the fieldwork would not present a notable limitation on the findings. Given the intensively managed nature of the lands in question, it was further assessed that significant species diversity was unlikely to be present at any time and, accordingly, this would not be a limitation on the survey effort. The timing of the field surveys and the absence of one full season of surveys for both wintering and breeding birds is not a limitation to the findings of the Ecological Impact Assessment submitted and, in particular, the AA Screening Report.
- The Emergency Response Plan (Fire Suppression) submitted, provides for an extremely high level of protection, including such that adverse effects on the Lough Derravaragh SPA cannot arise. In the unlikely event of a fire,

contaminants which are directed to the infiltration tank will be removed from site and disposed of at an approved waste management facility.

- The detailed CEMP will fully incorporate all design features and mitigation measures set out in the Planning & Environmental Report and will address any requirements prescribed in the conditions of consent, subject to a grant of planning permission.
- With regard to potential effects on invertebrates and glint and glare impacts, there is limited evidence to suggest that the development of solar arrays have a significant effect on their behaviour. Having regard to the distinguishing border and 'grid' appearance on solar panels, the proposed development will have no significant effect on aquatic invertebrates.
- The assessments undertaken and submitted with the planning application are highly precautionary; conservative; and, on the basis of the desk and field studies undertaken, have fully identified all pathways for operational phase effects on the Lough Derravaragh SPA.
- The Appellant is willing to commit to implementing a phase of ornithological monitoring at the proposed development site prior to and following construction.
- The proposed development's connection to the national grid will be the subject of a separate planning application and will therefore be the subject of a dedicated AA screening exercise. Furthermore, the competent authority to whom the planning application will be lodged will be required to undertake an AA of the grid connection infrastructure.
- As is standard practice and a legal requirement, no hedgerow removal or maintenance will take place during the bird breeding season.
- The Appellant is satisfied to accept, subject to a grant of permission, a condition of consent requiring the preparation as part of the CEMP of a specific Biodiversity Enhancement & Management Plan prior to the commencement of development wherein all of the habitat and landscape mitigation proposals will be fully detailed including proposed species mix.
- Prior to the commencement of development, the Appellant is willing to undertake further ecological surveys of the proposed development site. It is

highly likely that the Appellant will undertake such surveys, as a matter of course, regardless of whether they are mandated by way of a condition of consent, or not. The purpose of these surveys would be to ensure that there have been no alterations to the baseline ecological conditions at the site to inform the detailed design process and to make any immaterial alterations to the layout as may be required.

- Artificial lighting will not be required throughout the proposed development site.

Response to Submission from Inland Fisheries Ireland

- Mounting frames are likely to be installed using screw-piles, however, pre-cast concrete foundations may be utilised should ground conditions dictate. Such foundations would, if required, be installed at ground level and there will be no requirement for excavations or rock breaking.
- The volume of excavations and material to be excavated, is not assessed to be significant.
- While the IFI is correct that water will be discharged overland as a final filtration measure, this is the final stage in an already highly-precautionary and comprehensive series of treatment measures.
- Decommissioning methodologies will be further developed and will evolve over the coming years. As such, the submission of a definitive Decommissioning Plan at this time would not be appropriate.
- All construction activities will be undertaken in accordance with IFI best practice manuals, as relevant.

6.2. Planning Authority Response

6.2.1. No response received on file.

6.3. Observations

The Board received nine Observations in respect of the First-Party Appeal. The key points raised are summarised below.

6.3.1. Inland Fisheries Ireland

- Highlights the importance of Lough Derravaragh, Bishop's Lough Stream and Moneen Stream for trout. Notes that during the period 2004 to 2016 a substantial investment was made to enhance and rehabilitate the spawning and nursery habitat of the lake's tributary streams.
- Lough Derravaragh and its tributary streams must be protected from any adverse impacts.
- Given that the site is c.87Ha it is imperative that a full site survey takes place to map all watercourses on site. A full field survey should be carried out and a map of all watercourses on site produced or confirmation that a full field survey has been carried out.
- Further details are required in relation to the nature of the discharge passing through an oil interceptor.
- A fire at the battery storage site could present a substantial risk of deleterious matter entering watercourses downstream.
- There was no consultation with IFI.
- The proposed surface water disposal is 'to ground', the outflow from a settlement pond via a level spreader will more than likely reach a watercourse, this should be accounted for.
- Unacceptable for Applicant to request that the final layout and details of the project be agreed prior to the commencement of the project.
- IFI requests that settlement ponds or other effective techniques such as filtration be used to treat suspended solids, settlement ponds should be sized to allow 24jr retention time (1 in 10 years).
- Further details are required in relation to the nature of stormwater discharge, and the contract in place for maintenance of the large 3 stage silt trap and petrol interceptor.
- Studies have shown that large solar layer arrays have the potential to impact on mayfly and other invertebrate behaviour and egg laying in ways which will impact survival and population sizes. (*Potential Ecological Impacts of Ground Mounted Photovoltaic Solar Panels, An Introduction and Literature Review*,

BSC Ecology, 2019 is attached with the Observation). Invertebrate have an aquatic life stage and are essential in the diet of many fish species particularly wild brown trout and pike. None of the glint and glare or ecological assessments or AA screening, submitted with the application recognised, considered or addressed this potential impact.

- The construction of new roads represents substantial disruption and removal of top soil, with increased chance of run off from these activities. In this regard a Spoil Management Plan should be produced detailing the treatment of these arisings from road construction.
- IFI are concerned about the hydrology of any site where excavations including excavations for road construction are being undertaken.
- The Applicant demonstrates poor knowledge of the statutory authorities involved in the prevention and detection of water pollution.
- IFI is unable to assess from the information provided where the settlement pond designs proposed are adequate for the construction period, figures and calculations should be presented to show expected volumes of run off and concentration of suspended solids in these waters during the construction phase, then an assessment could be made in relation to the adequacy of these proposals.
- Monitoring of any run off and water quality is imperative during construction. A surface water management plan must be provided for the construction period.
- Site specific measures should be outlined in the CEMP and Water Pollution Plan to protect groundwater. The entire site should be surveyed for springs and wells.
- It is imperative that the development does not cause or exacerbate flooding in the area.
- A full site plan should be produced showing trucks wash, concrete chute wash and concrete mixing area with dimensions from the nearest watercourse.
- All dewatering should be monitored.

- An actual frequency of inspection for the bunding area for fuel storage should be provided, in addition to an alarm being provided.
- Geotechnical studies should be carried out to quantify if there is any excavation/rock breaking required in advance of works. Crushed rock and stone required for the 6.5km access road contain fine materials which may pollute nearby watercourse.
- A Spoil Management Plan should be produced.
- Details of the construction of foundation plinths for medium voltage power stations should be provided with relevant control measures.
- The Emergency Response Plan should include details of the relevant parties to this development.
- A full decommissioning plan should be provided.
- The following is required:
 - A detailed site specific CEMP is required and a Final CEMP, the latter should be agreed with the IFI before commencement.
 - Method Statements.
 - Arrangements for cleaning the solar panels and relevant control and mitigation measures and scour and volumes of water should be provided.
 - All works must adhere to IFI guidelines, where relevant.
- Any lighting should be diffused and angled away from the stream.
- The 12-15 month construction period should have regard to the open season (1st May to 30th September).

6.3.2. Sandra Kennedy, Gardlandstown, Castlepollard, Co. Westmeath

- The proposal is unsightly and not consistent with the CDP.
- The area's beauty, biodiversity, archaeology, and heritage should be protected for generations to come.

- To downplay the proportion of the site that is in a High Amenity area is not acceptable.
- The Moneen River leading into Lough Derravaragh supports a range of important species, including brown trout. Derravaragh is only one of 13 wild brown trout lakes remaining in Europe.
- The flightpath of the whooper swan runs across the development to Lough Lene, Lough Bawn and the Glore. The birds may mistake the panels for a lake at night and their grazing grounds and that of other birds will be destroyed.
- The contaminated grass or scrub that grows under the panel would not feed sheep.
- The amount of hedgerow to be removed is not highlighted. It will take 20-30 years for woodlands/hedgerow to grow.
- The proposal is on a regional and local road network and would be unduly prominent.
- The AA screening, Ecological Impact Assessment, and Water Environment Assessment are inadequate.
- The area is prone to flooding and the solar panels will make it worse.
- Glint and glare from the development will affect the main road network (R394 and L1731).
- The grid connection should be part of the application.
- There was no community engagement.

6.3.3. Kate Mulligan, Gardlandstown, Crookedwood, Co. Westmeath

- The proposal is unsuitable at this location within and adjacent to an Area of High Amenity and 300m from Lough Derravaragh SPA.
- It is imperative that there is a national framework and guidelines for solar farms.
- There are too many unknowns and parts of the overall project which still need to be applied for, resulting in an unsatisfactory and piecemeal assessment in terms of ecology and appropriate assessment, and is not in the interest of proper planning and sustainable development of the area.

- There was no effective community engagement.
- Solar farms should be located on marginalised lands, brownfield sites or roof structures.
- The development should not be located in a High Amenity Area.
- The Applicant has no regard to the impact on tourism or archaeology from the proposed development.
- No evidence has been submitted to overturn the reasons for refusal.
- The main areas of concern are visual impact, flooding, glint and glare, noise and disturbance from construction phase and devaluation of property.
- The Water Environment Assessment states there is no history of flooding. However, flooding is an issue in the area. The run-off from the proposed development will increase the flooding risk to nearby properties.

6.3.4. Val Martin, Drumsallagh, Kingscourt, Co. Cavan

- The Observation outlines the Observer's understanding of the legal framework for the proposed development.
- The application is a component of a government public plan or programme for energy to which the SEA Directive applies.
- The application is invalid as it with respect to the SEA Directive and EIA Directive.
- Neither the Local Authority or the Board has the expertise to assess a plan or programme for energy and do not have the jurisdiction to attempt to do so.
- A screening process cannot be done where an EIA is mandatory because the result can only be that one is required.
- The criteria for determining if EIA is required is if there is likely to be a significant effect on the environment.
- The application is subject to EIA with respect to Annex 3 and Schedule 6, 7, 7a, and 8 of the Regulations 2001.

- Not only will the solar farm require exhaustive assessment from a pollution standpoint, but will require monitoring over its 40 year life. Questions who will pay for the monitoring.
- With all the proposed hardware and connecting cables there is a risk of accident.
- The applicant for this solar farm wants to build it without any SEA, EIA, AA or compliance with the Pollution Control Directive.
- If the Board grants permission for the proposed development and it is built, it could be rendered liable to pay compensation where a plaintiff proves damage to health or amenity and proves European Law was bypassed.
- The landowners own the local road. A private company cannot legally apply for permission to carry out works on the public road.
- The archaeological impact from the proposed development needs to be assessed in an EIAR.

6.3.5. John Burke and Susie Whyte, Alan and Rosanna Broderick, John and Anne Morrissey, Val Brennan and Aisling Keogh, Deirdre Keogh, Noel and Maureen Orme, Jill Whyte, Cormac Finnerty, Elizabeth Connery, Ken Fallon and Fiona Foy, Katie Johnston

- The Applicant has completely misinterpreted the rationale behind the first reason for refusal and has failed to adequately address the key Landscape Character Assessment policy objectives that informed the primary reason for refusal under CPO 13.8 and CPO 13.10.
- Objective CPO9.24 is clear in that it will restrict development not relating to farming practices and tourism in all High Amenity Areas, with the sole exception being housing for the immediate family of established residents that meet the rural housing policies of the Council.
- Approx 25% of the application site is within the AHA. The Applicant fails to understand the rationale and basis for the identification of these areas as being suitable for protection.

- All aspects of the proposed development within the HAA is contrary to CPO 9.24. The existing and continued use of the land is irrelevant in terms of this policy. The proposal is not a farming practice and does not relate to tourism.
- The conclusions of the landscape visual impact assessment submitted with the application are clear that the proposal will be highly visible within the local landscape.
- The application lacks clarity in terms of the proposed landscaping plan. The LVIA is based on a high degree of maturity of planting.
- The LVIA fails to consider the impact from the proposed development on the HAA and is based on the landscape mitigation maturing.
- The reference to the proposed development materially contravening CPO 13.8 is not a passing reference. There is no basis for why section 37(2)(b) of the Planning and Development Act 2000 (as amended) does not apply in this instance.
- The Applicant has had regard to mitigation measures for addressing surface waters, however has screened the development out for Stage 2 AA.
- The approach to AA Screening and EIA was not adequate. The winter bird surveys are below the normal standard to reach any certainty in relation to the impact on the environment and birds that are connected and linked to the SPA.
- The ecological walkovers surveys were inadequate.
- The Applicant has not proved that the proposal will not negatively impact on the conservation objectives of the Lough Derravaragh and would therefore be contrary to CPO 12.4, 13.6, 12.7, and 12.11.
- The application does not adequately address or justify why the subject site is an appropriate location for such a large solar array farm.
- The Applicant has identified that a large part of the site is at risk of flooding but has not undertaken a substantive Flood Risk Assessment.
- The proposed layout has had little or no consideration to environmental considerations as well as its landscape and visual impact.

- The visual impact of the substation has not been assessed.
- The layout and design of the hedgerows being proposed will alter the fabric and character of the area.
- There is no basis that the proposed development will result in a biodiversity and habitat gain.
- The potential for Whooper Swan collisions as a result from glint and glare has not adequately been assessed.
- The AA screening process dismisses the cumulative effects of the substation and its connection to the national grid.
- There has been no assessment of the functional interdependence between different elements of the project, including the grid connection, which may as indicated by the Applicant involve crossing the River Boyne and River Blackwater SAC. Reference is made to the O’Grianna judgement.
- Future monitoring can only be considered appropriate and acceptable, if the scientific basis for that monitoring is deemed acceptable and conclusive. This is not the case.
- A number of the proposed attenuation features are located either entirely outside or partially outside of the application boundary.
- It is unclear if the engineered features have the potential post development to attract birds away from the SPA and therefore negatively impact upon the SAC.
- The application should assess the visual impact of the development on day one of its operation.
- No reference has been made to how quickly the disparate and ill-considered landscape proposals will mature and no indication of how this will enhance biodiversity links within the local and surrounding area.

6.3.6. Colm De Burca Rathcorbally, Monilea, Mullingar, Co. Westmeath

- There are no guidelines or targets for renewable energy, particularly solar.
- All portions of a proposed development should be assessed in light of the AHH and SPA.

- The electricity substation and grid connection are an integral part of any large-scale energy production development, but these aspects were not included in the application. These may be substantial in their scale, and their impact on the local area and environment and need to be assessed as part of the overall development.
- Apart from a leaflet drop no effort was made to consult with locals. The Appellant makes no reference to the existence of the submissions made to the Local Authority in respect of the application.
- The site is also used for cattle grazing. This is not mentioned by the Applicant, which highlights the inconsistencies and lack of attention to detail in the application.

6.3.7. John Cogan, Gartlandstown, Castlepollard, Co. Westmeath

- If permitted the solar farm would seriously injure the visual and residential amenities of the area.
- The photomontage is clearly depicted the dramatic and destructive impact of the proposal on the lands.
- The argument that the solar panels would become more acceptable as they add to the diversity of the land use is a novel argument without substance.
- Highlights that planning permission has been refused for a number of rural housing projects on visual amenity grounds. Screening a locationally bad development is not a sustainable solution. This is the wrong location for an industrial scale proposal and it cannot be justified by the imposition of extensive screening which in itself would be injurious to residential amenities and to the visual amenities of the area.
- The reference by the Appellant to the policies of diversification in the CDP in support of the proposal, fails to acknowledge that these policies are all predicated on the caveat of “protecting the environment of sensitive areas” which the present proposal definitely does not. In such circumstances the precautionary principle must be employed in favour of protecting the amenity, habitats and the ecology.

- An EIAR should have accompanied the application. Mandatory EIA is required where the area of lands to be restructured by the removal of field boundaries exceeds 50 hectares or recontouring within farm holdings exceeding 5 hectares. The subject site extends to 87 hectares and extensive land recontouring is an essential part of the development. Furthermore, the scale of the development being 60 MW makes this a large scale project and brings the proposal within the sub threshold capacity criterion.
- The risk of collision for the whooper swan is self-evident and is not one that should be accepted, in particular where the proposal is not locationally bound, for example the quarry, where there are many other substantial negative locational characteristics. The precautionary principle must be applied having regard to the potential serious effects such a proposal would cause and request that the Board refuse permission.
- The proposed development will have a profound impact on the ecology and biodiversity of the area through the replacement of 215 acres of grassland with 215 acres of industrial development. The applicant's statement that only 40% of the site will be actually covered by panels and that sheep will graze under and between the mounted panels is not a mitigating factor. Such sheep grazing is not culturally acceptable in Ireland where animal welfare is highly regarded by the farming and wider community. There will be extensive degradation of ground and under and between pans from the loss of direct sunlight and it will and it is very likely that the ground will be off very little ecological value.
- There will be a significant surface water runoff during both the construction phase and the 35 year operational phase of the development. The residents strongly advised that a precautionary approach be taken by the Board in this regard. There is also a serious concern that changes in runoff and flow patterns will result from compaction of soil and loss of permeable areas. This will also result in silt and debris pollutants and other sediments entering watercourses and surface water flows which would impact residential properties.
- The proposed development would significantly devalue residential property in the vicinity.

- The Board has refused permission for a number of solar farms generally for site specific reasons, and although each case is determined on its own merits and different sites present different characteristics, it is however relevant that the Board has given significantly to visual amenity and has refused many solar plant proposals for this reason (e.g. 249348, 248329, and 303577).
- The grid connection route is a fundamental and essential element of what should be a composite application.
- The fundamental problem with the proposed development is not on the principle of solar energy infrastructure but rather the appropriate location of such development. The correct location selection methodology should and must be to assess the location and requirements before site selection and to use these criteria to find an appropriate site.

6.3.8. Cllr Denis Leonard, Trim Road, Kinnegad, Co. Westmeath

- The problems highlighted in this application range from insufficient information from day one, no public consultation, the EIA, screening, general planning policy, the actual suitability of the site, local infrastructure, visual amenity, battery storage safety, threats to local road users, the effects on a strong local tourism product, ecology, habitats, hydrology, security, and simply general environmental concerns ranging from pollutants, debris and surface water and the overall effects on local properties.
- The sensitive and unique site is wholly inappropriate for a development of this scale.
- Part of the development is located in the Lough Derravaragh High Amenity Area.
- The environmental assessments undertaken are inadequate leading to significant concerns over impact on the Lough Derravaragh SPA and the protected species it supports.
- The development is out of character with the landscape in the area and the landscape and visual impact assessments underestimates the impact.

- The proposal will limit the opportunities for development of tourism and heritage in the area which is an objective of the County Development Plan.
- Fear that the proposed development may be a precursor for further incremental large energy developments in the area that do not take account of its topography, tourism potential and the obvious lack of consultation with the local community.
- The countless proposed energy developments for Westmeath will place too high a concentration of solar installations in a rural area, too near individual homes, and are not in keeping with the County Development Plan objective for a fair balance of renewables in the county.

6.3.9. Crookedwood, Collinstown, Castlepollard Action Group

- Solar farming is a misnomer as it is not farming. It is an agricultural practice but on the contrary takes land out of agricultural practices.
- If permitted the solar farm would seriously injure the visual and residential amenities of the area.
- The LVIA report acknowledges that the objectors will be negatively impacted from the proposal.
- The argument that the solar panels would become more acceptable as they add to the diversity of the land use is a novel argument without substance.
- Highlights that the planning permission has been refused for a number of rural housing projects on visual amenity grounds. Screening a locationally bad development is not a sustainable solution. This is the wrong location for an industrial scale proposal, and it cannot be justified by the imposition of extensive screening which in itself would be injurious to residential amenities and to the visual amenities of the area.
- The reference by the Appellant to the policies of diversification in the CDP in support of the proposal, fails to acknowledge that these policies are all predicated on the caveat of “protecting the environment of sensitive areas” which the present proposal definitely does not. In such circumstances, the

precautionary principle must be employed in favour of protecting the amenity, habitats and the ecology.

- The proposal would set an undesirable precedent for similar large scale development proposals in the area and the potential expansion of the development proposed.
- Concur with the planning authority's comments that significant manipulation of the undulating and scenic landscape will be required, including 510 metre agricultural track to be upgraded to four metre wide and extensive planting of 8,200m of hedgerow. These works will irreversibly and adversely impact upon the receiving landscape.
- The partly sighting of the development within the Lough Derravaragh AHA is wholly inappropriate and would form a prominent and obtrusive feature in the landscape.
- The proposed development with its high industrial scale visibility would significantly conflict with the Council's policy objective to develop tourism and recreational aspects of the Children of Lir legend.
- The proposed development would be contrary to policy objectives CPO 6.7 and CPO 13.76.
- An EIAR should have accompanied the application. Mandatory EIA is required where the area of lands to be restructured by the removal of field boundaries exceeds 50 hectares or recontouring within farm holdings exceeding 5 hectares. The subject site extends to 87 hectares and extensive land recontouring is an essential part of the development. Furthermore, the scale of the development being 60 MW makes this a large scale project and brings the proposal within the sub threshold capacity criterion.
- The risk of collision for the whooper swan is self-evident and is not one that should be accepted, in particular where the proposal is not locationally bound. The precautionary principle must be applied having regard to the potential serious effects such a proposal would cause and request that the Board refuse permission.

- The proposed development will have a profound impact on the ecology and biodiversity of the area through the replacement of 215 acres of grassland with 215 acres of industrial development. The applicant's statement that only 40% of the site will be actually covered by panels and that sheep will graze under and between the mounted panels is not a mitigating factor. Such sheep grazing is not culturally acceptable in Ireland where animal welfare is highly regarded by the farming and wider community. There will be extensive degradation of ground and under and between pans from the loss of direct sunlight and it will and it is very likely that the ground will be off very little ecological value.
- Notwithstanding the proposed mitigation measures the residents are seriously concerned that surface water would flow into adjacent residential properties. The residents strongly advise that a precautionary approach be taken by the Board in this regard. There is also a serious concern that changes in runoff and flow patterns will result from compaction of soil and loss of permeable areas. This will also result in silt and debris pollutants and other sediments entering watercourses and surface water flows which would impact residential properties.
- The proposed development would significantly devalue residential property in the vicinity.
- The Board has refused permission for a number of solar farms generally for site specific reasons, and although each case is determined on its own merits and different sites present different characteristics, it is however relevant that the Board has given significantly to visual amenity and has refused many solar plant proposals for this reason (e.g. 249348, 248329, and 303577).
- EIA screening is required having regard to SI 383 of 2003 relating to Projects for the Restructuring of Rural Land Holdings. Having regard to the significant impact and scale of the proposed development on the environment an Environmental Impact Assessment Report ought to have been prepared and submitted with the planning application.
- The substantial industrial proposal is in conflict with the CDP policies to promote tourism and protect Lough Derravaragh and as such permission should be refused.

- The fundamental problem with the proposed development is not on the principle of solar energy infrastructure, but rather the appropriate location of such development.

6.4. **Further Responses**

No further responses received.

7.0 **Assessment**

Having inspected the subject site, application details and documentation as well as considering the national, regional and local planning policy context and guidance, I consider the main issues to be considered in this appeal are as follows:

- Principle of the Proposed Development
- Landscape and Visual Impacts
- Biodiversity
- Water
- Glint and Glare
- Residential Amenity
- Site Access and Roads
- Archaeological, Architectural and Cultural Heritage
- EIA
- Other Matters.

Each of these issues is addressed in turn below.

7.1. **Principle of the Proposed Development**

Policy Support

- 7.1.1. There is significant policy support for the provision of additional renewable energy development (including solar) across all national, regional and local planning policy documents, which translates from broad cross-sectoral government support to move towards a low carbon future, reduction in use of fossil fuels, and increased penetration of renewable energy onto the national grid. Objective No. 55 of the NPF seeks 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.”

- 7.1.2. One of the key actions identified in the Climate Action Plan 2023 is to increase the proportion of renewable electricity to up to 80% including a target of 8GW of solar energy by 2030. The Government policy statement on security of supply (November 2021) notes the commitment that 80% of electricity consumption will come from renewable sources by 2030, with an overall aim of achieving net zero emissions.
- 7.1.3. I acknowledge the observations on file that note the lack of national guidelines in relation to solar energy development, however, there is clear broad support at strategic, regional, and local level for the increased deployment of renewable energy technologies including solar development, (as set out in Section 5 of this report above). The CDP provides significant local policies and objectives to support the sustainable development of the County, which provide significant protections for sensitive environmental receptors including residential amenity in relation to all development proposals. I also note that the Board have considered a significant number of solar farm applications in the absence of national guidance and have considered each in the context of the proper planning and sustainable development of the relevant areas. While the CDP does not provide any mapping indicating suitable locations for the provision of large-scale solar farm developments it does require such applications to be assessed on their own merits on the basis a variety of factors including *inter alia*, landscape character, visual impact, glint and glare, traffic impacts, archaeological impacts, protection of built and natural heritage, security measures, and decommissioning.

Loss of Agricultural Land

- 7.1.4. In relation to the principle of the proposed development, I note that the Observations on the appeal have raised concerns in relation to the loss of agricultural land, the broader industrialisation of the rural landscape and the general lack of national guidelines in relation to solar development. In this regard I note that the CDP, RSES, NPF and government policy all provide significant policy support and context within which to consider the merits of the proposed development in terms of the proper planning and sustainable development of the area. Furthermore, the NPF and RSES

acknowledge that future renewable energy developments will by their very nature require to be located on tracts of rural land. There is no grading system for land in Ireland and specifically there is no policy which precludes the development of solar farms on agricultural land.

7.1.5. National agricultural strategy (Food Wise 2030) aims for Ireland to become a world leader in Sustainable Food Systems; however it also recognises that agriculture has a key role to play in protecting Ireland's climate and environmental credentials and states that the sector must scale up renewable energy sourced including solar PV. The proposed development will not result in the permanent loss of a significant portion of agricultural land and the relevant policy framework acknowledges that rural areas are generally suitable locations in principle for the provision of renewable energy developments provided significant effects across a range of environmental media and receptors are mitigated/minimised. Save for the access tracks and the location of the inverter/transformer stations and BESS, it is not intended to remove soil from the site. Whilst the top soil layer will be disrupted during construction due to the passage of heavy vehicles, the original pasture conditions are generally returned within less than a season. Grazing of small animals can be accommodated on the site in addition to pro agri-environmental measures. This appears to be the norm for most solar farms being proposed and will maintain the fields in agricultural use, albeit restricted in the type of agricultural use.

7.1.6. I, therefore, consider that the principle of the proposed development at this location will not have a significant adverse impact on agricultural activities or preclude agricultural practices returning to the site in the event of decommissioning. I note that some of the Observers question whether or not the site can be used for sheep grazing during the proposal's operational life. Such practice is common for many operational solar farms both nationally and internationally. No conclusive evidence has been provided by Observers to indicate that such practice would negatively impact livestock in this instance.

Site Selection

7.1.7. In relation to site selection for the proposed development, the joint Observation from John Burke *et al.* states that the application has not provided an adequate justification

of the selection of the subject site. As outlined in the First Party Appeal, the Applicant explains that the proposed development site was selected following the completion of a comprehensive and extensive environmental constraints analysis. The key criteria assessed as part of the analysis are outlined in Section 2.0 of the Cover Letter (15th June 2023): avoiding areas assessed to be at risk of flooding; avoiding the location of known cultural heritage sites; and designing and siting of the proposed solar array to minimise the effect on nearby dwellings and residents.

7.1.8. I note the following in relation to the principle of the location of the proposed development:

- The provisions of the CDP (Section 9.11.1) support farm diversification, provided proposals related directly either to the agricultural operation engaged on the farm or the rural nature of the area, and provided it does not unacceptably impact on the landscape and character of the area and is compatible with the existing road infrastructure in the area. (These items are considered in later sections of this report).
- A solar farm by its very nature requires a significant site area in order to generate renewable energy, and to ensure a proposed development can be commercially viable. In this regard, rural areas provide an important resource for such sites.
- While I note that there are dwellings in the vicinity of the proposed development, the site is not located in an area with a high population density.
- While a small section of the site forms part of a AHA, the majority of the site is not located in a visually vulnerable landscape. The protected view at Lough Derravaragh will not be impacted by the proposed development, as it is orientated in the opposite direction to the subject site.
- The site is not subject to any specific environmental designations and is not elevated above the surrounding environment, but rather forms part of the undulating landscape in the area.
- The site is in relatively close proximity (c. 10km as-the-crow-flies) to the permitted Bracklyn Wind Farm (ABP-311565-21), which could potentially facilitate connection of the proposed development to the national grid.

- 7.1.9. I consider the site selection process undertaken by the applicant to have been adequate in this instance.

Conclusion

- 7.1.10. Taking account of the above and following site inspection, I consider that the principle of the proposed development (subject to the further detailed considerations discussed below in relation to landscape impacts, residential amenity, road corridor, environmental effects, etc.) is acceptable at this location.

7.2. Landscape and Visual Impacts

- 7.2.1. The site of the proposed development is located within the 'LCA 4 – Central Hills & Lakes' LCA as designated in the CDP. Other landscape character areas within the wider study area include 'LCA 01 – Northern Hills and Lakes'. Whilst no sensitivity classifications are identified for the landscape character areas in Westmeath, LCAs 1 and 4 are noted for their "high scenic quality". The CDP describes the LCA as being typified by undulating hills and lakes, the most prominent of which are Lough Derravaragh and Lough Owel. In addition, a section of the southern element of the southern solar array is located within the south-eastern extent of the Lough Derravaragh AHA. I note from my site visit that the overall rolling landscape at this location is rural in character and the predominant landuse is pastoral agriculture, although there are established plantations of commercial forestry in the immediate vicinity of the proposed development (north and south). There are linear clusters of dwellings and farmsteads in the area, however in general, the area is rural in character with a low population density.

LVIA

- 7.2.2. The application is accompanied by a Landscape and Visual Impact Assessment (LVIA) prepared by Macroworks, dated June 2023. The LVIA establishes the baseline environment of the study area and identifies key landscape receptors based on relevant landscape and visual designations. A study area of 5km was used. I consider that the methods used for viewpoint analysis, landscape assessment and visual assessment are satisfactory and in accordance with industry standards. Furthermore, a detailed landscape mitigation plan that provides for additional maintenance and

augmentation of the existing mature hedgerows throughout and within the proposed development site has been included within the project design.

- 7.2.3. Computed Generated Zone of Theoretical Visibility (ZTV) Maps were prepared to illustrate where the proposed development is potentially visible from. The ZTV map indicates where the proposed development will not be visible from within the 5km study area. The ZTV maps indicate that visibility of the proposed development would be typically limited to its immediate surrounds and locally elevated regions in the study area. Due to the topography of the area, the northern section of the proposal would be more visible than the southern section. These maps are solely based on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views (i.e. a worst case scenario). Digital surface model based ZTV maps were also prepared. These include a more consolidated area incorporating the surrounding networks of roads and dwellings within c. 1km of the application site boundary. The LVIA considers that due to the rolling, varied nature of the terrain and existing vegetation within the study area, the majority of the landscape in the immediate surrounds of the site has the potential to afford visibility of less than 20% of the total panel area. Some limited locally elevated parts of the study area to the east of the northern array will still have the potential to afford views of up to 80% of the proposed array, however these parts of the study area are principally contained in pastoral lands.
- 7.2.4. The assessment is supported by 14 viewshed reference points (VRPs) which were selected to reflect a range of difference receptor types, distances and angles. Photomontages have been submitted (an 'LVIA' Photomontages' booklet), prepared by Macroworks and dated June 2023. The photomontages provide for, where appropriate, pre and post mitigation views. I consider the locations for the images chosen to be representative and allow for a proper assessment of the landscape and visual impacts of the proposed development from the most sensitive locations in the surrounding area. A tabular analysis and assessment of visual receptor sensitivity at each VRP is set out in Table 1.6 of the LVIA. Each VRP is individually described and considered. Of the 14 VPR's, in terms of visual receptor sensitivity, 9 views were categorised as **Medium-Low**, 3 views as **Medium** and one view as **High**.
- 7.2.5. In consideration of the viewpoints the LVIA concludes that in the pre-mitigatory planting scenario significance of the visual impact is, **Imperceptible** from 2 views (VPs

9 and 13), **Slight-imperceptible** from 6 views (VPs 1, 7, 8, 11, 12, and 14), **Slight** from 1 view (VP 3), **Moderate-slight** from 1 view (VP10), **Moderate** from 2 views (VPs 5, and 6), **Substantial-moderate** from 2 views (VPs 2 and 4). Viewpoints 2 and 4 are taken along the R394, west of the northern solar array. The proposal will obstruct views of the pastoral area. Due to the neighbouring pastoral field uphill from the viewer at VP 4, the solar array's perceived scale will be accentuated. In a post mitigation planting scenario, the extent of the impacts remain unchanged or reduced with the most significant impacts (Nos. 2 and 4) being considered **Moderate-Slight**. Having reviewed the application documentation and completed a site inspection I consider the findings of the LVIA to be reasonable and I am in agreement with same having regard to the site context and the characterisation of visual impact.

7.2.6. I consider that the greatest potential visual impact arises at residential properties in the immediate vicinity of the site, notably along R394 and L1731. I submit that the 30 metre minimum setback of the solar arrays from any boundary, allied with the containment of the development within existing field boundaries (to be supplemented with additional planting) and the site's location within a rolling topography, will collectively serve to mitigate the impact. I accept that views would be possible from the first floors of the small number of two-story dwellings in the vicinity. I acknowledge that the proposed development will be introducing a large-scale built form of development into the landscape that was not previously present, however, following site inspection and on consideration of the character of the landscape, application documentation and mitigatory planting proposed, I am of the opinion that the solar farm will not be visually dominant, nor will it present a significant visual intrusion at this location. There are certainly areas from which the solar panels will be visible, but due to the limited height of the panels (maximum 3.2m), the nature of the site and wider study area (rolling terrain with mature hedgerows and ditches, rural dwellings and farm buildings) the significant visual screening that is in place in terms of existing hedgerows and the detailed mitigatory landscaping that is incorporated into the design, I consider that the proposal will not have an adverse visual impact on the landscape, the amenities of the area or the established character, and is an appropriate form of development at this location.

7.2.7. As outlined in Section 5.0 above, there is a Protected View (No. 26) at the southern edge of Lough Derravaragh. However, this view faces away from the proposed

development and as such is not impacted by the proposal. As is evident from VP9, the proposed development is not visible from the designated viewing point.

- 7.2.8. I note the statements made in relation to the substation not forming part of the visual impact assessment, however the subject application does not include for such infrastructure and as such is not before the Board for assessment.
- 7.2.9. I note the concerns raised by the Observers in relation to the specific details of the landscaping and the reliance on a high degree of maturity to screen the proposed development. Section 1.3 (Mitigation and Restoration Measures) in the LVIA provides a detailed overview of the proposed landscaping. In addition, a comprehensive landscape mitigation plan is detailed on drawings LD.CRKDWOOD 1.1, and 1.2, which will be implemented using hedgerow types 1 (underplanting and inter-planting of existing hedgerows), and 2 (introduction of new boundary planting) with use of indigenous species mix. The planting comprises a mixture of native hedgerow species that are prevalent in the immediate area. I am satisfied that the LVIA and post mitigation photomontages adequately assess the impact of the planting on the landscape. In short, I do not consider that the planting will alter the landscape to any significant extent. Field margins are to be planted and/or managed in accordance with the BRIDE project EIP techniques. The planting is to occur in the first growing season prior to the commencement of the development. It is predicted that the hedgerows should reach full establishment (3-4m in height) within 2-3 years. I consider this to be a relatively short period of time, having regard to the project's operational lifetime (i.e. 35 years). Should the Board be minded to grant permission, I recommend that a landscaping plan be agreed in writing with the Local Authority prior to the commencement of the development. Overall, I consider the landscaping plans to be of an overall net gain for local ecology and habitats arising from the proposed development and will not adversely impact on the character of the landscape.

Lough Derravaragh Area of High Amenity

- 7.2.10. As outlined above, in addition to Landscape Classifications, the CDP has classified Areas of High Amenity (AHA's). The southern element of the southern solar array is located with the south-eastern extent of the AHA. The exact extent of the overlap is unclear: the Applicant states in the First-Party Appeal that the area is approximately 8.5ha or less than 10% of the total site area, while the John Burke *et. al.* Observation

states the area is 25% of the total site area. Map 64 – High Amenity Areas in Volume 2 of the CDP delineates the extent of the AHAs, however it is not presented at a high resolution, and as such it is difficult to decipher the exact extent of the subject site that is located within the designated area.

- 7.2.11. The northern section of the site is not positioned in the AHA, and is therefore capable, in my opinion of absorbing the proposed development having regard to my analysis above.
- 7.2.12. In relation to the subject lands contained within southern section of the site, the landcover is pasture, with commercial forestry located further to the south. It is bordered and contains a number of mature hedgerows. I acknowledge the Planning Authority's and Observers concerns in relation to the proposed development's partial location within the AHA. However, as discussed above, I consider the LVIA and photomontage booklet submitted with the application to be an accurate reflection of the impact that the proposed development would have, and it is sufficiently detailed. The proposed solar panels, though extensive in overall area, are relatively limited in height, not rising more than c. 3.2m above the underlying terrain and will be considerably screened by existing and enhanced surrounding hedgerow and trees. The landscaping scheme/mitigation plan will result in improvements and active management, as well as the retention, of hedgerows and trees. As stated above, I consider that the proposal will result in an overall net gain for local ecology and habitats.
- 7.2.13. Notwithstanding the AHA designation, having regard to the landscape character of the site, comprising pastoral agricultural lands, the rolling topography with mature hedgerows and trees and commercial forestry, the limited height of the proposed solar panels, and location and size of the BESS, and the proposed planting, I consider the proposed development can be accommodated without resulting in significant adverse effects on the landscape character and sensitivities of the area.

First Reason for Refusal

- 7.2.14. The Local Authority's first reason for refusal states that the proposal would give rise to a visually obstructive form in an open, undulating and attractive rural area. It was considered that the proposed development would materially contravene CPO 13.8 and 13.20 and would be inconsistent with CPO 10.151. Furthermore, it was deemed that

the proposal would be contrary to CPOs 9.24, 12.4 and 13.8. Each of these CPOs are considered in turn having regard to my above assessment.

7.2.15. **CPO 9.24** (Areas of High Amenity): *Restrict development not related to farming practices and tourism in all High Amenity Areas, with the exception of housing for the immediate family (son/daughter) of established residents living on landholdings, who demonstrate a housing need and have long-term intrinsic links with the area. The entire landholding will be demonstrated to have been in the resident's ownership 5 years prior to the date of application.*

7.2.16. As outlined above, I do not consider that the proposed development would negatively impact on the character of the area and consider the site suitable for the proposed development from a landscape perspective. The Observers argue that the proposed development is not related to farming and as such the proposal is not consistent with this CPO. On the contrary, the Applicant argues that the proposal represents an efficient and effective diversification of agricultural activities and sustaining of existing farming practices. Importantly, I highlight that the CPO aims to 'restrict', not 'prohibit', development within AHAs. As stated above, I am satisfied that the proposal would not adversely impact on the AHA and reiterate that only a small section of the site is positioned within the AHA. Furthermore, it is proposed that the lands will continue to be used for sheep grazing. As such, while the primary use of the lands would be for renewable energy, the lands would still be maintained in agricultural use (albeit to a lesser extent than their current use). Having regard to the foregoing, I do not consider the proposal to be contrary to CPO 9.24.

7.2.17. **CPO 10.151** (Solar Energy Policy Objectives): *Ensure that proposals for solar farms consider the following criteria:*

- *The Landscape Character of the County.*
- *Visual impact particularly on raised/elevated sites.*
- *Zone of visual influence and visual impact of the structures.*
- *Glint and glare report and potential impact on adjoining road networks and dwellings.*

- *Road access and impact on road network serving the site during the construction phase (A pre and post construction impact report may be required).*
- *Archaeological Impact.*
- *Incorporation of security measures – use of CCTV/surveillance cameras and security fencing.*
- *The suitability/strength of the grid and accessibility to it.*
- *The suitability of the site, having regard to other land use policies, including the need to protect areas of important built and natural heritage.*
- *Decommissioning of obsolete infrastructure and after-use.*

7.2.18. In terms of landscape impacts, I consider that the proposal is consistent with the first three bullet points having regard to my assessment above. As discussed in further detail in Section 7.5 below, I consider that the Glint and Glare assessment submitted by the Applicant to be robust and I am satisfied that there will be no adverse impacts on sensitive receptors as a result of the proposal. Similarly, as outlined below, I do not consider that the proposal represents a traffic safety hazard, nor will it negatively impact on the local road network (see Section 7.7). Furthermore, in my view, having regard to the archaeological, architectural and cultural heritage report prepared by the Applicant, the proposed development will not negatively impact on the area's archaeology, subject to condition (see Section 7.8).

7.2.19. I note that the Planning Report expressed concerns in relation to the visual impact from the CCTV poles. The poles measure 3.5m in height and have a slim profile and as such, I do not consider that they would adversely impact on the area's landscape character. In addition, the application includes security fencing and as such is consistent with CPO 10.151.

7.2.20. Whilst grid connection (and a substation) does not form part of the subject application, the Applicant has stated that grid connection could potentially be provided via Bracklyn wind farm. An application for such grid connection would fall under the Strategic Infrastructure provisions of the Act requiring a separate application under S.182. I consider that the Applicant has provided sufficient detail in this regard, but importantly

highlight that the grid connection will be subject to its own detailed planning assessment at a future date.

7.2.21. In relation to decommissioning, the Observers argue that the decommissioning plan is not detailed enough in order to fully assess the application. On the contrary, the Applicant states that a definitive decommissioning plan at this time would not be appropriate due to evolvments in methodologies in the future. I consider that the Applicant has submitted sufficient detail in this regard. The decommissioning phase will require certain works/activities, but these will not be as significant as those required for construction and similar mitigation measures will ensure that significant adverse impacts will not arise, notwithstanding this however, I recommend that a decommissioning plan be agreed prior to the commencement of development, in the event of favourable consideration.

7.2.22. Having regard to the foregoing, I do not consider the proposal is inconsistent with CPO 10.151.

7.2.23. **CPO12.4** (Natura 2000 Sites): *Protect and conserve Special Areas of Conservation, candidate Special Areas of Conservation, Special Protection Areas and candidate Special Protection Areas, designated under the EU Birds and Habitats Directives respectively.*

I concur with the Applicant that it is unclear why this CPO was referenced in the first reason for refusal, which relates to the landscape and visual impact of the proposed development. My assessment of the proposed development's compliance with this CPO is outlined below in Section 8.0.

7.2.24. **CPO 13.8** (Landscape Character Assessment): *Protect the landscapes and natural environments of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted.*

As outlined above, in my opinion, the proposal will not unduly impact on the landscape and as such I do not consider that it is contrary to this CPO.

7.2.25. **CPO 13.20** (Areas of High Amenity): *Protect High Amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place.*

As outlined above, in my opinion, the proposal will not negatively impact on the Lough Derravaragh AHA and as such is not inconsistent with this CPO.

Material Contravention

7.2.26. As highlighted by the Applicant, whilst the assessment in the Local Authority Planner's Report does not make reference to material contravention, the first reason for refusal states that the proposal would materially contravene CPO 13.8 and 13.20 due to its overall scale and siting. As stated above, I do not consider that the proposal materially contravenes these CPOs or the other CPOs referenced in the first reason for refusal.

7.2.27. I note the exceptional criteria set out in Section 37 2(b) of the *Planning and Development Act 2000, (As Amended)*, whereby the Board may decide to grant permission even if the proposed development contravenes materially the development plan relating to the area of the planning authority to whose decision the appeal relates. These include where the proposal would be considered to:

- (i) be of strategic or national importance
- (ii) where there are conflicting objectives in the development plan or the objectives are not clearly stated insofar as the proposed development, is concerned, or
- (iii) that permission for the proposed development should be granted having regard to regional planning guidelines for the area, guidelines under Section 28, policy directives under section 29, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister or any Minister of the Government, or finally
- (iv) having regard to the pattern of development, and permissions granted, in the areas since the making of the development plan.

7.2.28. In regard to the foregoing, I do not consider the proposal to be of strategic or national importance. I do not consider that there are conflicting objectives in the Development Plan. As regards government strategies and guidelines to address renewable energy, I have noted above the current applicable policies and guidelines (including *inter alia* REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022, Climate Action and Low Carbon Development (Amendment) Act 2021, Climate Action Plan 2023, National Planning Framework, National Development Plan 2021-2030, and

RSES) which would lend support for the case in hand. As outlined in Section 7.1 above, I consider that the principle of the proposed development is consistent with national, regional and local policy. Should the Board be of the opinion that the proposed development does materially contravene the CPOs referenced in the first reason for refusal, and is minded to grant permission, it is open to the Board to consider a grant of permission in this case having regard to the exceptions (i-iv) set out in Section 37(2)(b) of the *Planning and Development Act 2000 (As Amended)*.

Landscape and High Amenity Assessment – Conclusion

7.2.29. Having inspected the site and surrounding area and having reviewed the LVIA and photomontages, I consider that the visual impact of the proposed development will be limited due to the site topography, the extensive hedgerows and their enhancement with further planting. I concur with the findings of the LVIA that the subject site is located in a typical productive rural landscape and does not exhibit any notable degree of distinctiveness or scenic value that would exclude it from development, similar to the nature and extent of that proposed, in landscaping terms. Unrestricted views in the immediate environs and from further distances will not be possible. Any views would be intermittent. I consider that the Applicant has comprehensively demonstrated that there will be no significant effects on the wider area of Lough Derravaragh arising from the proposed development. Having regard to the foregoing, I do not consider that the visual impacts from the proposed development would adversely impact on tourism in the area.

7.2.30. In conclusion, in my opinion, the proposed solar farm would not have an undue adverse impact on the visual amenity and Lough Derravaragh AHA and would not be contrary to CPO 13.8, CPO 13.20, CPO 10.151, CPO 9.24, and CPO 12.4 of the Westmeath County Development Plan 2021-2027 in landscaping terms.

7.3. Biodiversity

Reasons for Refusal

7.3.1. The Local Authority's second reason for refusal states in the absence of sufficient details submitted to the contrary and in applying the precautionary principle in identifying operational phase pathways for likely significant effects which includes hydrological connection from the site to Lough Derravaragh which may result in

indirect effects, collision risks to the Whooper Swan and displacement effects from the large area of solar arrays and potential effects arising from glint and glare, it is considered that the proposed development may pose a risk of significant effects on the conservation objectives and integrity of the Lough Derravaragh SPA.

- 7.3.2. Furthermore, the Local Authority's third reason for refusal states that the proposed development would have an adverse ecological impact and would be contrary to CPO 12.25. The Reason makes reference to the concerns raised by DHLGH and IFI in this respect. To recap, the DHLGH primary concerns in relation to ecology include survey limitations, glint and glare impacts, potential for biodiversity improvements and hedgerow removal, artificial lighting, and AA matters. The IFI concerns primarily relate to water quality (particularly surface water run-off) and associated impacts on aquatic ecology.

Habitat

- 7.3.3. The application is accompanied by Ecological Impact Assessment and a Screening for Appropriate Assessment Report. A desk study and a walkover survey of the site were carried out by the Applicant. The site is split over two adjacent parcels: the southern parcel comprises eight fields, mainly supporting agricultural improved grassland, while the northern parcel consists of eleven improved grassland fields and a small woodland plantation. The flora as identified is synonymous with a managed agricultural landscape with no protected species identified. No invasive species were recorded on the site during the surveys.
- 7.3.4. Given the use of the lands in active agricultural use that are heavily managed, the proposed solar farm and associated infrastructure, once constructed, will entail significantly less on-site activity than heretofore is experienced. I note that an area of immature, relatively recently-planted woodland (0.13ha) in the northern parcel of the site (in the south east corner of Field 7) will be removed for solar panel installation. In order to compensate for this loss, Fields 2, 3, 4 and 5 (located within the overall landholding and adjacent to the southern parcel) will be left to undergo ecological succession (total area approx. 14ha). In addition, I note from my site visit that there is a similar sized area of recently-planted woodland in the southern parcel of the site, where solar arrays are proposed to be erected. This section of woodland does not appear to have been taken account of in the application documentation. However,

having regard to its size and early development stage, I do not consider that its loss would result in significant overall habitat impacts. Approximately 2,800 sqm of woodland mix is also proposed as part of the landscaping plan. It is proposed that a Biodiversity Enhancement and Management Plan will be prepared by a suitably qualified ecologist prior to the commencement of construction.

- 7.3.5. Fields are generally separated by hedgerows, often including mature trees. A number of the fields are bounded by hedgerows that are between a double row of barbed wire and mesh fencing, and as such are stock proof, but nonetheless are gappy or open at the bottom. In addition to the retention of the existing hedgerow network and its augmentation, coupled with the planting of wildflower and/or wild grass in residual spaces, provides for the potential for increase in diversity over time. I also note that perimeter fencing which will allow for mammal access is proposed.
- 7.3.6. IFI has raised concerns in relation to the timing of the Biodiversity Enhancement and Management Plan (post planning), however, I consider that sufficient information has been provided with the application (in particular the landscape mitigation plans attached to the LVIA) to allow the Board to determine the case. In my opinion, the finer details of the enhancement and management plan could be agreed with the Local Authority prior to the commencement of the development, should the Board grant permission for the proposal.
- 7.3.7. In summary, having considered the nature of the proposed development, the subject site and the application documentation, I consider that the proposed development is being proposed in a robust environmental location and it will not give rise to significant adverse impacts on any unique habitats of ecological significance either during the construction or operational phases.

Avifauna (Excl. Whooper Swan)

- 7.3.8. The avifauna identified during the site walkover is synonymous with a managed agricultural landscape with no protected species identified. However, I highlight that the survey was conducted outside the breeding season for the majority of birds. With the exception of the Starling (Amber listed), all the recorded birds are Green listed. The proposed development is located on habitat which is predominantly classified as improved agricultural grassland. In my opinion, the proposed development does not represent a significant loss of unique habitat nor a significant impact on avifauna that

was recorded on the site. The most valuable habitat on site in relation to avifauna are the treeline and hedgerow habitats. These are to be retained insofar as practicable and augmented and improved through the provision of a landscaping mitigation plan. The submitted EIA notes that “where possible” no scrub clearance tree felling, or other removal of vegetation will occur during the bird nesting season (1st March to 31st August). I consider that in the interests of minimising impacts on avifauna that in the event of favourable consideration scrub clearance and tree felling and/or other removal of vegetation should be strictly conditioned to only occur outside the bird nesting season as there is no necessity for these activities to occur within the season.

Whooper Swan

- 7.3.9. Noting the Local Authority’s second reason for refusal, I will outline my assessment in relation to the potential impacts from the proposed development on the Whooper Swan separately to the other avifauna. This Section should be read in conjunction with Section 7.4 in relation to potential impacts on water quality and Section 8.0 Appropriate Assessment.
- 7.3.10. In response to the Local Authority’s second reason for refusal, the Applicant states in the First-Party Appeal that there is little evidence that solar arrays present a significant risk for avian species including Whooper Swans. Furthermore, the Applicant states that there is no evidence of wetland and waterbird activity at the proposed site and that any displacement would be highly localised. In terms of glint and glare, the Applicant argues that there is no evidence to suggest that avian species are at a significant risk of experiencing such effects from solar energy arrays.
- 7.3.11. Lough Derravaragh SPA is located 300m as-the-crow-flies (1.1km downstream) to the west of the subject site. With the exception of noting that the Whooper Swan is listed as a qualifying interest of Lough Derravaragh SPA and Lough Iron (c.14km west), and has been recorded in the Bird Atlas (hectad N46), the EIA makes no other reference to the species. The AA Screening Report indicates that there will be no significant impact on the species as the proposed development is located >300m from the subject site.
- 7.3.12. DHLGH raises a number of concerns in relation to the potential impacts from the proposed development on the Whooper Swan and particularly the lack of detail provided with the application. The Department recommends that at least one full

season of bird surveys is carried out paying particular attention to the SPA species and flight lines. The EIA states that a desktop study was undertaken in addition to a one-day walk over survey of each parcel of site in January 2023.

- 7.3.13. In the First-Party Appeal, the Applicant argues that it has not been the Board's practice to request a full season of surveys for wintering and breeding birds for solar energy developments. However, having regard to the site's proximity to the SPA (300m), neighbouring SPAs that have also the Whooper Swan listed as qualifying interests (Lough Iron – c.14km west of the appeal site) and watercourses (in particular Bishops Stream and Lough Derravaragh), and to the use of the subject site and surrounding lands for pastoral farming practices (which may be suitable feeding grounds), I consider that the one-day survey (albeit carried out in January) is significantly deficient and does not allow for a robust assessment of potential impacts on the species. Without sufficient baseline information in relation to species including their population, movement and activity within the site and surrounds, it is not possible to assess potential impacts (if any) such as fragmentation, disruption to the species or their habitats, collision risk, and glint and glare impacts on the species as a result of the proposed development at this location.
- 7.3.14. Furthermore, as outlined in 7.4 of this Report, I do not consider that the planning application provides sufficient detail to determine that adverse impacts on water quality would not occur as a result of the proposal. As such, potential indirect impacts on habitats that Whooper Swan are dependent on, cannot be ruled out.
- 7.3.15. Having regard to the foregoing and applying the precautionary principle, I recommend that the Local Authority's second reason for refusal is upheld.

Aquatic Ecology

- 7.3.16. In relation to aquatic habitats, there are a number of waterbodies on or in the vicinity of the site most notably Lough Derravaragh, Bishops Lough Stream and Moneen Stream. Both Observers and IFI highlight the importance of these waterbodies particularly for trout and pike. The IFI states that during the period 2004 to 2016 a substantial investment was made to enhance and rehabilitate the spawning and nursery habitat of the lake's tributary streams. As outlined in Section 7.4 below, I consider that the application lacks significant detail to confidentially determine that the

proposal will not have an adverse impact on water quality. Accordingly, potential adverse impacts on aquatic ecology cannot be ruled out.

Fauna

- 7.3.17. The EIA notes that open areas of improved grassland provide poor potential foraging habitats for bat species, however hedgerows may be used as flightlines linking roost sites and foraging areas. No roosts were found, however larger ivy-covered trees were classified as having a low to moderate bat roost potential (BRP). Mitigation measures to protect bats include retention and augmentation of field boundaries and limited tree felling. I submit that in view of the nocturnal nature of the species, the fact that the existing hedgerows and treelines are to be augmented and to the preponderance of comparable habitat in the vicinity in addition to limited proposed lighting, I consider that the development will not result in an adverse impact on bats.
- 7.3.18. Badger trails were identified during the survey of the southern parcel of the site, however no setts or feeding areas were identified. Having regard to the separation distances proposed to hedgerows and that project fencing has been designed to facilitate mammal access at regular intervals, I consider that the development as proposed will not have an adverse impact on badgers. In the event of the Board considering a grant of permission in this case, however, having regard to the potential time between the survey (January 2023) and commencement of the development, I recommend that a further survey be carried out in advance of construction to re-confirm badger presence/absence and in the event of a new sett or paths/features being identified appropriate set-back and mitigation being applied to avoid any potential construction impacts.
- 7.3.19. The Applicant states that there is no indication that the local watercourses are used by otter, but it is possible nonetheless that they are present having regard to the site's proximity to watercourses and their associated fishing potential. (I highlight that Otter is not listed as a qualifying interest associated with Lough Derravaragh SPA – i.e. the nearest European Site to the subject site.) Mitigation (i.e. 10m buffer zone will be maintained between works and any watercourse) is proposed. As outlined in Section 7.4, I have significant concerns in relation to potential impacts on water quality at both construction and operational phases of the proposed development. As such, negative

impacts on fish supplies cannot be ruled out and in turn potential negative impacts on food supplies for otter may also be impacted upon.

7.3.20. Drainage ditches provide suitable habitat for amphibians. As highlighted by the Planning Authority, a dedicated amphibian survey was not carried out but the Applicant states that the drains that separate field 3 and 4 and the drain with field 5 have the potential to support the common frog and smooth newt. Having outlined my concerns above in relation to potential impacts on water quality resulting from the proposed development, I do not consider that potential significant impacts on amphibians can be ruled out.

7.3.21. In terms of invertebrate, I note the IFI concerns in relation to mayfly and other invertebrate mistaking the solar arrays for water and potential glint and glare impacts. In response to these concerns, the Applicant contends that there is limited evidence to suggest that the development of solar arrays have a significant effect on their behaviour. Furthermore, the Applicant highlights that the distinguishing border and 'grid' appearance on solar panels would mitigate the impacts. I am not persuaded from the information on file that it can be conclusively determined that solar farms impact significantly on invertebrate.

Conclusion on Biodiversity

7.3.22. In summary, I am not satisfied that sufficient information has been provided with the application to fully assess the potential impacts from the proposed development on the Whooper Swan, a qualifying interest of Lough Derravaragh SPA. Furthermore, as discussed in detail below, I am not satisfied that significant negative impacts on water quality as a result of the proposed development can be ruled out, and in turn consider that potential significant impacts on otter or amphibians can not be ruled out also.

7.4. Water

Water Quality

7.4.1. Generally, the lands in the south parcel fall in a south-west direction from a maximum height of approximately 87 m OD to 59 m OD. Lands in the north parcel fall in a south-east direction from a maximum height of approximately 100 m OD to 74 m OD. The site of the proposed development is within the Upper Shannon catchment (26F) and within the Inny (Shannon)_SC_030, river sub-catchment (part of the larger Upper

Shannon catchment), discharging to Lough Derravaragh. The 'River Inny Tributary 1' (Inny_070) (also referred to as Bishops Lough Stream) flows from the north around the eastern extent of the northern parcel. It crosses under the L1731 road and a second minor road, before flowing westward adjacent to the southern parcel of the proposed development site. It continues west flowing under the R394 road before discharging into Lough Derravaragh also. I concur with the Applicant that it is the most significant watercourse adjacent to the site. The 'River Inny Tributary 2' (also referred to as Moneen Stream) flows along the south-western boundary of the southern parcel of the site. It passes under the R394 road before discharging into Lough Derravaragh. It is less significant than Bishops Lough Stream, and is more characteristic of a field drain. The Inny_70 is classified as having "At Risk" and having a "Moderate" status, while Derravaragh is classified as "Not at Risk" and "Good" status. The significant pressure on the Inny_070 arises from agriculture and extractive industry. Water features within the proposed development site itself comprise primarily of agricultural drainage ditches and natural ephemeral features, however as highlighted by IFI a map of all watercourses on site has not been provided with the planning application.

- 7.4.2. The First-Party Appeal outlines that the proposed development includes for a set of surface water control design features to intercept, treat and attenuate all surface water. A Water Environment Assessment submitted with the application includes a Water Pollution Prevention Plan (Appendix A) and a Drainage Plan (Appendix B). These documents outline the design measures that have been incorporated into the scheme to ensure adverse impacts do not arise on surface water. The Applicant states that the proposal has been designed to minimise the potential for impact by providing set-backs from watercourses (>10m) and incorporating silt fencing protection measures as appropriate. In addition, a suite of mitigation measures including *inter alia* settlement/attenuation ponds, infiltration tank, silt fencing, swales and checkdams, and pollution control values are referenced.
- 7.4.3. However, I refer the Board to Appendix A of this Report and note the Memorandum (dated 17th January 2024) prepared by Mr Emmet Smyth (the Board's inhouse scientist), which highlights the lack of detail provided by the Applicant in relation to the specifics of these measures. The Memorandum states *inter alia*:

Section 5.1.5 of the water pollution prevention plan, during the construction phase, 'silty water will be routed over land or via suitably designed settlement

ponds.’ The overland route being completely unacceptable method of addressing contaminated stormwaters during the construction phase. The application gives no indication as to volumes of water requiring treatment, rates of inflow (particularly where water is pumped from excavations), retention times, and the rationale for the size of settlement ponds etc.

Traditionally the treatment of contaminated surface run-off is by way of settlement ponds, with retention times of 11 hours for medium silts ($\geq 0.006\text{mm}$) and 24 hours for fine silts typically ($\geq 0.004\text{mm}$). Appendix B again references drainage and attenuation ponds, absence of any specific details. In this report it is difficult to differentiate between mitigation measures proposed to control and treat contaminated storm waters during the construction stage and those proposed during the operational phase of the development. (Bold: My emphasis.)

- 7.4.4. As outlined in Section 6.3.1 above, IFI raised similar concerns in relation to the lack of information provided with respect to the design of the settlement ponds.
- 7.4.5. In addition, the Memorandum highlights that the Applicant has not identified the designated area where concrete trucks will wash down. Furthermore, the Memorandum raises concerns in relation to the deterioration in the quality of the watercourses (and their at-risk projection) surrounding the subject site, due to phosphorus removal from soils through surface water run-off. I concur with the findings of the Memorandum that it is difficult to differentiate between mitigation measures proposed to control and treat contaminated storm waters during the construction stage and those proposed during the operational phase of the development.
- 7.4.6. At four locations, attenuated discharges are to be dispersed overland via a “level spreader” where water will drain overland within the site. The Memorandum highlights that there has been “no indication given as to how the overland spreaders have been designed, and the flow rate capabilities of same, other than a drawing in the water and environment assessment. There are 5 other points proposed where surface waters are to be discharged indirectly to the watercourse, which has a direct hydrological connectivity to Lough Derravaragh SPA”. I note that the IFI raised similar concerns in relation to the land spreaders. In addition, to the concerns raised in the Memorandum,

I note that one of the proposed basins (No. 4) will discharge directly to a watercourse/field drain. The Drainage Plan states that an outfall will be constructed with wingwalls orientated in the direction of river flow and pollution prevention guidelines for working in and adjacent to water shall apply. No other specific pollution prevention measures are specified. This watercourse/field drain flows directly into Bishops Lough Stream approximately c.220m downstream of the proposed discharge point.

- 7.4.7. I concur with the findings of the Memorandum that having regard to the nature of the proposed development, the operational phase of the project is likely to have a reduced risk of impacting negatively on water quality than the construction phase of the project. Nonetheless, there is a lack of detailed provided as to what specific measures will be relied on to mitigate against the risk of hydrocarbon contamination prior to groundwater discharge or surface water discharge.
- 7.4.8. In summary, I consider that the application lacks significant detail to confidentially determine that the proposal will not have an adverse impact on water quality. I do not consider that the Applicant has provided any new additional information as part of the First-Party Appeal to address the concerns raised by the Local Authority, IFI or DHLGH in relation to water quality. Having regard to the foregoing, in my view, the proposed development would not be consistent with CPO 10.89 (i.e. seeks to ensure that development would not have an unacceptable impact on water quality) of the Development Plan and accordingly I recommend that permission is refused on this basis.
- 7.4.9. Observers states that some of the mitigation measures are proposed outside the site boundary, however the specific attenuation measures have not been identified. On review of the drawings, I do not consider this to be the case. Notwithstanding this, I highlight that Section 34(13) of the *Planning and Development Act 2000 (as amended)* states: “A person shall not be entitled solely by reason of a permission under this section to carry out any development.” As such, should the Board be minded to grant permission for the development, it is the Applicant’s responsibility to ensure sufficient legal interest exists to implement the permission.

Flooding

7.4.10. A flood risk assessment is included in the Water Environment Assessment report. It highlights that the OPW's indicative flood mapping indicates that part of the southern parcel of the site is located adjacent to land that is at risk of fluvial flooding. However, all the proposed built development (tracks, solar array, and ancillary electrical infrastructure including the BESS) is located within Flood Zone C (0.1% AEP floodplain). Access tracks are at existing ground level to ensure impacts on flow pathways are not affected and panels are to be provided 1m+ off ground level. I consider this to be appropriate for access, maintenance and emergency purposes. Having regard to the above, and noting the small increase in hard surfaced areas and lack of significant reprofiling works, I consider that the proposed development is appropriate at this location, and is in accordance with the Flood Risk Guidelines and will ensure that there is no loss of flood storage or increased flooding risk to neighbouring properties.

7.4.11. Fire

7.4.12. Observers on the appeal have raised concerns in relation to fire arising from the proposed development and in particular the impact on water quality from such an incident. In this regard I note that the type of materials used in solar panels and the supporting frames should not be considered as constituting a fire hazard and all the works carried out, and components used in construction as well as all electrical equipment will have to comply with the relevant EU safety legislation. In Section 4.1.2 of the PER, the Applicant emphasises the rarity of fire instances with solar farm development, but also outlines that the proposal will include an automated management system that will notify the asset manager who will, in turn, notify the relevant authorities should a fire occur.

7.4.13. In terms of the BESS, the Applicant states that the containers are designed to incorporate a number of fire identification and suppression systems. Each energy storage container will be fitted with a minimum of two smoke detectors and a heat detector. Sensors, within each container, are attuned to changes in atmospheric conditions and, if a change is identified, a number of measures will be implemented. Firstly, the automated management system will shut-down the individual container and disconnect it from the wider electrical circuits. Secondly, the fire suppression system

will release a suppression-medium (clean-agent extinguishant) within the container to starve the fire of oxygen thus ending the fire event. Thirdly, the automated management system will notify the asset manager and, in turn, the relevant authorities. Firewater provision is assumed to comprise one 1,400l retention tank per BESS container (i.e. 78.4 cubic meters total). The Applicant states that the drainage system to the BESS area will be designed to give sufficient time to allow for the arrangement of pumping facilities to remove the contaminate water from the network into suitable lorries which will then transport this to a licenced facility for disposal. Importantly, the Applicant highlights that typically the battery container is bunded such that under normal circumstances (including fire suppression) there would be no liquid discharge from the site.

- 7.4.14. I highlight that the Drainage Plan includes an Emergency Response Plan. Whilst the IFI criticise the detail provided in the EMP, having regard to the low probability of a fire occurring and subject to condition should the Board grant permission, I am satisfied that the EMP is sufficient for the purposes of the Board's assessment and that should the Board be minded to grant permission for the proposal that a more detailed plan could be submitted for agreement with the Local Authority prior to the commencement of the development.
- 7.4.15. In considering the foregoing, having regard to the design of the proposed development, including *inter alia* the proposed automated management system, the fire suppression system, the use of a clean agent fire extinguishant and the retention tanks, I am satisfied that the likelihood of external firefighting action being required is very low. The Applicant has not sought permission to install any water supply infrastructure at this location. Furthermore, I highlight that should permission be granted for the proposal, a fire safety certificate will be required. Thus, based on the information provided, I am satisfied that the risk of pollution to surface and ground waters arising from any requirement for external firefighting activity at the appeal site would be very limited. As such, I consider that it would be unreasonable to refuse planning permission on this basis. However, my concerns in relation to the surface and ground water as outlined above, particularly during the construction, phase remain.

7.5. Glint and Glare

- 7.5.1. While photovoltaic solar panels are not a highly reflective surface, glint and glare can arise from the development of solar farms. The application documentation includes a detailed Glint and Glare Assessment (GGA). The GGA considers the potential of glint/glare to arise across a number of scenarios (bare-earth, with no screening, with existing screening, and with augmented screening/landscaping as proposed within the application documentation). I note that there are no guidelines in place for the assessment of glint and glare or thresholds established in relation to acceptable levels of impact. I also note that solar arrays by their very nature do not present highly reflective surfaces, that modelling is theoretical and therefore must assume that the sun is always shining at full intensity notwithstanding the mean duration of sunshine, weather patterns, or the general climate and accordingly presents a highly conservative worst-case scenario. In the current case the key receptors to be considered in relation to Glint and Glare can be classified into three categories: residential, traffic (roads) and aviation.
- 7.5.2. In relation to residential dwellings (Appendix A of the G&GA), the GGA modelling considers 17 dwellings in the vicinity of the proposed development within 1 kilometre which could potentially experience glint or glare. When extant and proposed screening/landscaping mitigation measures are considered the submitted GGA states that there are seven dwellings which have the potential to still receive a level of glint/glare from the proposed development. Of these the potential for impacts to arise are categorised as being Negligible, Low, and Medium. The dwelling with a Medium impact is a two-storey residential dwelling located along a local road some c. 650m to the southeast of the northern array. Reflectance has the potential to occur at this dwelling for a maximum of 26 minutes per day at the ground floor and a maximum of 30 minutes per day at the first floor between 7:00pm and 8:30pm from April to August. Once the proposed mitigation screen planting has fully established, the total minutes per year will marginally reduce at both the ground and first floor of this dwelling.
- 7.5.3. This dwelling does not have a significant number of windows on its upper eastern elevation, although there are windows on its northern elevation directly addressing the solar site. Having regard to the application documentation submitted and following site

inspection I do not consider that the proposed development will give rise to a significant adverse impact on the amenity of this dwelling arising from glint or glare.

- 7.5.4. Having completed a review of the planning documentation, completed site inspection, as well as on consideration of the design of the proposed development, existing dwellings in the vicinity and combined with the fact that solar PV panels are designed to not to be highly reflective, I consider that the development as proposed will not give rise to significant adverse impacts on dwellings in the vicinity from glint/glare.
- 7.5.5. In relation to traffic (roads) (Appendix B of the G&GA) the glint and glare assessment/analysis has reviewed all the roads in the immediate vicinity (123 No. road receptor points). With the introduction of the mitigation screening, 14 No. road receptor points have the potential to experience residual glare once mitigation planting is fully established. The Applicant highlights that there must be clear sunshine for any glare to occur. Having regard to the Irish weather and the geographic orientation, residual effects are not assessed to be significant. Having regard to the nature of the proposed development, its overall low reflectance, distances to potential source of glaring panels, low traffic volumes and speed limits on the subject roads and transitory/fleeting and minimal nature of the potential glare, I do not consider that the proposed development presents a significant adverse impact to road traffic on the existing network.
- 7.5.6. In relation to aviation, the Applicant highlights that there are no IAA registered aerodromes within the 10 km aviation study area and neither of DAA's Dublin or Cork airports occur within 15 km of the proposed solar farm. For these reasons, no further aviation analysis was undertaken. I consider this approach to be reasonable and acceptable.
- 7.5.7. The importance of the existing hedgerows throughout and along the perimeter of the proposed development site has been emphasised in the submitted GGA and the importance of their retention and continued maintenance is an important factor in ensuring the protection of both the general visual and residential amenities of the area. In this regard in the event of favourable consideration, I recommend conditions to ensure that existing hedgerows are maintained and enhanced. The standard condition requiring the development to be carried out in accordance with the plans and details submitted will require that the characteristics of the proposed development (i.e. height,

orientation, extent etc. of the panels themselves) will be in accordance with the parameters assessed.

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

7.6. Residential Amenity

- 7.6.1. The proposed development is located in a rural location with a low population density. Impacts on residential amenity could potentially arise on dwellings in the vicinity from noise, construction activities, glint and glare as well as the potential impacts that could be felt from the physical and visual presence of the proposed solar development. The proposed development is provided over two separate parcels of land.
- 7.6.2. The majority of the dwellings in the vicinity of the proposed development are arranged along the local county and regional roads in the vicinity of the proposed development.
- 7.6.3. Having regard to the design of the proposed development, which provides for setbacks to solar panels where they are proximate dwellings, the significant mitigatory planting that is proposed and to the nature of the proposed development (solar panels with a maximum height of 3.2m above existing ground levels and size and scale of the BESS with a height of c.2.9m), I consider that it will not give rise to significant adverse impacts on the amenities enjoyed by residents in the vicinity. I acknowledge that the proposed development will be visible from dwellings in the area and that there will be a change in the character of views of the site, however, I do not consider that views of the development will prove a significant detriment to residential amenity.
- 7.6.4. The construction period for the proposed development is estimated to be approximately 12-15 months, and one temporary construction compound will be provided, located remote from residential properties and any environmentally sensitive areas. The construction hours proposed in the PER are 07:00 to 19:00 Monday to Friday inclusive and 07:00 to 13:00 on Saturdays which I do not consider appropriate within this low noise location which has a local, although dispersed, population in place. Standard construction hours are generally taken as being 08:00 to 19:00 Mondays to Fridays and 08:00 to 14:00 on Saturdays, and I do not consider it appropriate to deviate from this general construction standard for a development of the nature proposed in order to protect residential amenities. I do note, however, that

certain specific works or processes may require alternative timeframes to be agreed, should this be the case specific exceptions to the construction hours could be agreed with the Planning Authority in advance to ensure proper development and the protection of residential amenities.

- 7.6.5. In relation to operational noise, solar farm developments are not significant producers of noise. The main sources of noise during the operational period will be from the BESS power stations/inverters throughout the site (there being no mechanical movement of the solar panels). In terms of the inverters and power stations, the Applicant states in Section 4.8.2 of the PER that *“it is assessed that the noise levels likely to be experienced at the nearest dwelling are not likely to be perceptible above ambient background noise levels (i.e. 30dB LA90 and 35db LA90).”* In relation to the BESS the Applicant states that *“it is assessed that noise levels at the nearest dwelling, arising from the proposed development, will be at or below ambient background levels.”* Furthermore, the Applicant highlights that noise levels will be naturally reduced at night-time due to the nature of the proposed development. It is argued that having regard to EirGrid Evidence Based Environmental Studies Study 8: Noise – Literature review and evidence-based field study on the noise effects of high voltage transmission development (May 2016), which states a 5m separation distance is appropriate in respect of high-voltage electrical installations and noise sensitive property, no significant noise effects will be experienced. Notwithstanding that the details of the assessments referenced by the Applicant have not been submitted with the application, having regard to the Board’s assessments of other solar and battery storage applications, I concur with the principles of the arguments made by the First-Party. However, should the Board be minded to grant permission for the proposed development, I am satisfied that having regard to the nature and design of the proposal (in particular the proximity of the inverters, power stations and BESS to residential properties), that a condition could be attached to control any noise emissions from the electrical infrastructure to ensure that residential amenity would not be adversely impacted upon as a result of the proposal.
- 7.6.6. Potential negative impacts and nuisance can arise on the local population during any construction project, however, the application of good on-site management and co-ordination of construction activities can mitigate these impacts. A Construction and Environmental Management Plan (CEMP) has been provided within the application

documentation (Annex 2 of the PER) which demonstrates how the proposed development can be provided while minimising and mitigating environmental impact and protecting the amenities of the local population. The CEMP of any project is a live document that needs to be updated as a project progresses. I acknowledge that in the event of favourable consideration a contractor will be appointed who will take over the implementation of the CEMP as part of the construction process. Accordingly, in the event of favourable consideration, I recommend that the Board include a condition requiring the preparation of an updated CEMP to be agreed with the Planning Authority prior to commencement. The updated CEMP should incorporate all the details, methodologies and mitigation measures set out in the current application documentation as a minimum and incorporate any technological improvements or design alterations necessitated through the application of or adherence to any further conditions that may be imposed.

- 7.6.7. Accordingly, I conclude that the amenity of the residential properties in the vicinity will not be significantly adversely affected.

7.7. Site Access and Roads

- 7.7.1. As outlined earlier, the Applicant proposes to develop one 'new' access point from the L1731 for access to the northern parcel; and to upgrade one existing access point from the R394, which will service the southern parcel of the site. The R394 is a regional road between Mullingar to the south and Castlepollard to the north. The proposed new access is located on an 80km/h non-overtaking section of the R394 with a carriageway width varying from 6m to 6.5m. A traffic survey was commissioned in March 2023 on the R394 to determine the traffic flow and the vehicles speeds. The results are summarised below:

Total Daily No. of Vehicles (PCU)	AM Peak Hour	Westbound AM Peak No. of Vehicles (PCU)	Eastbound AM Peak No. of Vehicles (PCU)	PM Peak Hour	Westbound PM Peak No. of Vehicles (PCU)	Eastbound PM Peak No. of Vehicles (PCU)
4183	08:00 to 09:00	359	162	16:00 to 17:00	199	294

R394 Traffic Survey Key Details

Cumulative 85% Speed	Westbound 85% Speed	Eastbound 85% Speed
80.87 km/hr	83.97 km/hr	76.86 km/hr

R394 Traffic Speed Details

- 7.7.2. CPO 16.33 of the CDP requires sightline distances of 150m on regional roads. Whilst this is achievable to the east, the visibility splay to the west is 120m. The Applicant argues that whilst the visibility to the west is restricted due to the vertical alignment of the road, it is nonetheless compliant with TII publication DN-GEO-03031, which has a desirable minimum visibility distance of 120m for a 70km/h design speed and one-step below desirable for an 85km/h design speed. Gates will be set back c. 1.8m from the road edge thus ensuring that traffic, including heavy-goods vehicles (HGVs) are not required to temporarily park on the public road before accessing the proposed development site. The Applicant argues that the traffic survey demonstrates that the R394 is operating within capacity with minimal excessive speeding. On review of the information lodged and having conducted a site visit, I consider that the Applicant has demonstrated that the site can be adequately accessed by construction traffic, without significant adverse impacts on the road network or road users.
- 7.7.3. The construction period for the solar farm is 12-15 months. It is estimated that the proposed development will result in the following additional daily movements: 7 no. HGV movements, 8 no. LGV movements and 16 no. two-way movements by construction staff. A series of mitigation measures are proposed to reduce the impact on the road network including *inter alia*: the preparation of a traffic management plan with the Planning Authority prior to the commencement of the development, including a stop/go system on the R394, and road reinstatement works. By its nature the construction period is temporary and I consider that sufficient detail is provided that the road network can accommodate the anticipated vehicular movements subject to such mitigation measures as outlined in Section 4.9.1 of the PER. Whilst the additional traffic and management measures will inconvenience local road users and residents of dwellings in the vicinity, the impacts are considered acceptable having regard to the limited duration of the works.
- 7.7.4. The operational phase of the solar farm would generate limited vehicular movements associated with maintenance and security.

7.7.5. In summary, I am satisfied that the proposed development will not adversely impact on the local road network or cause a traffic hazard.

7.8. Archaeological, Architectural and Cultural Heritage

7.8.1. The application documentation includes a detailed archaeological, architectural and cultural heritage assessment which has been informed by a desktop survey and site visits. There is one RMP site (Ringfort – WM012-014) within the proposed site in the southern parcel of the site. The assessment outlines that the RMP is depicted on the First Edition Ordnance Survey map (1838) as a small roughly circular-shaped enclosure planted with trees. It was described in 1972 as a monument that had been almost completely levelled, and all that survived were the poorly preserved remains of a raised sub-circular shaped area with an approximate diameter of 29m east/west x 27m north/south. The monument no longer survives above-ground. In addition, there are 26 No. RMP sites within 1km of the site. There are no Protected Structures within the proposed development site, however there is one such structure (St. Munna's Church – RPS No. 012-031) 1.2km from the site. There are no structures recorded on the NIAH within the proposed development site. However, there are four such structures within 2km of the proposed development: Streamstown House (NIAH 15400750), Gartlandstown Stud (NIAH 15401228), Martinstown House (NIAH 15401232), and Saint Munna's Church (NIAH 15401238).

7.8.2. The proposed development includes a 40m buffer zone around the on-site RMP. In addition, a geophysical survey of 'Field 2', where the subject RMP is located in the southern parcel of the site, is proposed to be carried out under Licence to the Department of Housing, Local Government and Heritage. The Applicant advises that further measures, which may include test trenching, monitoring, excavation or preservation in situ, may be implemented pending the results of the geophysical survey. Additional mitigation proposed includes archaeological monitoring of all excavation works associated with the temporary construction compound, BESS, electrical and communications cabling, the upgrade of the site entrance and development of one new site entrance, on-site access tracks, and any additional subsurface groundworks. Monitoring will be carried out under Licence to the Department of Housing, Local Government and Heritage and the National Museum of Ireland.

7.8.3. The DHLGH recommended that an architectural impact assessment be undertaken, including a geophysical survey at locations chosen by the archaeologist. I note that the DHLGH recommended that such an assessment should be submitted as Further Information, however I highlight that the National Monuments Service – Internal Guidance Document in relation to Solar Farms (November 2016) notes that while solar developments can have large sites they present relatively low levels of ground impact and that by their very nature they also have design flexibility to avoid impacts. Having regard to this, and on review of the application documentation, in particular the Archaeological, Architectural and Cultural Heritage Assessment, the nature of the proposed development (i.e. no extensive excavation is proposed) and the layout of the proposed development, which includes a 40m buffer around the RMP, I consider it reasonable that a detailed architectural impact assessment could be conditioned to be submitted for agreement with the Local Authority prior to the commencement of the proposed development, should the Board be minded to grant permission. In summary, I am satisfied that subject to appropriate conditions that the proposed development would not have a material impact on the archaeology of the area.

7.8.4. Observers contend that the proposed development with its high industrial scale visibility would significantly conflict with the Council's policy objective to develop tourism and recreational aspects of the Children of Lir Legend (CPO 13.73: Develop the cultural and recreational aspects of the Children of Lír Legend as a tourist attraction for the area.) As outlined above, having regard to the design of the proposal, including landscape mitigation measures, and the topography of the area, the proposed development will not have an adverse visual impact on Lough Derravaragh. I do not consider that the proposed development precludes or in any way restricts the development of the area as a tourist attraction. As such, in my opinion, the proposal is not contrary to CPO 13.73 and would not negatively impact on the area's cultural heritage.

7.9. EIA

7.9.1. The requirements for Environmental Impact Assessment (EIA) are outlined in Part X of the Act and Part 10 of the *Planning and Development Regulations 2001*, (As amended) ("the Regulations"). Schedule 5 of the Regulations sets out the various classes and thresholds of development which require mandatory EIA. Part 1 of

Schedule 5 lists projects for which mandatory EIA is required on the basis of their type while Part 2 of the same schedule lists projects which require EIA on the basis of their relevant scale/size threshold.

- 7.9.2. Solar energy (nor BESS) development is not listed as a class of development for the purposes of EIA under the Regulations. In this regard, a requirement for preliminary examination or EIA does not arise.
- 7.9.3. Observers argue that the full project including grid connection may warrant EIA and that the splitting of the project into two parts avoids the need for EIA. The proposed solar energy development will require a connection to the national grid. While this appeal relates to a decision under S.34 of the Act, an application for such grid connection would fall under the Strategic Infrastructure provisions of the Act requiring a separate application under S.182. Such underground grid connection would not constitute a class of development under Schedule 5 and would not require preliminary examination or EIA.
- 7.9.4. Observers also make the case that the proposed development comprises rural restructuring of farmland requiring screening under the Environmental Impact Assessment (*Agriculture*) Regulations, 2011, by the Department of Agriculture, Food and the Marine. In this regard I note the more recent amending regulation *S.I. 383 of 2023 Planning and Development (Amendment) (No. 2) Regulations 2023*, which amends Class 1 of Part 2 of Schedule 5, by inserting the following:

(a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment)(Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.

I note that these thresholds reflect those set out in Schedule 1, Part B of the 2011 EIA (Agriculture) Regulations. Furthermore, Part A of Schedule 1 of the 2011 regulations sets out the following thresholds for screening for EIA:

Restructuring of rural land holdings	Screening Required
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Length of field boundary to be removed	Above 500m
Re-contouring (within farm-holding)	Above 2 hectares
Area of lands to be restructured by removal of field boundaries	Above 5 hectares

- 7.9.5. These screening thresholds may be a useful guide in considering the reinserted Class 1(a) above. The Environmental Impact Assessment (Agriculture) Regulations Guide for Farmers describes restructuring of rural land holdings as involving changing the layout of the farm. I note that the 2023 amending regulations do not identify solar development as a class of development to be subject to EIA / EIA Screening.
- 7.9.6. Circular EUIPR 01/2023 notes that it is the elements of field boundary removal or re-contouring of a field which amount to restructuring of a rural land holding which would need to be screened for EIA. The proposed development involves the removal of a limited extent of hedgerow, primarily at the entrance to the northern parcel of the site comprising less than c.160m. This is significantly below the threshold of 4km for EIA reinserted by the 2023 Amending Regulations and is also considerably below the screening threshold set out in the 2011 (Agricultural) Regulations. Such removal is associated with (access requirements) and does not result in the amalgamation or enlargement of existing fields. I have concluded above that significant effects on birds and bats are not likely as a result of such works.
- 7.9.7. The development does not involve the recontouring of the lands by, for example, the levelling off hills or by infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. While Observers refer to extensive excavations at the construction compound site (c.3,000 sqm), I note that ground levels in this area do not vary significantly, and no significant excavation will be required. I do not consider that the topography of the lands will be fundamentally impacted as the solar arrays can be installed to existing topography, without excavation or alteration of levels. Section 4.3.1 of the PER states that topsoil and subsoil shall be excavated to a depth of c. 300mm to facilitate the construction of the site entrances, access tracks, temporary construction compound and energy storage facility compound. In addition, inverter / transformer containers (c. 14.5-sq.m.) will be sited on areas of hardstanding. In summary the proposal may require some localised levelling and foundation works,

however, such works are not significant in nature and would not constitute recontouring of the lands nor would they impact on the character of the area.

7.9.8. Having regard to the purpose and to the nature and extent of the works in the subject case, I would conclude that such non-agricultural development, would not constitute rural restructuring and, therefore, would not be considered sub-threshold development requiring preliminary screening or EIA.

7.9.9. The application is accompanied by an Environmental Impact Assessment Screening Report, however, the application does not provide Schedule 7A information or refer thereto. I refer to Form no. 1 appended to this report and conclude that preliminary screening or EIA is not required.

7.10. Other Matters

Public Consultation

7.10.1. In relation to public engagement while Observers have raised concerns in relation to this, I note that there is no legal or legislative requirement for the applicant to engage in discussions prior to the lodgement of a planning application and that the planning application process itself has facilitated wide engagement with and by third parties. While Observers have noted their dissatisfaction with the level of public engagement, third parties have not been precluded from engagement in the process as evidenced in the observations and submissions that have been made to the appeal and the planning file.

Devaluation of Property

7.10.2. Observers to this appeal have also raised concern that the proposed development could potentially give rise to devaluation of property. While no firm evidence has been presented in this regard, I note that it is possible for devaluation of property to occur in the event of a proposed development having a significant negative impact on the amenity of property in the vicinity. The potential effects arising from the proposed development have been set out in full previously in this report, and as set out I consider that no unacceptable or significant effects are arising on the amenities of property in the vicinity which could be considered to represent an adverse impact on property valuations.

SEA

- 7.10.3. Observer, Val Martin, contends that the project is invalid with respect the SEA Directive. The proposed development does not require SEA and as such, I do not consider the points raised in this respect are relevant to the Board's assessment of the case.

8.0 Appropriate Assessment

8.1. Appropriate Assessment Screening

8.1.1. Compliance with Article 6(3) of the Habitats Directive

- 8.1.2. The requirements of Article 6(3) as related to Appropriate Assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered in this section.

8.2. Screening for Appropriate Assessment - Test of likely significant effects

- 8.2.1. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on any European site(s).
- 8.2.2. The proposed development is examined in relation to any possible interaction with European sites designated Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) to assess whether it may give rise to significant effects on any European Site.

8.3. Brief description of the development

- 8.3.1. The subject site comprises an area of c.87ha in two parcels located at Gartlanstown, Crookwooded, Co. Westmeath. The lands are primarily in agricultural use, comprising pastoral fields, improved agricultural grassland and treelines /hedgerows. The site of the proposed development is within the Upper Shannon catchment (26F) and within the Inny (Shannon)_SC_030, river sub-catchment (part of the larger Upper Shannon catchment), discharging to Lough Derravaragh. The 'River Inny Tributary 1' (Inny_070) (also referred to as Bishops Lough Stream) flows from the north around the eastern extent of the northern parcel. It crosses under the L1731 road and a second minor road, before flowing westward adjacent to the southern parcel of the proposed development site. It continues west flowing under the R394 road before discharging

into Lough Derravaragh. The 'River Inny Tributary 2' (also referred to as Moneen Stream) flows along the south-western boundary of the southern parcel of the site. It passes under the R394 road before discharging into Lough Derravaragh. Water features within the proposed development site itself comprise primarily of agricultural drainage ditches. Whilst mapping illustrating surface water drainage within the site has not been provided, having regard to the information submitted and from my site visit, I note that surface water flow appears to be directed towards the two neighbouring streams, which ultimately feed into Lough Derravaragh.

8.3.2. The proposed development comprises the construction of a solar PV development on the site, consisting of:

- photovoltaic solar panels on steel mounting frames;
- electrical inverters;
- electrical power stations;
- underground electrical and communications cabling;
- containerised battery energy storage facility;
- the upgrade of an existing site entrance and development of a new site entrance;
- on-site access tracks;
- a temporary construction compound;
- security fencing and security gates;
- pole-mounted security cameras; and
- all associated and ancillary site development, landscaping and reinstatement works.

8.4. **Applicant's Stage 1 AA Screening Report**

8.4.1. The Stage 1 AA Screening Report submitted with the application states that a site visit was carried out on 29/30-01-2023 by Dr Brian Sutton to inform an Ecological Impact Assessment as well as the present Habitats Directive assessment. The assessment included both the solar farm and the likely effects of the connection of the facility to the national electricity grid. In summary, all Natura 2000 sites within a 15km radius of

the subject site were examined. It is contended that in the absence of any likely pathways to the sites, they all could be screened out from further assessment with the exception of Lough Derravaragh SPA and River Boyne Blackwater SAC. The Report states *inter alia*:

“The proposed development boundary approaches the Lough Derravaragh SPA boundary at around 300m from its southern end. Overland flow in the site is directed towards the streams that form the boundary of the two development sites and which flow into the lough around 1.1km downstream of the development site boundary. There is, thus, a potential pathway for pollutants generated on the development sites to enter the boundary stream, with effects on the avian designation features of the SPA and the habitats on which they depend. However, the nature and scale of the development, with minimal sediment arisings from the preferred piling support installation method, the remoteness of the scheme substation, works compound and permanent infrastructure from the stream, and avoidance of construction within the stream flood zone, as well as the use of best-practice works methods, indicates that there will be no significant inputs of pollutants from the scheme into the boundary stream and hence into the SPA. There will be no potential for effects on the SPA or its conservation objectives.....

SPA receptors that must be considered include both the avian and habitat designation features of the Natura site. The remoteness of the proposed development structures from the stream that enters the SPA and the limited potential for the production of silt arisings mean that there are unlikely to be any effects on any waterfowl species, their prey or food species or designated terrestrial habitats arising from the scheme. Stormwater derived from surface water runoff in the proposed development area will discharge into the local surface water and groundwater systems, providing a potential pathway for effects on aquatic features. However, there will not be a significant change in water quality or volume discharging into the system and there will therefore be no change from the present position with regard to effects on the Natura site and its conservation objectives....”

The Report concludes that the proposed development would not have the potential to significantly affect any Natura 2000 site.

8.5. Submissions and Observations

- 8.5.1. There is no reference to consultations with external bodies in the AA Screening report. I note that the planning application was referred to the DHLGH and IFI. These bodies raised a number of concerns in relation to the potential impact on European sites, in particular Lough Derravaragh SPA. The DHLGH argued that at least one full season of surveys for both wintering and breeding birds should normally be carried out for such developments, paying particular attention to Special Conservation Interest (SCI) species and flight lines. The Department is of the view that the screening for AA and NIS has not applied the precautionary principle in identifying operational phase pathways for likely significant effects i.e. collision risks and displacement effects from the large area of solar arrays. The potential effects of glint and glare from the solar farm has not been adequately assessed and as such no operation monitoring programme is proposed. Furthermore, the Department considered that the inclusion of the grid connection in the Screening Report to be premature as permission is not being sought for same as part of the subject application. In addition, the Local Authority's Environmental Section contends that Stage 2 Appropriate Assessment is required having regard to the hydrological connection from the site to Lough Derravaragh. Similarly, Observations made to the Local Authority and to the Board also raise concern in relation to potential impacts on Lough Derravaragh SPA.

8.6. European Sites

- 8.6.1. The development site is not located in or immediately adjacent to a European site. The closest European site is the Lough Derravaragh SPA (site code 004043) which is c.300m as-the-crow-flies from the subject site (c.1.1km downstream).
- 8.6.2. A summary of European Sites that occur within a possible zone of influence of the proposed development is presented in the table below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail. Table 8.1 provides a summary of European Sites within a possible zone of influence of the proposed development.

Table 8.1: European Sites				
European Site		Distance from proposed development (as-the-crow-flies)	Connections (Source, pathway, receptor)	Considered further in screening. Y/N

Lough Derravarragh SPA (004043)	Whooper Swan (Cygnus cygnus) [A038] Pochard (Aythya ferina) [A059] Tufted Duck (Aythya fuligula) [A061] Coot (Fulica atra) [A125] Wetland and Waterbirds [A999]	0.3km W	Yes, Hydrological Connection, SAC is 300m downriver via the Bishops Lough Stream and Moneen Stream. It is understood that the site drains to these to waterbodies which ultimately drain into the SPA.	Yes, due to the hydrological connectivity and potential ex-situ connectivity.
Garriskil Bog SPA (004102)	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	10.6km NW	Possible (ex-situ)	Yes, due to potential ex-situ impacts.
Lough Iron SPA (004046)	Whooper Swan (Cygnus cygnus) [A038] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Shoveler (Anas clypeata) [A056] Coot (Fulica atra) [A125] Golden Plover (Pluvialis apricaria) [A140] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] Wetland and Waterbirds [A999]	11.2km W	Possible (ex-situ)	Yes, due to potential ex-situ impacts.
Lough Owel SPA (004047)	Shoveler (Anas clypeata) [A056] Coot (Fulica atra) [A125] Wetland and Waterbirds [A999]	7km SW	Possible (ex-situ)	No, having regard to the separation distance, the nature of the qualifying interests, and that the National Biodiversity Database only contains limited records of these

				species within the vicinity of the site. It is concluded therefore that significant effects on the conservation objectives of the SAC are unlikely and therefore the site can be screened out from further consideration.
River Boyne and River Blackwater SPA (004232)	Kingfisher (<i>Alcedo atthis</i>) [A229]	11.4km SE	Possible (ex-situ)	No, having regard to the separation distance, the nature of the qualifying interest, and that the National Biodiversity Database only contains limited records of these species within the vicinity of the site. It is concluded therefore that significant effects on the conservation objectives of the SAC are unlikely and therefore the site can be screened out from further consideration.
Lough Ennell SPA (004044)	Pochard (<i>Aythya ferina</i>) [A059] Tufted Duck (<i>Aythya fuligula</i>) [A061]	14.4km SW	Possible (ex-situ)	No, having regard to the separation distance, the nature of the qualifying

	<p>Coot (<i>Fulica atra</i>) [A125]</p> <p>Wetland and Waterbirds [A999]</p>			<p>interests, and that the National Biodiversity Database only contains limited records of these species within the vicinity of the site. It is concluded therefore that significant effects on the conservation objectives of the SAC are unlikely and therefore the site can be screened out from further consideration.</p>
Lough Lene SAC (002121)	<p>Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p>	3.9km NE	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
River Boyne and River Blackwater SAC (002299)	<p>Alkaline fens [7230]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>	6km E	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
Scragh Lough SAC (000692)	<p>Transition mires and quaking bogs [7140]</p> <p>Alkaline fens [7230]</p> <p><i>Hamatocaulis vernicosus</i> (Slender</p>	6.2km SW	No – no connection between the proposed development	No – outside the zone of influence of the development due to the lack of connection to the

	Green Feather-moss) [6216]		and the SAC.	specific habitats for which the site is designated.
Lough Owel SAC (000688)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Transition mires and quaking bogs [7140] Alkaline fens [7230] Austropotamobius pallipes (White-clawed Crayfish) [1092]	7km SW	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
White Lough, Ben Loughs and Lough Doo SAC (001810)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Austropotamobius pallipes (White-clawed Crayfish) [1092]	7.5km NE	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
Wooddown Bog SAC (002205)	Degraded raised bogs still capable of natural regeneration [7120]	8km S	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
Lough Bane and Lough Glass SAC (002120)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Austropotamobius pallipes (White-clawed Crayfish) [1092]	8.5km NE	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
Lough Ennell SAC (000685)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Alkaline fens [7230]	14.4km SW	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.
Garriskil Bog SAC (000679)	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	10.6km NW	No – no connection between the proposed development and the SAC.	No – outside the zone of influence of the development due to the lack of connection to the specific habitats for which the site is designated.

8.7. AA Screening

European Site	Qualifying Interests	Conservation Objectives
Lough Derravarragh SPA (004043)	Whooper Swan (<i>Cygnus cygnus</i>) [A038] Pochard (<i>Aythya ferina</i>) [A059] Tufted Duck (<i>Aythya fuligula</i>) [A061] Coot (<i>Fulica atra</i>) [A125] Wetland and Waterbirds [A999]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Garriskil Bog SPA (004102)	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Lough Iron SPA (004046)	Whooper Swan (<i>Cygnus cygnus</i>) [A038] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Shoveler (<i>Anas clypeata</i>) [A056] Coot (<i>Fulica atra</i>) [A125] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

8.8. Identification of likely effects

8.8.1. Water Quality

8.8.2. Having regard to the separation distances and an absence of strong hydrological connections to Garriskil Bog SPA (004102) and Lough Iron SPA (004046), I am satisfied that likely significant impacts on Conservation Objectives of these two sites can be ruled out in relation to water quality.

8.8.3. However, as outlined in Section 7.4 of this Report, having regard to the level of detail provided with the planning application, potential adverse impacts on water quality cannot be ruled out, particularly during the construction phase. The subject site has an indirectly hydrological link (c. 1.1km) to Lough Derravaragh SPA (004043). I reiterate that proposed attenuation basin 4 located in southeast corner of the southern parcel of the site will directly discharge to a field drain and that the pollution control measures from same have not been specified. The distance between this point along field drain and Bishops Lough Stream is c. 220m. I consider this drain to be a significant source-pathway-receptor link and highlight that a surface water management plan was not submitted with the application. Noting the significant hydrological connection between the subject site and Lough Derravaragh, there is potential for the proposed development to negatively impact on the water quality which in turn supports species and habitats that the Lough Derravaragh SPA's qualifying interests are reliant on. The main impacts on water quality would be increased siltation from run-off and/or eutrophication (from fuel spills or contaminated run-off). This could cause degradation of aquatic or associated habitats which could also result in degradation of habitat quality for wintering waterfowl and birds which are qualifying interests of the SPA. As a Stage 2 Appropriate Assessment was not submitted with the application, potential adverse impacts could not be mitigated via condition should the Board be minded to grant permission for the proposed development.

8.8.4. In the absence of sufficient detailed information in relation to surface water management, particularly during the construction phase of the proposed development, it is not possible to form a full, precise and definitive conclusion capable of removing all reasonable scientific doubt as to the significance of potential impact on the

Conservation Objectives of the SPA, and as such, the Board is precluded from granting permission for the proposed development.

8.8.5. Ex-situ Impacts

- 8.8.6. The NPWS Site Synopsis states that Lough Derravaragh is one of the most important midland lakes for wintering waterfowl, supporting *inter alia* 102 Whooper Swans. (It is a designated Ramsar site.) Furthermore, the First-Party Appeal states that ornithological monitoring from the Coole Wind Farm (circa 13km north of the subject site) records Whooper Swans regularly move between Lough Bane, Lough Kinale, Derragh Lough, Lough Sheelin and Lough Derravaragh, and that the Lough Derravaragh population is highly mobile in the area to the north of the Lough. (I noted two swans in the southeast corner of the lake during my site visit in January (i.e. c.300m from the site.) The First-Party Appeal states: “*Given that the proposed development is proximate, c.300m at its nearest point, to Lough Derravaragh, the subject site may be utilised occasionally by Whooper Swan and other waterbirds for feeding/foraging.*” I concur with the Applicant that having regard to the nature of Lough Derravaragh SPA’s other SCI (Pochard, Tufted Duck and Coot), they are less likely to utilise the site and instead stay in close proximity to the lakeshore for nesting and foraging.
- 8.8.7. Site specific conservation objectives have not been set for the Lough Derravaragh SPA, however, based on other sites where Whooper Swan is an SCI, the following targets and attributes are of relevance in maintaining or restoring the favourable conservation status of the species with emphasis in bold on the attribute of relevance to ex-situ areas in particular:
- Population trend: Long term population trend stable or increasing
 - Distribution: there should be **no significant decrease in the numbers or range of areas used** by waterbird species, other than that occurring from natural patterns of variation.
- 8.8.8. The Applicant only conducted a one-day walkover survey of each of the two parcels of land comprising the site. The AA Screening Report indicates that there will be no significant impact on the species as the proposed development is located >300m from the subject site.

- 8.8.9. The DHLGH raises a number of concerns in relation to the potential impacts from the proposed development on the Whooper Swan and particularly the lack of detail provided with the application. The Department recommends that at least one full season of bird surveys is carried out paying particular attention to the SPA species and flight lines.
- 8.9. Having regard to the proximity of the subject site to Lough Derravaragh other nearby SPAs for which Whooper Swan is also a SCI, I concur with the DHLGH that a one-day walk over survey (albeit carried out in January) is not sufficient to form a full, precise and definitive conclusion capable of removing all reasonable scientific doubt as to the potential significance of the proposed development the Whooper Swan species. I consider the Applicant's arguments in the First-party Appeal with respect to collision risk and glint and glare impacts somewhat premature and without foundation as there is not sufficient baseline information in relation to their presence (or otherwise) in the area. The AA Screening Report makes no reference to flight paths. Information in relation to same would have provided insight to bird migration routes and routes between roosting and foraging areas.
- 8.10. I note the Applicant's arguments in the First-party Appeal in relation to the Board's assessment of previous solar farm cases with respect to collision risk and glint and glare impacts, however, it should be noted that each case is assessed on its own merits.
- 8.10.1. The Applicant contends in the First-Party Appeal that any disturbance or displacement would be localized and would not significantly affect the species. However, again no scientific information has been provided to support these arguments. Without sufficient baseline information in relation to the species including *inter alia* their population, movement and activity within the site and surrounds, it is not possible to assess potential impacts (if any) such as fragmentation, disruption to the species or their habitats, collision risk, and glint and glare impacts on the species as a result of the proposed development at this location. Whilst I have concerns that the proposal may result in potential foraging areas for Whooper Swan having regarded to the improved agricultural grassland on the site, without sufficient baseline information it is not impossible to interrogate the significance of such a potential impact.

8.10.2. The Applicant is willing to commit to implementing a phase of ornithological monitoring at the proposed development site prior to and following the construction phase, however, reliance on post consent monitoring to identify any adverse effect is not in line with the obligations of Article 6(3) of the Habitats Directive.

8.10.3. **Screening Conclusion**

8.10.4. In summary, there is insufficient information on file to determine if there would be any likely significant impacts on the Conservation Objectives of Lough Derravaragh SPA or other neighbouring European Sites. As such, having regard to the precautionary principle, I recommend planning permission is refused on this basis.

8.10.5. Separately, I concur with the DHLGH and IFI that the grid connection should not form part of the AA process as it does not form part of the planning application.

9.0 Recommendation

It is recommended that planning permission be refused for the reasons and considerations set out below.

10.0 Reasons and Considerations

1. On the basis of the information provided with the application and appeal including the Appropriate Assessment Screening Report, and in applying the precautionary principle, the Board cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on Lough Derravaragh SPA (004043), or any other European site, in view of the site's Conservation Objectives. In such circumstances, the Board is precluded from granting permission.
2. The information provided with the application and appeal is not sufficient to enable the Board to determine, that the proposed development would not have a significant negative impact on water quality in the area, which in turn may cause potential adverse impacts on biodiversity and as such would be inconsistent with CPOs 10.89, 12.4 and 12.25 of the Westmeath County Development Plan 2021-2027 and contrary to the proper planning and sustainable development of the area.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Susan Clarke
Senior Planning Inspector

29th February 2024

Appendix A: Memorandum from Emmet Smyth (dated 17th January 2024)

Appendix B Form 1: EIA Pre-Screening

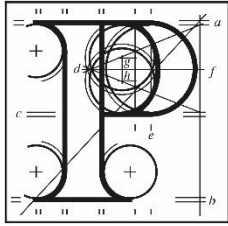
[EIAR not submitted]

An Bord Pleanála Case Reference	317952-23		
Proposed Development Summary	Development of a Solar Photovoltaic (PV) Energy Development comprising of solar photovoltaic arrays, BESS, and associated infrastructure.		
Development Address	Gartlandstown, Crookedwood, Co. Westmeath		
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)		Yes	<input checked="" type="checkbox"/>
		No	
2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) or does it equal or exceed any relevant quantity, area or limit where specified for that class?			
Yes		Class.....	EIA Mandatory EIAR required
No	<input checked="" type="checkbox"/>		Proceed to Q.3
3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?			
		Threshold	Comment (if relevant)
No	<input checked="" type="checkbox"/>	Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of Schedule 5, within the Planning and Development Regulations, 2001 (as amended). Having regard to the purpose, nature and to the limited extent of the works, such non-agricultural development would not constitute	No EIAR or Preliminary Examination required.

		rural restructuring under Class 1 of Part 2 of Schedule 5.		
Yes		NA		Proceed to Q.4

4. Has Schedule 7A information been submitted?				
No	NA	Preliminary Examination required		
Yes	NA	Screening Determination required		

Inspector: Susan Clarke Date: 29th February 2024



An
Bord
Pleanála

Memorandum ABP- 317952-23

To: Susan Clarke.
From: Emmet Smyth.
Re: ABP-317952-23.
Date: 17th January 2024.

Reference ABP-317952-23 refers to a ten-year planning permission for a solar energy development with a total site area of 87 hectares comprising (i) photovoltaic solar panels on steal mounting frames; (ii) electrical inverters; (iii) electrical power stations; (iv) underground electrical and communication cabling; (v) containerised battery energy storage facility; (vi) the upgrade of 1 no. existing site entrance and the development of 1 no. new site entrance; (vii) on-site access tracks; (viii) a temporary construction compound; (ix) security fencing and security gates; (x) pole mounted security cameras and (xi) all associated and ancillary site development, landscaping and reinstatement works at Gartlandstown, Crookedwood, Co. Westmeath.

The site straddles an area underlain by both Locally important karstified aquifer to the north and a Locally important aquifer to the south which is moderately productive only in local zones. The site subject of this application is classified by GSI as having predominantly moderate vulnerability with high vulnerability to the south of the subject site. The soils in this area are a Chert till with deep well drained mineral soils of the grey-brown Podzolic or Brown earths. The site is classified under the GSI mapping tool as having moderate permeability. There are no public water schemes mapped within the area of the subject site. The development is located c.370 metres from the Lough Derravaragh SPA at its closest point. Elevated risk areas for Phosphorus loss typically have poorly draining soils and dominant overland flow pathways. Whereas freely draining soils and substantial groundwater pathways are elevated risk for

nitrogen losses. Overall, the subject site is well drained with minimal risk for phosphorus loss, as indicated by the Pollution Indication Potential for phosphorus (PIP) maps.

The groundwater body (Derravaragh groundwater body IE_SH_G_077) is presently good status but deemed at risk due to agriculture with nutrients trending upwards (for the period 2013-18), with a portion of the southern aspect of the subject site located within the Inny ground waterbody (IE_SH_G_110) which is also good status and not deemed at risk.

The site is split by the local road, L1731. The northern portion of the subject site is bound to the East by the Inny river catchment and the portion of the site to the south of the L1731 is also bound to the west by the Inny river catchment. Its status under the river waterbody WFD status 2013-18 was good with this disimproving to moderate status for the period 2016-2021, agriculture being cited as the primary pressure attributable for the dis-improvement.

The development as proposed would be most impactful during the construction stage with a lesser impact during the operational phase of the development.

Section 5.1.5 of the water pollution prevention plan, during the construction phase, 'silty water will be routed over land or via suitably designed settlement ponds.' The overland route being completely unacceptable method of addressing contaminated stormwaters during the construction phase. The application gives no indication as to volumes of water requiring treatment, rates of inflow (particularly where water is pumped from excavations), retention times, and the rationale for the size of settlement ponds etc.

Traditionally the treatment of contaminated surface run-off is by way of settlement ponds, with retention times of 11 hours for medium silts ($\geq 0.006\text{mm}$) and 24 hours for fine silts typically ($\geq 0.004\text{mm}$). Appendix B again references drainage and attenuation ponds, absence of any specific details. In this report it is difficult to differentiate between mitigation measures proposed to control and treat contaminated storm waters during the construction stage and those proposed during the operational phase of the development. The applicant would need to clarify completely, all mitigation measures being put in place for the construction phase and separately the operational phase.

Section 5.2 of the Water and Environment report references 'concrete trucks will wash down in a designated area,' there is no indication as to the volumes of cementitious wastes and wash waters with a high alkalinity nor any indication as to methods for the disposal of same.

Reference is made in the drainage plan regarding addressing the potential surface waters via a level spreader overland at 4 points not 3 points as referenced in the Water and Environment Assessment report, where collected storm waters will disperse overland and infiltrate to ground. The major pathway for phosphorus removal from soils is through surface water run-

off and given the deterioration in the quality of the watercourses (and their at-risk projection) surrounding the subject site, the applicant would be required to revisit this proposal for surface water drainage. In the event of surface waters meeting the existing watercourses from such proposals as described, this may impede the ability to achieve our Water Framework objectives of maintaining high and good status waters where they exist and preventing the deterioration of status in all waters. There is no indication given as to how the overland spreaders have been designed, and the flow rate capabilities of same, other than a drawing in the water and environment assessment. There are 5 other points proposed where surface waters are to be discharged indirectly to the watercourse, which has a direct hydrological connectivity to Lough Derravaragh SPA.

The access tracks throughout the development will facilitate the movement of maintenance traffic throughout the development, given the change in the land use this will pose a risk, albeit a relatively low risk, of hydrocarbon or silt related pollution due to the limited traffic movements throughout the development. However, all stormwaters collected by these tracks shall be disposed of by means of overland level spreaders or by attenuation or infiltration basins. The applicant has not provided any details pertaining to the sizing of these features. Reference is made to drainage from such areas draining to swales whose outlet is isolated by a 'pollution control.' It is not explicitly clear what control/s are being proposed or referenced to mitigate against the risk of hydrocarbon contamination prior to groundwater discharge or surface water discharge.

Based on the information to hand, I am of the opinion that the applicant would need to provide at a minimum clarification on a number of points as outlined in the body of this report.