

Inspector's Report ABP-316078-23

Development

Planning permission for a period of 10 years to construct and complete a Solar PV Energy Development with a total site area of 124.07 hectares, to include: Inverter / Transformer Substations, modules, solar PV ground mounted on support structures, temporary construction compounds, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works relating to the access of the site. The solar farm will be operational for 35-years.

Hawkinstown, Riverstown (ED Ardcath), Scatternagh, Balgeeth, Ardcath, Co. Meath.

Planning AuthorityMeath County CouncilPlanning Authority Reg. Ref.22552

Location

Applicant(s)	Obton Limited
Type of Application	Permission
Planning Authority Decision	Refusal
Type of Appeal	First Party v. Decision
Appellant(s)	Obton Limited
Observer(s)	Ivan, Marie, Grainne, Colm and Leah Craigie & Joan Gough
	Eoin O'Sullivan
	Bernadette O'Sullivan
	Shane Everitt
	Aisling O'Sullivan
	Ambrose O'Sullivan & Eithne
	O'Sullivan
	Orla Craigie & Bobby O'Brien
	Gary McGlew
	Anthony Briody (The Ark Puddenhill
	Play Centre)
	Kathleen Dowling & Desmond Mooney
	Jason & Catherine Bowens
	Mary Ellen Bowens & Pat Daly
	Eugene O'Sullivan
	Catherine Flanagan
	Teresa Friel & Noel Friel
	Eco Advocacy CLG
	Laura Doyle and Declan O'Sullivan
	Muireadhach O Chinneide & Emma Ni Chinneide

Faustina O'Sullivan Bernadette Fox Stanley & Margaret Bowens Kerrie Fox Jennifer & Shane Heeney Brendan & Ruth Traynor Michael Sorohan Cllr. Stephen McKee

Date of Site Inspection

Inspector

13th June, 2024 Robert Speer

1.0 Site Location and Description

- 1.1. The proposed development site extends across the rural townlands of Hawkinstown, Riverstown (ED Ardcath), Scatternagh, Balgeeth & Ardcath, Co. Meath, approximately 9.5km north of Ashbourne and 5.3km south of Duleek, where it occupies a position to the east of the R152 Regional Road and the N2 National Road. It is located in a predominantly rural area characterised by an undulating drumlin landscape where the primary land use is agricultural as typified by a wellmanaged patchwork of pastoral fields (enclosed by a combination of mature hedgerow, tree lines, ditches, field drains, and post & wire fencing) which is in turn interspersed with intermittent instances of individual farmsteads and rural housing.
- 1.2. The site itself has a stated site area of circa 124.07 No. hectares (307 No. acres), is irregularly shaped and extends across 26 No. agricultural fields (which form part of a larger landholding), the majority of which are set as pasture. The westernmost extent of the site and the wider landholding is bisected east to west by Local Road No. L5009 which extends between two junctions with the R152 Regional Road. A larger proportion of the site is bisected north to south by an unnamed minor roadway which extends eastwards from its junction with Local Road No. L5009 with the remainder of the development site located to the north of this same roadway. The site topography varies between c. 45-98m AOD and is dominated by a shallow valley centred approximate midways within the site with the lands rising to the east and west of same. This valley accommodates the Athcarne Stream which flows northwards through the lands before converging with the Coolfore Stream and continuing onwards to the River Hurley to the northwest. Overhead power lines traverse fields within the western / southwestern and eastern / northeastern limits of the site.

2.0 Proposed Development

- 2.1. The proposed development, as initially submitted to the Planning Authority, consists of the construction of a solar PV energy development (with an expected output of up to 85MW Maximum Export Capacity) within a total site area of circa 124.07 No. hectares and includes for the following:
 - Ground-mounted solar photovoltaic panels set within galvanised metal framework racks elevated above the ground surface and assembled in south-

facing rows (arrays) east to west over the development area. The panels will be fixed at an angle of between 10-25 degrees from the horizontal, with a proposed maximum height of up to 3.2m to the top of the panel frame on level ground, including 0.8m of ground clearance to enable maintenance access below the PV panels.

The precise solar panel arrangement and rack variant will be established prior to construction. The submitted design is based on informed assumptions of the most likely option for the panels and their positioning, however, as solar PV technology is continually advancing and becoming more efficient, it is proposed to utilise the most efficient infrastructural specifications available at the time of construction. Although these may vary slightly from the indicative details described in the application, resulting in different configurations, angles and spacing, there is not expected to be any significant departure from the details specified.

To ensure that the final detailed design layout and elevations of nonsubstantive elements of the project receive the approval of the planning authority prior to construction, it is proposed that the following condition be attached to any grant of permission:

'Prior to commencement of the development, full details of the final locations, design and materials to be used for the solar arrays shall be submitted to the local planning authority for agreement in writing'.

- The metal support structures will utilise piles directly driven into the ground thereby removing the need for deeper foundations. A small gap surrounding all sides of each module will allow water to drain between the modules.
- 37 No. transformer stations housed within self-contained weatherproof units (each measuring c. 3.55m x 2.8m and requiring an area of ground disturbance of 9.94m² to accommodate a concrete foundation).
- Underground cabling.
- The provision of 3 No. new access points off local roadways and the use of 1
 No. existing farm access point from Local Road No. L5009.

- The laying of additional and upgraded access / maintenance tracks throughout the site. These will generally measure 4m in width (with the carriageway increasing in width at bends and entrance points) and will extend for a combined length of c. 5.6km. All the new tracks will be unpaved and constructed from local stone. Geosynthetic reinforcement or soil stabilisation may be used to reduce the depth of track construction. The surface will be a compacted granular material (crushed rock) up to an approximate thickness of 0.3m, depending on ground conditions.
- Perimeter security fencing (c. 13,126m in length) measuring 2.4m in height with a 0.1m gap at the bottom and supported by timber posts.
- A CCTV system with pole mounted cameras (269 No. cameras supported on 3.5m high galvanised steel posts and positioned at intervals along the security fence line).
- All associated ancillary site development works, including temporary construction compounds.
- 2.2. The proposal has sought a 10-year permission.
- 2.3. In response to a request for further information, revised proposals have been put forward whereby the level of development within Field Nos. 3 & 20 is proposed to be reduced in order to increase the setback from neighbouring housing, however, these amendments have not been shown on the accompanying drawings supplied to the Board.
- 2.4. Although a grid connection is required for the proposed development, it is anticipated that the provision of a 110kV substation (and the associated connection) will form part of a separate a planning application made directly to the Board under the Strategic Infrastructure Development provisions of the Planning and Development Act, 2000, as amended (Para. 4.9 of the Planning and Environmental Statement refers to future proposals as regards the provision of a substation and grid connection). Any future application for a grid connection will thus be made to An Bord Pleanala under s182A whereupon screening for Appropriate Assessment will be captured or that, subject to screening, it would be exempt under Class 26 (Section 5 declaration).

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. Following the receipt of a response to a request for further information, on 21st February, 2023 the Planning Authority issued a notification of a decision to refuse permission for the proposed development for the following reason:
 - HER POL 52 of the Meath County Development Plan, 2021-2027 sets out the policy to protect and enhance the quality, character, and distinctiveness of the landscapes of the county in accordance with the national policy and guidelines and the recommendations of the Landscape Character Assessment to ensure that new development meets high standards of siting and design. As set out in the applicable Landscape Character Assessment for County Meath (Appendix 5) and associated maps, the proposed development would be partially sited in Landscape Character Assessment (LCA) 06 Central Lowlands, a landscape of High Landscape Character Value, Moderate Sensitivity and is of Regional Landscape Importance and with a recommendation to maintain the visual quality of the landscape by avoiding development that would adversely affect short range views between drumlins and to have particular regard to the retention of high quality landscapes on the tops of drumlins which are inter-visible with the Hills of Tara and Skyrne in LCA 12. Based on the information submitted with the application, it is considered that, by reason of its nature, scale, massing and location, the Planning Authority is not satisfied that the proposed development sufficiently protects and enhances the quality, character, and distinctiveness of this high landscape value. The proposed development would, therefore, be contrary to the above referenced Development Plan policy and would not be in accordance with the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

3.2.1. Planning Reports

An initial report details the site context, planning history and the relevant policy considerations before summarising the contents of the various submissions and reports received with respect to the proposed development. It proceeds to state that the proposed development is acceptable in principle, subject to the consideration of other factors, including any impact on landscape character. The report notes the contents of the submitted 'Landscape Visual Appraisal' (LVA) before stating that the document does not amount to a complete 'Landscape and Visual Impact Assessment' (LVIA) and that the analysis should be revisited having regard to the apparent omission of potentially relevant sensitive receptors and any need to amend the design accordingly. It then states that additional viewpoints are required from other locations along with updated photomontages for all of the viewpoints (to include the proposed development at Year 0 and Year 5 as a minimum) as well as any protected viewpoints within the functional area of Fingal County Council.

The remainder of the report considers issues including glint & glare, noise, traffic management, archaeological, architectural & cultural heritage considerations, natural heritage, flooding implications, and appropriate assessment. With respect to the 'Glint & Glare Assessment' and the 'Noise Impact Assessment', the report states that the findings of both documents should be amended to account for the apparent omission of certain relevant residential receptors (such as dwelling houses of more recent construction and sites with the benefit of planning permission). Concerns are also raised in relation to the proposed traffic management arrangements (as per the report of the Transportation Dept.) and the need for a revised Construction Traffic Management Plan to address any potential traffic conflicts (which may necessitate the implementation of a one-way haul route).

The report concludes by stating that the proposed development is consistent with the applicable policy context and thus is acceptable in principle before recommending that further information be sought in relation to a number of issues, including updated mapping / drawings detailing all existing development and extant grants of permission relevant to the subject proposal; a new Landscape and Visual Impact Assessment accompanied by additional viewpoints and photomontages; a revised

'Glint & Glare Assessment' and 'Noise Impact Assessment' to account for all relevant residential receptors in the vicinity; a topographical survey; a revised Construction Traffic Management Plan; and the contents of the submissions received.

Following the receipt of a response to a request for additional information (along with the submission of revised public notices), a further report was prepared. This considered the additional information provided and the contents of the further submissions received before concluding that the proposed development would not be appropriately sited and would not serve to enhance the quality, character and distinctiveness of the Central Lowlands LCA. The report concludes by recommending a refusal of permission for the reason stated.

3.2.2. Other Technical Reports

Fire Service Dept.: States that access for fire tenders to the development should accord with the recommendations of subsection 5.2 of Technical Guidance Document B 2006 (Reprinted Edition, 2020). In addition, prior to the commencement of the project, the agent and / or applicant is required to make contact with the Fire Service Dept. to allow the proposal to be reviewed in more technical detail.

Water Services: States that the development as proposed broadly complies with the requirements of the Water Services Section as regards the orderly collection, treatment and disposal of surface water. It subsequently recommends that a condition be included in any grant of permission requiring the works to comply with the Greater Dublin Regional Code of Practice for Drainage Works (Vol. 6).

Environment: States that the proposed solar farm and ancillary structures can be classified as '*highly vulnerable development*' by reference to '*The Planning System and Flood Risk Management, Guidelines for Planning Authorities*'. It is further stated that the proposed development site is partially located in Flood Zone A (where the probability of flooding is greater than 1% from fluvial flooding) and Flood Zone B (where the probability of flooding is between 0.1% and 1% from fluvial flooding).

Upon review of the submitted Site Specific Flood Risk Assessment, it has been noted that the applicant has kept essential infrastructure such as solar panels and transformer stations outside of the identified flood zones (as determined from hydraulic modelling of the Athcarne and Coolfore streams). With regard to the accompanying Drainage Impact Assessment, the proposed surface water storage requirements are recorded as having been designed to cater for the runoff generated during a 1 in 100 critical storm event plus 20% climate change.

The remainder of the report from the Environment Section makes the following observations:

- It is unclear whether an existing crossing of the Athcarne Stream on site will be upgraded or kept as is. A Section 50 agreement with the OPW will be required for any proposed culverts, crossings, alterations or diversion of watercourses on site.
- There are areas of access track and fencing located within the identified flood zones. All fencing within these zones should be limited to deer fencing so as not to remove floodplain storage or obstruct flow paths. Furthermore, any access tracks within these flood zones are to be constructed at grade.
- A 10m buffer zone to existing watercourses will be required.

The report subsequently concludes by stating that there is no objection to the proposed development, subject to the following conditions:

- Any proposed culverts, crossings, watercourse diversions or amendments to same shall require Section 50 consent from the OPW and such written consent shall be submitted to the Planning Authority before the commencement of development on site.
- The applicant shall ensure that there shall be no development within 10m of the watercourse on site to facilitate ongoing maintenance by the OPW or other parties unless otherwise agreed with the OPW and such agreement shall be submitted in writing to the Planning Authority.
- Any gates at watercourse crossings shall not impact the flow of water in a 1% AEP or 0.1% AEP flood event.
- Any fencing within Flood Zones A & B shall be limited to deer fencing or similar and any fencing crossing the watercourses shall not extend into the watercourse. Details of all such proposed fencing shall be submitted for the written agreement of the Planning authority prior to the commencement of development.

 All access tracks located in Flood Zones A & B shall not be raised above the local ground level so as not to remove any floodplain storage / block any flow paths. Access tracks within Flood Zones A & B shall be delineated with a marker pole which shows the depths of floodwaters, the details of which shall be submitted for the written agreement of the Planning Authority prior to the commencement of development.

Public Lighting: In the event that external lighting is required, its design should mitigate against obtrusive light (e.g. skyglow, glare and light trespass) and include a lighting contour drawing that shows the impact of the lighting on surrounding areas.

Transportation: An initial report raises concerns as regards the substandard sightlines available at the junction of Local Road No. L5009 with the R152 Regional Road as well as the narrow width and poor condition of the road network along the proposed haul route. It subsequently recommends that the applicant be requested to submit a revised Construction Traffic Management Plan that includes proposals to address potential conflicts between arriving and departing HGVs and local traffic (it is suggested that consideration be given to a one-way haul route). It is also recommended that the applicant be requested to submit full details of its Traffic Survey.

Following the receipt of a response to a request for additional information, a further report was prepared which stated that while it was proposed to implement a one-way system for construction traffic, it was considered that the intended haul route was undesirable given its use of narrow roadways in the absence of pull-in bays to facilitate local traffic. The report concludes by recommending a grant of permission, subject to conditions, including a requirement that a revised Construction Traffic Management Plan be submitted for written agreement, prior to the commencement of development, which identifies a suitable haul route with pull-in bays to facilitate passing traffic.

Architectural Conservation Officer: Sets out the relevant policy context of the Development Plan and concludes that the proposed development will have no direct negative effects on adjacent protected structures or Recorded / Registered Monuments. It recommends that the following condition be included in any grant of permission:

- a) Any service building for this development requires to be referenced to the Meath County Council Rural Design Guide and integrated into the landscape as such.
- b) The use of matt dark green paint colour for all exposed metal work, service buildings, cabins, gates and fences.

Scientific Officer: States that the primary source of noise from the development will be the 37 No. transformers before noting that the predicted sound levels at the identified noise sensitive locations (NSLs) do not include a 2dB rating penalty to account for the '*just perceptible tone*' from the inverters given the separation distances involved, although a 3dB façade correction is included in the modelling for each of the NSLs. It subsequently states that the proposed development will have a low impact on the identified NSLs with the projected noise levels being well below the WHO night-time guideline noise limit of 40dB(A). The report concludes by stating that there is no objection to the proposed development, subject to conditions.

3.3. Prescribed Bodies

- 3.3.1. Irish Water / Uisce Eireann: No objection, subject to conditions.
- 3.3.2. Department of Housing, Local Government and Heritage: Based on an examination of the information contained in the archaeological component of 'Technical Appendix 3: Archaeology and Architectural Heritage Impact Assessment' and the proposed archaeological mitigation, it is recommended that the following condition be included in any decision to grant permission:

'Pre-development testing shall be carried out as follows:

- The applicant is required to engage the services of a suitably qualified archaeologist to co-ordinate the mitigation proposals contained in the report for test excavations and archaeological monitoring of groundworks resulting from construction methods (Technical Appendix 3, Section 3.63, and page 41). Geophysical survey will take place in advance of testing where appropriate. No sub-surface works shall be undertaken in the absence of the archaeologist without his / her express consent.
- 2. The archaeologist is required to notify the National Monuments Service of the Department of Housing, Local Government and Heritage in writing at

least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work.

- The archaeologist shall carry out any relevant documentary research and will excavate test trenches at locations chosen by the archaeologist, having consulted the proposed development plans.
- 4. The archaeological method statement for the mitigation will be agreed with the National Monuments Service of the Department of Housing, Local Government and Heritage in advance of the commencement of construction. The method statement will include a schedule of the details of the nature, location and extent of all groundworks and topsoil stripping that may be approved.
- Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the National Monuments Service of the Department of Housing, Local Government and Heritage for consideration.
- 6. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and / or monitoring may be required and the National Monuments Service of the Department of Housing, Local Government and Heritage will advise the Applicant / Developer with regard to these matters.
- 7. No site preparation or construction work shall be carried out until after the archaeologist's test excavation report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the National Monuments Service of the Department of Housing, Local Government and Heritage.

Reason: To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest'.

- 3.3.3. Health Service Executive / Environmental Health Officer: States the following:
 - The Glint and Glare Assessment has concluded that the impact of glint and glare from the proposed development will range from low to not significant effects as a result of the implementation of mitigation measures (including the

planting of native trees and hedgerows) at certain locations in order to reduce the visual impact of the solar panels. However, the report has not outlined when the mitigatory vegetation will be planted and if there would be any significant or harmful effect on residential and road receptors while this vegetation is growing. Furthermore, the assessment has not included any information regarding the impact on receptors when trees / vegetation are bare during the winter months.

 The noise impact assessment advises that no baseline monitoring was conducted due to the relatively low levels of noise produced by solar farms. It subsequently concluded that there would be low to negligible impacts on local receptors and that mitigation measures would not be required in the assessment.

It is recommended that an assessment of existing background noise levels at noise sensitive locations be carried out. The impact of low level continuous noise emissions from equipment operating from the early hours of the morning through to dusk cannot be accurately predicted without existing background noise level monitoring. It is not possible to accurately establish the future impact of noise emissions on local residents without this data.

- The applicant has indicated that the operation of some of the equipment may
 result in tonal noise emissions although these would not be perceptible at
 noise sensitive locations due to the separation distances involved. No further
 information has been provided as regards the location or type of equipment
 involved. A full assessment of the noise emissions from this equipment should
 be submitted given that tonal noise emissions can cause a nuisance for local
 residents if unmitigated.
- No information has been provided regarding environmental control measures during the construction period. The applicant should provide a detailed environmental management plan for the construction period to ensure the control of noise, dust and surface water emissions.
- Information should be provided on a public complaints procedure. In the event of a nuisance occurring during the operational or construction phases, a

member of the public should be able to contact a representative of the operator to ensure that any issue is dealt with in a timely manner.

- 3.3.4. *Transport Infrastructure Ireland:* States that the Authority will rely on the planning authority to abide by official policy in relation to development on / affecting national roads as outlined in the 'Spatial Planning and National Roads, Guidelines for *Planning Authorities, 2012*', subject to the following:
 - The Authority requests that the Council has regard to the provisions of Chapter 3 of the 'Spatial Planning and National Roads, Guidelines for Planning Authorities' in the assessment and determination of the planning application.

3.4. Third Party Observations

3.4.1. A total of 59 No. submissions were received from interested third parties and the principal grounds of objection / areas of concern raised therein can be derived from my summation of the observations received on the first party appeal.

4.0 **Planning History**

4.1. **On Site:**

- 4.1.1. PA Ref. No. 90808. Application by Stephen Corry for permission to erect a dwelling house. This application was withdrawn.
- 4.1.2. PA Ref. No. 992630. Was granted on 30th March, 2000 permitting Jock Wilkinson permission for alterations, new single storey rear extension, new septic tank to S.R.
 6: 1991, to existing dwelling, all at Hawkinstown, Ardcath, Co. Meath.

4.2. On Adjacent Sites:

- 4.2.1. PA Ref. No. SA40043. Was granted on 17th June, 2004 permitting Eugene O'Sullivan permission for a single storey sunroom to the west elevation of an existing bungalow at Balgeeth, Ardcath, Co. Meath.
- 4.2.2. PA Ref. No. SA70053 / ABP Ref. No. PL17.223097. Was granted on appeal on 7th November, 2007 permitting Stephen Corry permission for the retention of a cattle

shed and silage pit with permission for a slurry tank under shed and flooring of silage pit at Balgeeth, Ardcath, Co. Meath.

- 4.2.3. PA Ref. No. SA120330. Was granted on 15th August, 2012 permitting Stephen Corry permission for a new dairy facility, cubicle shed, calf shed, overground slurry store, grain bin & silage slab, all within the curtilage of a protected structure, at Balgeeth, Ardcath, Co. Meath.
 - PA Ref. No. AA170669. Was granted on 28th July, 2017 permitting Stephen Corry an 'Extension of Duration' of PA Ref. No. SA120330 until 14th August, 2022.
 - PA Ref. No. 22954. Was refused on 9th September, 2022 refusing Stephen Corry a further 'Extension of Duration' of PA Ref. No. SA120330.
- 4.2.4. PA Ref. No. AA191075. Was granted on 22nd January, 2020 permitting Stanley Bowens permission for the construction of a storey and a half residence, domestic garage, septic tank and percolation area, new entrance and all associated site development works at Balgeeth, Ardcath, Co. Meath.
- 4.2.5. PA Ref. No. AA200295. Was granted on 6th August, 2020 permitting Sinead
 O'Sullivan outline planning permission for a dwelling house, wastewater treatment system and percolation area, joint access road to site and all associated site works.
 All at Hawkinstown, Ardcath, Co. Meath.
- 4.2.6. PA Ref. No. AA201031. Was granted on 10th November, 2020 permitting Declan O'Sullivan permission for the construction of a part two storied, part single storied dwelling house and a detached domestic garage, installing a proprietary wastewater treatment unit and percolation area and to make a new entrance onto the road along with all ancillary site works. All at Hawkinstown, Ardcath, Co. Meath.
- 4.2.7. PA Ref. No. 21434. Was granted on 10th June, 2021 permitting Declan O'Sullivan permission for revisions to an existing grant of permission (PA Ref. No. AA/201031) to include the following: (1) Change of house type to entire two-storied, (2) Minor revisions to the site layout which will also include a revised position of the proposed entrance onto the public road (4) All ancillary site development works. All at Hawkinstown, Ardcath, Co. Meath.

- 4.2.8. PA Ref. No. 21493. Was granted on 17th June, 2021 permitting Orla Craigie permission to construct a part two storey, part single storey dwelling house, detached garage, new wastewater treatment system and percolation area, new well and all associated site development works, all at Moorepark, Garristown, Co. Meath.
- 4.2.9. PA Ref. No. 2287. Was granted on 26th August, 2022 permitting Leo Collins permission for a 500,000 gallon overground circular slurry store with ancillary reception tank, 2 no. walled silage pits with concrete apron together with all associated site works. All at Balgeeth, Ardcath, Co. Meath.
- 4.2.10. PA Ref. No. 23636. Was granted on 18th September, 2023 permitting Sinead O'Sullivan permission consequent on a grant of outline permission (PA Ref. No. AA/200295) for a dwelling house, wastewater treatment system and percolation area, joint access road to site, detached domestic garage, and all associated site works, all at Hawkinstown, Ardcath, Co. Meath.
- 4.2.11. PA Ref. No. 23727. Was granted on 17th October, 2023 permitting Orla Craigie permission for a change of house type from a two-storey dwelling to a redesigned two-storey dwelling with a single storey projection to the side, a redesigned detached domestic garage, along with revised site layout and all associated site works all further to previous PA Ref. No. 21/493, all at Moorepark, Garristown, Co. Meath.
- 4.2.12. PA Ref. No. 2360086. Was granted on 30th April, 2024 permitting Joseph Corry permission for a three bed passive house, agricultural facilities, effluent treatment system & percolation area, and all associated works, all at Hawkinstown, Ardcath, Garristown, Co. Meath.

4.3. Other Relevant Files:

- 4.3.1. PA Ref. No. AA201784. Was granted on 26th April, 2021 permitting Colm Craigie outline planning permission for a dwelling house, wastewater treatment system and percolation area and all associated site works at Moorepark, Garristown, Co. Meath.
- 4.3.2. PA Ref. No. AA201785. Was granted on 26th April, 2021 permitting Grainne Craigie outline planning permission for a dwelling house, wastewater treatment system and percolation area, entrance to site via existing family entrance gate and all associated site works at Moorepark, Garristown, Co. Meath.

5.0 Policy and Context

5.1. National Policy

5.1.1. **The Programme for Government - Our Shared Future:**

The current programme commits to an average 7% reduction in greenhouse gas (GHG) emissions per annum over the 2021-2030 period (a 51% reduction over the decade) and the achievement of net zero emissions by 2050. It states that the reliable supply of safe, secure and clean energy will be essential in order to deliver a phase-out of fossil fuels and commits to taking the necessary action to deliver at least 70% of renewable electricity by 2030.

5.1.2. Project Ireland 2040: National Planning Framework, 2018:

The National Planning Framework (NPF) sets out a vision for the future development of the country and includes strategic goals in respect of transitioning to a low carbon and climate resilient society. It contains a number of relevant National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs) which can be summarised as follows:

- NSO 8: Transition to a Low Carbon and Climate Resilient Society:

Recognises that the diversification of energy production systems away from fossil fuels and towards a more renewables focused energy generation system (utilising sources such as wind, wave, solar and biomass) will be necessary. It includes an aim to deliver 40% of electricity needs from renewable sources by 2020, with further increases through to 2030 and beyond in accordance with EU and national policy.

- NPO 23: Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.
- *NPO 54*: Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and

adaptation objectives, as well as targets for greenhouse gas emissions reductions.

- *NPO 55:* Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

5.1.3. National Development Plan, 2021-2030:

The National Development Plan, 2021-2030 (NDP) sets out the Government's 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.

5.1.4. Policy Statement on Security of Electricity Supply, November 2021 (Government of Ireland):

The Policy Statement notes that electricity is vital for the proper functioning of society and the economy and states that in order to contribute to the achievement of the targeted reductions in greenhouse gas emissions, the Government has committed that up to 80% of electricity consumption will come from renewable sources by 2030 on a pathway to net zero emissions. It emphasises that the continued security of electricity supply is a priority at national level and within the overarching EU policy framework in which the electricity market operates. The challenges to ensuring security of electricity supply are stated to include:

 ensuring adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services are put in place to meet demand – including at periods of peak demand.

Within the Policy Statement the Government recognises inter alia that ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions and that there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection, and storage in order to ensure security of electricity supply.

5.1.5. Energy Security in Ireland to 2030: Energy Security Package, November, 2023:

This document outlines a new strategy to ensure energy security in Ireland for the decade, while ensuring a sustainable transition to a carbon neutral energy system by 2030. It has been published as part of an Energy Security Package, containing a range of supplementary analyses, consultations, and reviews, which have informed recommendations and actions related to energy security. The report sets out that Ireland's future energy will be secure by moving from an oil- and gas-based energy system to an electricity-led system, maximising our renewable energy potential, flexibility and being integrated into Europe's energy systems. It further states that energy security must be prioritised, monitored, and reviewed regularly, and includes a range of measures to implement such an approach in the short and medium term by prioritising:

- Reduced and Responsive Demand
- A Renewables-Led System
- More Resilient Systems
- Robust Risk Governance

Under each of these four areas of actions, the report sets out a range of mitigation measures, including the need for additional capacity of indigenous renewable energy, but also energy imports, energy storage, fuel diversification, demand side response, and renewable gases.

5.1.6. Climate Action Plan, 2023 – Changing Ireland for the Better:

This plan is the second annual update to Ireland's Climate Action Plan, 2019 and is the first such plan to be prepared under the Climate Action and Low Carbon Development (Amendment) Act, 2021 as well as since the introduction of economywide carbon budgets and sectoral emissions ceilings in 2022. It implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Moreover, it supports the accelerated delivery of renewable electricity generation to the national grid with a target of achieving 80% of electricity demand being met from renewable energy by 2030. This includes a target of providing up to 5GW of solar energy by 2025 with a longer-term target of 8GW by 2030. The Plan proceeds to list the actions needed to deliver on climate targets and sets emission ceilings reductions for each sector of the economy. These include an increased reliance on renewable energy sources with the following actions of particular relevance to the proposed development:

- EL/23/1: Establish a taskforce to accelerate renewables.
- EL/23/2: Publish the Renewable Electricity Spatial Policy Framework.
- EL/23/3: Publish a roadmap for the development and implementation of Regional Renewable Electricity Strategies.
- EL/23/5: Complete analysis to update Shaping Our Electricity Future to accommodate 80% renewables and align with carbon budgets and sectoral emissions ceilings for electricity.
- EL/23/6: Ensure electricity generation grid connection policies and regular rounds of connection offers which facilitate timely connecting of renewables, provides a locational signal and supports flexible technologies.

5.1.7. Climate Action Plan, 2024:

An updated Climate Action Plan, 2024 was approved by Government on 21st May, 2024. It aims to build upon the last plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.

Chapter 12: '*Electricity*' of the Plan states that the electricity sector continues to face an immense challenge in meeting its requirements under the sectoral emissions ceiling, as the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification. The deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity are unprecedented and require urgent action across all actors to align with the national target. The EPA has projected that the electricity sector emissions are currently not aligned to Climate Action Plan 2023 (CAP23) pathways and targets (the projections forecast an overshoot of ~5.2 MtCO ₂eq. in the period 2021 to 2025, and ~8.2 MtCO₂eq. in the period 2026 to 2030). Therefore, the scale of the challenge to meet the sectoral emissions ceiling has been described as immense and requires policies to be moved from an 'end of decade' target trajectory towards a 'remaining carbon budget' target. The Plan emphasises that transformational policies, measures, and actions, along with societal change, are required to meet the electricity sector's sectoral emissions ceiling. In order to facilitate the major acceleration and increase in onshore wind turbines and solar PV required nationwide to achieve national and regional targets, a previously unseen level of electricity network upgrades and construction will be required. For onshore renewables, greater alignment between national, regional and local plans and renewable energy targets to support investment in and delivery of onshore wind and solar renewable energy will be critical.

Theme	2025 KPI	2030 KPI
	50% renewable electricity	80% renewable electricity
Accelerate Renewable	share of demand	share of demand.
Energy Generation	Up to 5 GW solar PV	8 GW solar PV capacity,
	capacity, including at	including 2.5 GW of new
	least 1 GW of new non-	non-utility solar.
	utility solar.	

Extract from Table 12.5: 'Key Metrics to Deliver Abatement in Electricity':

It has been stated that the achievement of further emissions reductions between now and 2030 will require a major step up across three key measures:

- Accelerate and increase the deployment of renewable energy to replace fossil fuels;
- Deliver a flexible system to support renewables and demand;
- Manage demand.

With respect to the acceleration of renewable electricity generation to reach 80% of electricity demand from renewable sources by 2030, necessary measures include:

- Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework;
- Target of up to 5 GW of solar by 2025;
- Target of 8 GW of solar by 2030;

• Commence drafting of Solar Energy Development Guidelines.

Extract from Table 12.6: 'Key Actions to Deliver Abatement in Electricity sector for the period 2024-2025':

Measure	2024 Actions	2025 Actions
	Accelerate Renewable	Accelerate Renewable
Accelerate Renewable	Electricity Taskforce to	Electricity Taskforce to
Energy Generation	oversee delivery	oversee delivery
	Revision to the National	Ensure that electricity
	Planning Framework to	generation grid
	include regional	connection policies, and
	capacities for the	regular rounds of
	allocation of national	connection offers (which
	targets at a regional level	facilitate timely
	in order to inform local	connection of renewables
	development plan policy	and supporting flexible
		technologies), provide a
		locational signal and
		support flexible
		technologies
	Publish Regional	Deliver onshore and
	Renewable Electricity	offshore RESS auctions
	Strategies	as per the annual RESS
	Publish revised	auction calendar
	methodology for Local	
	Authority Renewable	
	Energy Strategies	

The following 2024 actions are of relevance to the proposed development:

- EL/24/1: Accelerating Renewable Electricity Taskforce to publish programme of work.

- EL/24/3: Revision to the National Planning Framework to include regional capacities for the allocation of national targets at a regional level in order to inform local development plan policy.
- EL/24/4: Publish Regional Renewable Electricity Strategies.
- EL/24/6: Publish revised methodology for Local Authority Renewable Energy Strategies.
- EL/24/7: Publish new Electricity Generation Grid Connection Policy.

5.2. Regional Policy

5.2.1. Eastern & Midland Regional Economic and Spatial Strategy, 2019-2031:

The RSES provides a long-term strategic planning and economic framework for the development of the Eastern & Midland Region and represents a significant evolution of regional policy making which replaces the previous Regional Planning Guidelines. A key underlying principle of the Strategy is the need to enhance climate resilience and to accelerate a transition to a low carbon society. Relevant Policy Objectives include:

- *RPO 10.20:* Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

5.3. **Development Plan**

5.3.1. Meath County Development Plan, 2021-2027:

Chapter 6: Infrastructure Strategy:

Section 6.14: *Climate Change*

Section 6.15: Energy:

Section 6.15.3: Renewable Energy:

Section 9.2 of the NPF states the following in relation to energy *"Ireland's national* energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. The Government recognises that Ireland must reduce greenhouse gas emissions at 1990 levels from the energy sector by at least 80% by 2050, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses".

The potential feasible renewable energy options for the County include, but are not limited to, a balanced mix of:

- Bioenergy crops, forestry;
- Biomass anaerobic digestion, combined heat and power (CHP);
- Geothermal hot dry rock reservoirs, groundwater aquifers;
- Hydro energy small and micro hydro systems;
- Solar electricity generation, passive solar heating, active solar heating;
- Waste landfill methane gas collection;
- Wave wave action, and;
- Wind onshore wind, offshore wind (single turbines and groups).

Section 6.15.3.1: Solar Energy:

There are a range of technologies available to exploit the benefits of harnessing energy of the sun, including solar panels, solar farms, solar energy storage facilities all of which contribute to a reduction in energy demand. Solar technologies can be designed into buildings or retrofitted. Large scale solar farms have been positively considered on suitable sites within the County in the recent past. As of May 2019, twenty solar photovoltaic farms were granted planning permission across the County. A number of other solar farm proposals are at the pre-planning stage.

Proposals for the development of solar farms will be subject to a Site-specific Flood Risk Assessment as set out in the Planning System and Flood Risk Management Guidelines 2009 for Planning Authorities (or any updated guidelines).

- *INF POL 34:* To promote sustainable energy sources, locally based renewable energy alternatives, where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity, natural and built heritage, residential or local amenities.
- *INF POL 35:* To seek a reduction in greenhouse gases through energy efficiency and the development of renewable energy sources utilising the natural resources of the County in an environmentally acceptable manner consistent with best practice and planning principles.
- *INF POL 36:* To support the implementation of the National Climate Change Strategy and to facilitate measures which seek to reduce emissions of greenhouse gases.
- INF POL 42: To support the identification, in conjunction with EMRA, of Strategic Energy Zones, areas suitable to accommodate large energy generating projects within the Eastern and Midlands Regional area.
- *INF POL 43:* To require that development proposals in respect of solar panel photovoltaic (PV) arrays in the vicinity of Dublin Airport shall be accompanied by a full glint and glare study to assess the potential impact upon aviation safety (Refer to Chapter 5 Movement, Section 7.11, Aviation Sector).
- INF OBJ 39: To support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of renewable energy sources such as solar, wind, geothermal, hydro and bio-energy at suitable locations within the County where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county.
- *INF OBJ 41:* To promote the generation and supply of low carbon and renewable energy alternatives, having regard to the

opportunities offered by the settlement hierarchy of the County and the built environment.

- *INF OBJ 42:* To support the recording and monitoring of renewable energy potential in the County in partnership with other stakeholders including the Sustainable Energy Authority of Ireland (SEAI).
- *INF OBJ 45:* To ensure that all plans and projects associated with the generation or supply of energy or telecommunication networks are subject to an Appropriate Assessment Screening and those plans and projects which could, either individually or incombination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) undergo a full Appropriate Assessment.
- INF OBJ 46: To support the implementation of the actions of the Meath Climate Action Strategy 2019-2024 and review and update the Energy Management Action Plan 2011-2012, "Think Globally Act Locally".
- *INF OBJ 47:* To investigate the preparation of a Renewable Energy Strategy promoting technologies which are most viable in the County.

Chapter 8: Cultural and Natural Heritage Strategy:

Section 8.17: Landscape:

Section 8.17.3: Landscape Character Assessment

- HER POL 52: To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.
- HER POL 53: To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.

- HER OBJ 49: To ensure that the management of development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.
- HER OBJ 50: To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.

Section 8.18: Views and Prospects:

- HER OBJ 56: To preserve the views and prospects listed in Appendix 10, in
 Volume 2 and on Map 8.6 and to protect these views from
 inappropriate development which would interfere unduly with the
 character and visual amenity of the landscape.
- HER OBJ 57: To undertake a review of existing protected views and prospects contained in the County Development Plan and to assess and consider additional views and prospects deemed worthy of inclusion/protection.

Chapter 10: Climate Change Strategy:

Section 10.5: Integrating Mitigation and Adaptation into the County Development Plan

Section 10.5.8: Energy:

Mitigation Strategy: Encourage the uptake of more renewable energy sources.

Section 10.6.2: Energy and Waste Infrastructure

Chapter 11: Development Management Standards and Land Use Zoning Objectives:

Section 4: General Development Standards:

Section 11.4: General Standards applicable to all Development Types

Section 8: Energy Development Standards:

Section 11.8.1: Energy Development:

- *DM POL 27:* To encourage renewable development proposals which contribute positively to reducing energy consumption and carbon footprint.
- *DM OBJ 76:* In the assessment of individual energy development proposals, the Council will take the following criteria into account:
 - The proper planning and sustainable development of the area;
 - The environmental and social impacts of the proposed development;
 - Traffic impacts including details of haul routes;
 - Impact of the development on the landscape, (please refer to Appendix 5 Landscape Character Assessment);
 - Impact on protected Views and Prospects, (please refer to Appendix 10 Protected Views and Prospects);
 - Impact on public rights of way and walking routes, (please refer to Appendix 12 Public Rights of Way);
 - Connection to the National Grid (where applicable);
 - Mitigation features, where impacts are inevitable;
 - Protection of designated areas NHAs, SPAs and SACs, areas of archaeological potential and scenic importance;
 - Proximity to structures that are listed for protection, national monuments, etc. (Please refer to Chapter 8 Cultural Heritage, Natural Heritage, Landscape and Green Infrastructure and Appendices 6-9 inclusive for further details);
 - Cumulative Impact of proposal.

Section 11.8.2: Solar Energy:

There are a variety of solar technologies available in the form of roof-top domestic, roof-top commercial, large-scale land based solar developments (where solar cells

are mounted to supply energy to the grid) and solar energy storage facilities. There are a significant number of solar farm planning applications in the system nationally. Section 28 Guidance is awaited from the Department of Housing and Planning to assist in the assessment of this development type.

DM OBJ 77: In the assessment of individual proposals, the Council will require the following to be submitted as part of any planning application:

- Glint & Glare Assessment
- Outline Construction Environmental Management Plan (CEMP)
- Biodiversity Management Plan
- Public Consultation details
- Noise Assessment
- Socio-Economic Assessment
- EIA Screening
- Ecology Assessment
- Archaeology Assessment
- Traffic & Transport Assessment
- Landscape and Visual Assessment
- Hydrology Appraisal/Flood Risk Assessment
- Decommissioning/Restoration Plan

Appendix 5: A05: Landscape Character Assessment:

The proposed development site is located within the '*Lowlands*' Landscape Character Type and the '*Central Lowlands*' (6) Landscape Character Area which is considered to be of '*High Value*', '*Moderate Sensitivity*' and '*Regional Importance*'.

5.4. Natural Heritage Designations

The following natural heritage designations are located in the general vicinity of the proposed development site:

- 5.4.1. Special Protection Areas:
 - The River Boyne and River Blackwater Special Protection Area (Site Code: 004232), approximately 9.4km north-northwest of the site.
 - The River Nanny Estuary and Shore Special Protection Area (Site Code: 004158), approximately 11.9km northeast of the site.
 - The Boyne Estuary Special Protection Area (Site Code: 004080), approximately 13.4km northeast of the site.
 - The North-West Irish Sea Special Protection Area (Site Code: 0042360), approximately 14.1km northeast of the site.
- 5.4.2. Special Areas of Conservation:
 - The Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), approximately 9.4km north-northwest of the site.
 - The Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957), approximately 14.1km northeast of the site.
- 5.4.3. Natural Heritage Areas:

None.

- 5.4.4. Proposed Natural Heritage Areas:
 - The Balrath Woods Proposed Natural Heritage Area (Site Code: 001579), approximately 4.5km northwest of the site.
 - The Cromwell's Bush Fen Proposed Natural Heritage Area (Site Code: 001576), approximately 4.7km east-northeast of the site.
 - The Duleek Commons Proposed Natural Heritage Area (Site Code: 001578), approximately 6.0km north of the site.
 - The Thomastown Bog Proposed Natural Heritage Area (Site Code: 001593), approximately 6.2km northwest of the site.

- The Rossnaree Riverbank Proposed Natural Heritage Area (Site Code: 001589), approximately 9.8km northwest of the site.
- The Dowth Wetland Proposed Natural Heritage Area (Site Code: 001861), approximately 10.6km north of the site.
- The Crewbane Marsh Proposed Natural Heritage Area (Site Code: 000553), approximately 10.7km northwest of the site.
- The Laytown Dunes / Nanny Estuary Proposed Natural Heritage Area (Site Code: 000554, approximately 10.8km northeast of the site.
- The Bog of the Ring Proposed Natural Heritage Area (Site Code: 001204), approximately 11.3km east-southeast of the site.
- The Boyne River Islands Proposed Natural Heritage Area (Site Code: 001862), approximately 12.2km north of the site.
- The King William's Glen Proposed Natural Heritage Area (Site Code: 001804), approximately 12.8km north of the site.
- The Boyne Woods Proposed Natural Heritage Area (Site Code: 001592), approximately 13.0km northwest of the site.
- The Slane Riverbank Proposed Natural Heritage Area (Site Code: 001591), approximately 13.4km northwest of the site.
- The Knock Lake Proposed Natural Heritage Area (Site Code: 001203), approximately 13.6km east-southeast of the site.
- The Boyne Coast and Estuary Proposed Natural Heritage Area (Site Code: 001957), approximately 14.8km northeast of the site.

5.5. EIA Screening

- 5.5.1. Solar energy development is not listed as a class of development for the purposes of EIA under Parts 1 or 2 of Schedule 5 of the Planning and Development Regulations, 2001, as amended. In this regard, a requirement for preliminary examination or EIA does not arise.
- 5.5.2. The proposed solar energy development will require a connection to the national grid. While the subject appeal relates to a decision under S.34 of the Planning and

Development Act, 2000, as amended, it has been indicated that the proposed grid connection (along with an associated 110kV substation) would fall under the Strategic Instructure provisions of the Act requiring a separate application to be made directly to the Board under S.182. Such a grid connection would not constitute a class of development under Schedule 5 and would not require preliminary examination or EIA.

(For the purposes of clarity, and in response to a third party observation on file, as neither the proposed solar energy development or the associated grid connection constitute a class of development for the purposes of EIA, there is no conflict with the principles established in *O'Grianna & Ors v. An Bord Pleanala*).

- 5.5.3. Class 10(dd) of Part 2 of Schedule 5 of the Regulations requires EIA for *"All private roads which would exceed 2000 metres in length*". In this regard, the Board is advised that the definition of *'road*' utilised in the Planning and Development Act, 2000, as amended, is that set out in the Roads Act, 1993:
 - a) any street, lane, footpath, square, court, alley or passage,
 - b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge, flyover, carriageway (whether single or multiple), pavement or footway,
 - c) any weighbridge or other facility for the weighing or inspection of vehicles, toll plaza or other facility for the collection of tolls, service area, emergency telephone, first aid post, culvert, arch, gulley, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hardshoulder, island, pedestrian refuge, median, central reserve, channelliser, roundabout, gantry, pole, ramp, bollard, pipe, wire, cable, sign, signal or lighting forming part of the road, and
 - d) any other structure or thing forming part of the road and -
 - necessary for the safety, convenience or amenity of road users or for the construction, maintenance, operation or management of the road or for the protection of the environment, or
 - ii. prescribed by the Minister.
- 5.5.4. The description of the proposed development as set out in the statutory notices refers to the construction of *internal access tracks*' whereas the supporting 'Planning & Environmental Statement' states that the works will involve the construction and

upgrading of approximately 5.6km of 'access tracks'. Although the accompanying 'Indicative Infrastructure Layout' drawings refer to the provision of 'internal roads', I would advise the Board that Drg. No. NEO00873_0081_A Figure 6: 'Access Track Detail' references the construction of 'access tracks'. The specifications shown on Drg. No. NEO00873_0081_A Figure 6 as regards the construction of the access tracks are supplemented further by the details provided in Paras. 5.40 – 5.44 of the Construction Traffic Management Plan (please refer to Technical Appendix 5) wherein it is stated that all new tracks will be unpaved and constructed from local stone (while geosynthetic reinforcement or soil stabilisation may be used to reduce the depth of track construction) with a compacted granular surface (crushed rock) of up to an approximate thickness of 0.3m, dependent on the ground conditions. The proposed tracks will generally be approximately 4m in width (although they will be wider at bends and entrance points) and are intended to allow access for the construction, operation, maintenance and decommissioning of the solar panels and associated infrastructure.

- The Board may wish to consider whether the structures described as 'access tracks' 5.5.5. would fall within the definition of a 'road'. In this regard, I would draw the Board's attention to its determination of ABP Ref. No. PL17.248146 (a solar energy development with associated infrastructure) wherein it accepted the assessment by the reporting inspector that as the purpose of the access tracks then proposed was not for the conveyance of people and vehicles, per se, except as necessary in connection with the construction, maintenance and decommissioning of the proposed solar farm development, then the access tracks were materially different from a 'road' as defined under the Roads Act, 1993. That position has since been adopted in other Board decisions (e.g. ABP Ref. Nos. ABP-302681-18, ABP-314320-22 & ABP-318475-23) to the effect that access tracks serving solar developments do not fall to be considered under Class 10(dd) of the Regulations and thus do not require EIA. Accordingly, in light of the available information, with particular reference to the intended purpose and specification of the works in question, I am satisfied that the access tracks proposed to be constructed as part of the subject proposal do not fall to be considered under Class 10(dd) and do not require EIA.
- 5.5.6. Under the Environmental Impact Assessment (Agriculture) Regulations, 2011 issued by the Department of Agriculture, Food and the Marine, the rural restructuring of

farmland requires screening for EIA. 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.
- 5.5.7. 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
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

5.5.8. The proposed development involves the removal of a limited extent of hedgerow, primarily along the roadside boundary to accommodate Site Accesses 1, 2 & 3, comprising approximately 54.6m of hedging as shown on Drg. Nos. NEO00873_046I_A Figure 5.2: 'Swept Path Analysis 1' (21.0m of hedging), NEO00873_047I_A Figure 5.3: 'Swept Path Analysis 2' (17.07m of hedging) & Drg. No. NEO00873_048I_A Figure 5.4: 'Swept Path Analysis 3' (15.9m of hedging) and appended to Technical Appendix 5: '*Construction Traffic Management Plan*' (with some additional sections of roadside hedging to be trimmed back as necessary to achieve sightlines as per the visibility splays shown on Drg. Nos. NEO00873_042I_A Figure 5.6: 'Visibility Splay 1', NEO00873_043I_A Figure 5.7: 'Visibility Splay 2', NEO00873_044I_A Figure 5.8: 'Visibility Splay 3' & NEO00873_045I_A Figure 5.8: 'Visibility Splay 4'). In addition to the foregoing, it is proposed to remove parts of the

internal field boundaries in places to allow for the construction of new access tracks. Cumulatively, I am satisfied that the total length of hedgerow / field boundary to be removed (stated to be 102.5m overall) is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also 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. Significant effects on biodiversity are not likely as a result of the works.

- 5.5.9. The development does not involve any significant excavation or the recontouring of the lands by, for example, the levelling off of hills or by the infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. Although the proposed inverters / transformers will be sited on areas of hardstanding which will require some localised levelling and foundation works, such works are not significant in nature and would not constitute recontouring of the lands.
- 5.5.10. Having regard to the above, I am satisfied that the proposed solar farm is not of a class that requires EIA or screening for EIA, while the associated grid connection is also not of a class of development listed under Parts 1 or 2 of Schedule 5. The development would, however, constitute sub-threshold development for rural restructuring (Class 1(a), Part 2 Schedule 5).
- 5.5.11. I refer to Form No. 2 Preliminary Examination appended to this report and conclude that there is no real likelihood of significant effects on the environment and that EIA is not required.

6.0 The Appeal

6.1. Grounds of Appeal

 The Landscape and Visual Impact Assessment (LVIA) submitted by way of further information details a total of 21 No. representative viewpoints within the study area which were identified following multiple site visits and desktop studies. These viewpoints assisted in describing the baseline views and the effects likely to be experienced by associated visual receptors. They were selected on the basis that they cover a range of viewing distances, elevations
and orientations from locations with different viewing experiences of the proposed development. Their selection was informed by the following:

- Accessibility to the public;
- Designated specific viewpoints;
- Number and sensitivity of viewers who can be affected;
- Viewing direction, distance (i.e. short, medium or long-distance views) and elevation;
- Nature of the viewing experience;
- View type; and
- Cumulative views in conjunction with other development projects.

19 No. of these viewpoints are located within the 'Central Lowlands' Landscape Character Area (LCA 06) and were used in aiding the assessment of impacts upon the designated landscape character area. The LVIA has concluded that there would be a '*Moderate*' adverse impact upon LCA 06 prior to mitigation, which will then reduce to '*Minor / Moderate*' with the establishment of the embedded mitigation measures proposed as part of the development.

 To address concerns as regards short-distance views and the overall integrity of LCA 06, along with the intervisibility of the proposal with neighbouring LCAs, a Landscape Capacity Study (LCS) was undertaken by the applicant. This LCS investigates the landscape characteristics of the overarching LCAs and the sensitivity of local landscape receptors across the study area.

Para. 5.14 of the 'Guidelines for Landscape and Visual Impact Assessment', 3rd Edition, (GLVIA) states that 'broad-scale assessments at national or regional level can be helpful in setting the landscape context but are unlikely to be helpful on their own as the basis for LVIA – they may be too generalised to be appropriate for the particular purpose'. Accordingly, the LCS has been prepared by a landscape architect via desk-based reviews of published landscape character assessments and fieldwork to provide a finer level of detail and a more proportionate scale to the landscape assessment in comparison to the wider geographic extent of the published studies. The LCS has been informed by fieldwork surveys undertaken in March, 2023 so as to specifically consider landscape character, landscape sensitivities and landscape value during winter conditions. The purpose of this fieldwork was to review the boundaries and key characteristics defined in the published landscape character assessments and to identify, record and map the following aspects and characteristics of the landscape:

- Landcover, pattern and texture;
- Scale and appearance;
- Tranquillity;
- Cultural associations; and
- Human interaction.

Attributes recorded as part of these surveys include features and elements associated with the built environment, historic landscape and areas of managed landscape. Perceptual qualities of the landscape, such as tranquillity have also been recorded.

The assessment has established that the geographical extents of the designated LCAs are generally large and may extend beyond the study area. Therefore, to enable a more detailed assessment of the landscape character at a scale relevant to the proposed development, a Local Landscape Character Assessment was undertaken via a desk study and fieldwork surveys. This forms the basis of the assessment of landscape effects and informs the development of the masterplan and landscape design.

 Additional viewpoints were commissioned as part of the LCS to reinforce the findings of the original landscape and visual assessment. Three views were taken to highlight the level of screening within the study area attributable to the field pattern and existing hedgerows and tree planting. These views are taken from within the eastern extent of the study area from vantage points within the landscape where there are gaps in the vegetation. While depicting scenic views of the undulating landscape (similar to those included in the original planning submission), many of the views are screened by intervening tree lines and hedgerows. Where views of the proposed development are possible, these are usually limited to a small extent of the works visible through a field gate.

Mitigation measures have been introduced to reinforce the key characteristics of the overarching Landscape Character Assessment and the key findings of the Local Landscape Character Assessment within the Capacity Study.

- The LVIA and LCS submitted with the grounds of appeal have considered the effects on the surrounding landscape, intervisibility between LCAs, and the scale and extent of the proposed development. It is not felt that LCA 06 'Central Lowlands' or any neighbouring LCA would be significantly adversely affected.
- The Board is referred to Appendix B: 'Landscape Capacity Assessment' of the grounds of appeal which includes the 'Landscape Capacity Study' (LCS) and the 'Local Landscape Character Assessment' (LLCA) previously referenced.

The <u>LCS</u> details out the baseline landscape of the study area by summarising the relevant provisions of the Landscape Character Assessment appended to the Meath County Development Plan, 2021-2027 (with respect to the LCA 06: 'Central Lowlands' and LCA 09: 'Bellewstown Hills) as well as identifying an area of 'High Amenity' located within the neighbouring jurisdiction subject to the Fingal County Development Plan, 2021-2027.

The <u>LLCA</u> aims to investigate the site-specific landscape sensitivity, value, and capacity to accommodate change. It examines and defines the study area by four proportionate scales as follows:

- The Site: Within the development boundary
- *Immediate Site Context:* Within 250m-500m of the site development boundary
- Near Distance: Beyond 500m of the site development boundary
- *Wider Landscape:* Beyond 1.5km of the site development boundary

The analysis has been informed by the overarching county-defined Landscape Character Areas, with further refinement achieved through fieldwork and visual tools so as to inform the landscape capacity for development.

- <u>The Site:</u>

Location: LCA 06: 'Central Lowlands':

Key Characteristics:

- Gently undulating landform, large to medium scale fields, and mature vegetated boundaries give a sense of enclosure within the confines of the field boundaries.
- Predominantly pastoral agricultural fields create a rural landscape character.
- Views from elevated areas of the site can achieve distance, however, this is a fleeting occurrence due to the disruption caused by intervening topography and vegetation.
- Views of settlement are limited to scattered dwellings adjacent to the development boundary.
- The presence of pylons disrupts the momentary tranquil character of the site confines.

- There is little urbanising influence within the site, but the presence of pylons traversing the site and the evidence of heavy agricultural usage detracts from an otherwise relatively tranquil character.
- The site stands in contradiction to the landscape described in the overarching LCA 06: 'Views within this area are generally limited by the complex and mature vegetation except at the tops of drumlins, where panoramic views are available, particularly of the Hill of Tara uplands and Skyrne Church'. While some distant views are possible from within the site, these are not far-reaching as the vegetation along the well-defined site boundaries and within the wider landscape context, along with the undulating topography, limit distant views.
- However, the area is representative of the vegetation cover described as a key characteristic of LCA06: *'There are thick*

wooded hedgerows, some with conifer plantations, and shelterbelts of ash and larch, separate medium to large fields'.

- The value within the confines of the site has been assessed as 'Low'.
- Immediate Site Context:

Location: LCA 06 Central Lowlands:

Viewpoint Nos. 4, 7, 13 & 14 are located within this area.

Key Characteristics:

- Predominantly undulating farmland with large scale pastoral fields bound by thick bands of mature hedgerow, giving a sense of enclosure.
- Field boundaries are marked predominantly by high mature hedgerows which create a tunnel effect along the local road network, enclosing views, contributing to the sense of enclosure.
- Where views are available, large trees and blocks of woodland on the horizon limit views to the surrounding landscape.
- Settlement is limited to a few individual properties along the local road network.
- Large trees defining some field boundaries scattered across the area, create a diverse landscape character.

- The landscape contains elements such as hedgerows, trees and thick tree belts which are representative of key characteristics of the overarching 'Central Lowlands' LCA.
- The area is in keeping with the LCA's key characteristic i.e. 'views within this area are generally limited by the complex and mature vegetation . . .' Similar to the site confines, distant views are fleeting and usually occur where there are breaks in hedgerow vegetation, such as at field access points.

- However, through these points, there are scenic views of the undulating countryside of Co. Meath.
- The value within the immediate site context has been assessed as *'Medium'*.
- Near Distance:

Location: LCA 06 Central Lowlands & LCA 09 Bellewstown Hills

Viewpoint Nos. 1, 3, 11, 15 & 21 are located within this area.

Key Characteristics:

- Undulating landform, with views to lower ground in the western and northern reaches from the southern and eastern higher points within the landscape.
- Settlement is more apparent within this location due to the influence of neighbouring towns and villages.
- Large to medium scale fields give an increased sense openness across the landscape.
- Dominated by large to medium scale pastoral fields defined by hedgerow boundaries interspersed with trees.
- Pylons are visible from many of the viewpoints across the farmland, creating a definite detracting linear feature on the skyline.
- Pockets of distant views are available from the top of hills, however, there are often fleeting due to the dominance of the vegetation associated with the field boundaries. A tranquil character is evident away from the power station and pylons.

- The landscape contains elements such as hedgerows, trees and thick tree belts, which are representative of key characteristics of the 'Central Lowlands' LCA.
- The area is in keeping with the LCA's key characteristic i.e. 'The Bellewstown Hills consist of which is intensively managed with well-

wooded hedgerows, and the rolling landscape creates an enclosed environment. Built development consists of scattered detached dwellings in the countryside and ribbon development along rural roads . . .'. Hedgerows are mature and often very high, creating tunnel views along the roadways and thereby limiting views.

- The area has views of the surrounding landscape from high points, however, these are fleeting due to the extent of hedgerows and mature vegetation screening views for the majority of the area. The landscape is simple and partially degraded due to agricultural use with common features and minimal variation in the landscape pattern. The overall value is '*Low*'.
- Wider Landscape:

Location: LCA 06 Central Lowlands & LCA 09 Bellewstown Hills

Viewpoint Nos. 9 & 10 are located within this area.

Key Characteristics:

- The gently undulating landform, large to medium scale fields and high mature hedgerows give a sense of enclosure.
- Predominantly pastoral agricultural fields create rural landscape character.
- Distant views to lower ground and rolling field patterns are prominent from elevated views.
- Network of winding, quiet and narrow roads and lanes.

- The landscape contains elements such as hedgerows and tree belts, which are representative of key characteristics of the 'Central Lowlands' LCA.
- The area is in keeping with the LCA's key characteristics i.e. 'The Bellewstown Hills consist of which is intensively managed with wellwooded hedgerows, and the rolling landscape creates an enclosed environment. Built development consists of scattered detached rural

dwellings in the countryside and ribbon development along rural roads . . .' The hedgerows are mature and often very high which creates tunnel views along the roadways thereby limiting views.

 Similar to near-distance views, there are views available over the surrounding landscape from high points within the area, however, these are fleeting due to the extent of hedgerows and mature vegetation which screens views of the majority of the area. The views available are scenic in nature and show Co. Meath's undulating countryside. Therefore, the value is '*Medium*'.

Landscape Capacity Assessment:

The Site:

Given the undulating topography, existing field structure with mature hedgerows and tree belts, and the disruption of rural character already attributable to the influence of pylons, it is submitted that the receptor has some capacity to accommodate the proposed development without undue effect on its overall integrity. The large to medium sized field structure and the level of enclosure arising from the thick vegetation along the field boundaries will also accommodate some elements of the scheme. Therefore, on balance, the susceptibility to change is considered to be 'Low'.

Considering the 'low' landscape value and its 'low' susceptibility to change, the overall capacity of the landscape to accommodate change is thought to be 'High'.

Immediate Site Context:

The landscape contains some distinctive elements, such as patches of woodland and hedgerow, which are representative of key characteristics of the overarching LCA. The landscape value was determined to be 'Medium'.

The pattern of the landscape is mostly intact and / or with a degree of complexity and with features mostly in reasonable condition, including the large-scale field structure and existing tree belts. The topography, pattern and structure of fields, along with the screening vegetation along the road network, means that the area has some capacity to accommodate the proposed

development without undue effects upon its overall integrity. Therefore, on balance, the susceptibility of the area to change is 'Low'.

Considering the medium landscape value and low susceptibility, its overall capacity to accommodate change is 'High'.

Near Distance:

There is little urbanising influence in the area. It is considered to be representative of the key characteristics of the LCA with thick hedgerows and mature vegetation dominating field patterns and screening views. The value is 'Low'.

The gently undulating topography and field structure mean that the receptor has some capacity to accommodate the proposed development without effects upon its overall integrity. The large field structure and enclosure allow for the development to be accommodated. Therefore, on balance, susceptibility to change is 'Low'.

Considering the low value and low susceptibility, the overall capacity of the landscape to accommodate change is 'High'.

Wider Distance:

This area has views of the surrounding landscape from higher points, however, these are fleeting given the extent of hedgerows and mature vegetation which screen the majority of the area. The views achieved are scenic in nature and show Co. Meath's undulating countryside. The overall landscape value is 'Medium'.

The gently undulating topography and field structure within the wider landscape mean that the receptor has some capacity to accommodate the proposed development without effects upon its overall integrity. The large field structure and the level of enclosure allow for the development to be accommodated. Therefore, susceptibility to change is considered 'Low'.

Considering the medium value and low susceptibility, the overall capacity of the landscape to accommodate change is deemed to be 'High'.

Additional Capacity Assessment – Viewpoints:

Additional viewpoints were commissioned to reinforce the findings of the 'Landscape Capacity Assessment' provided with the grounds of appeal. Three views were taken to highlight the level of screening provided by the network of field hedgerows and tree planting. These views have been taken from the eastern extent of the study area at near distance points within the landscape where there are gaps in the vegetation discussed throughout the LCS. While depicting scenic views of Co. Meath's undulating landscape (similar to the viewpoints attached to the original planning submission), many of the views are screened by intervening trees and hedgerows. Where the proposed development is visible, it is usually through a field gate. Mitigation measures have been introduced to reinforce the key characteristics of both the overarching Landscape Character Assessment and the findings within the Local Landscape Character Assessment.

Therefore, it is submitted that the proposed development will not undermine the principles or key characteristics of the Central Lowlands Landscape Character Area. Furthermore, the embedded mitigation will also be in keeping with the localised landscape value and sensitivities identified in the LCS.

6.2. Planning Authority Response

None received.

6.3. **Observations**

A total of 25 No. observations have been received from interested third parties along with 1 No. representation from an elected member. In the interests of conciseness, and in order to avoid unnecessary repetition, I propose to broadly summarise the key issues raised under the following headings (although there will be some overlap of issues):

- 6.3.1. The Principle of the Development:
 - Failure to comply with the 'Planning Considerations for the Development of Ground Mounted Solar' (Irish Solar Energy Association, 2016) or the UK's 'Planning Guidance for the Development of Large Scale Solar Farms'.
 - The excessive proliferation of solar farm developments in the wider area and the cumulative impact on landscape character and visual amenity.
 - Contrary to the wider policies and objectives of the Meath County Development Plan, 2021-2027, including those which seek '*To protect and enhance the visual qualities of rural areas through sensitive design*'.
 - In the absence of any criteria or guidance in the County Development Plan as regards the proper planning and development of solar farms, the proposed development should be refused permission.
 - The unsuitability of Ireland in terms of latitude for the efficient capture of solar energy.
 - The impracticality, limitations and broader inefficiency of solar energy development.
 - The unfeasibility of utility-scale solar energy development in the absence of economic support incentives.
 - The sporadic, intermittent and non-dispatchable nature of solar energy and the resulting continuing reliance on other sources of energy, including fossil fuels.
 - The availability of alternative / more viable sources of renewable energy such as biomass, biofuels, hydrogen, tidal energy, wave energy, hydroelectric power, geothermal, and deep-bore geothermal.
 - A separate planning application for the grid connection would be contrary to the principles established by O'Grianna & Ors v. An Bord Pleanala.
 - The proposed development is premature pending the issuing of national guidance for the development of utility scale solar installations.

- The proposal is premature in the absence of a national strategic energy plan / locational strategy for utility scale solar installations along with an associated Strategic Environmental Assessment.
- The unsustainable manufacturing processes, environmental impact, emissions generation, and broader carbon footprint etc. associated with the production & transportation of solar panels and associated materials / infrastructure.
- 6.3.2. Lack of Consultation:
 - Despite the advice of relevant policy provisions / guidance, there has been no public consultation with local residents etc. as regards the proposed development.
 - There has been continual and sustained local opposition to the project.
- 6.3.3. Landscape and Visual Impact:
 - The proposal is inconsistent with the policies and objectives of the Meath County Development Plan, 2021-2027 which seek to protect and / or enhance the quality and character of the rural landscape.
 - The proposed development site is located within the '*Central Lowlands*' Landscape Character Area (LCA 6) which is of '*High Value'*, '*Moderate Sensitivity*' and '*Regional Importance*'.
 - Part of the development proposal is located within the '*Bellewstown Hills*' Landscape Character Area (LCA 9) which is of '*Very High Value*', '*Medium Sensitivity*' and '*Regional Importance*'.
 - Having regard to the surrounding drumlin landscape, the proposed development will be widely visible and will have a negative visual impact on the rural character of the area.
 - Concerns as regards the intervisibility of the proposed development site with other features in the surrounding landscape, such as the hills of Hawkinstown, Bellewstown, Garristown & Loughcrew, the Fourknocks, the Hill of Skyrne, the Hill of Slane, and the village of Duleek. These features are crucial to the aesthetically pleasing character of the area. Moreover, the pristine nature of hilltop views is integral to the wider landscape.

- The 'industrialisation' / 'urbanisation' of a predominantly rural area.
- Concerns as regards the impact of the proposed development on the archaeological, architectural and cultural heritage of the area (a defining character of the surrounding landscape).
- The proposed development will occupy an elevated and domineering position in the landscape and will break the skyline.
- The proposed solar farm will be visible from local viewpoints, including the surrounding hills of Skyrne, Tara and others, and will detract from the prevailing landscape character, including that of the Boyne Valley.
- The proposed development will interfere with several views listed for protection in the Development Plan (View Nos. 66 & 67).
- The supporting photomontages have been complied on the basis of summer foliage when all hedgerows and trees are in full flower.
- The submitted photographs are not representative of the likely visual impact of the proposed development.
- Screening of the proposal is heavily reliant on existing Ash trees that are susceptible to Ash-Dieback disease.
- Notwithstanding the proposed fencing and planting / landscaping measures, it will not be possible to satisfactorily screen such a large proliferation of solar panels from view (both locally and further afield) given the topography of the area and the scale, size, height and massing of the proposed development.
- The effectiveness of the proposed mitigatory planting will be negligible given the topography of the surrounding landscape.
- Contrary to the provisions of the Development Plan which seek to protect the visual qualities of rural areas through sensitive design, the proposed development will have a detrimental visual impact and will set an undesirable precedent.
- Proposals for rural housing in the area have previously been refused permission due to their potential visual impact while prospective applicants have been advised against lodging planning applications. To permit the

proposed development would be inconsistent in the approach applied to the assessment of visual amenity impacts.

- There has been an inadequate assessment of the visual impact of the proposed development from various viewpoints.

6.3.4. Loss of Agricultural Land:

- The loss of prime / high quality / productive agricultural land.
- The destruction of agricultural land in the manner proposed is contrary to the provisions of the European Landscape Convention and the requirement set out in the Planning and Development Act, 2000, as amended, to preserve the character of the landscape.

6.3.5. Impact on Residential Amenity:

- Inadequate consideration has been given to the proximity of the proposed development to (and visibility from) nearby housing as well as sites with the benefit of planning permission (incl. PA Ref. Nos. AA201784 & AA207185).
- A failure to identify all dwelling houses in the immediate surrounds of the proposed development.
- Mitigation of views of the proposed solar farm from nearby properties will be overly reliant on screening provided by summer foliage and trees susceptible to Ash-Dieback disease.
- The loss of views over surrounding lands consequent on the proposed development.
- Concerns as regards the adequacy of the glint & glare assessment and the effectiveness of the mitigation measures proposed as regards the preservation of residential amenity and the safety of road users.
- Deficiencies in the Noise Impact Assessment (as identified in the original submission received from the Health Service Executive).
- Devaluation of property due to a loss of amenity attributable to the proposed development.

- Broader concerns as regards glint & glare, noise, dust emissions, light pollution / overspill, construction impacts, fire risk, loss of views / visual impact, overlooking / loss of privacy, and general disturbance.
- The irregular and piecemeal layout of the development.
- The proposed development will surround several dwelling houses.
- Inconsistencies in the setback of the proposed development from neighbouring housing.
- 6.3.6. Flood Risk Assessment:
 - The proposed development site and surrounding area are prone to flooding (as evidenced by historical flood events recorded upstream and downstream of the development site).
 - The particulars submitted with the planning application include multiple errors as regards the hydrology of the area.
 - The application documentation does not adequately identify the main watercourse in the area (the Balgeeth River) or the full extent of the floodplain.
 - Deficiencies in the proposed drainage arrangements, including the inadequacy and location of the proposed surface water soakaways.

6.3.7. Traffic Considerations:

- The surrounding road network is of a substandard condition and does not have the capacity or carriageway width to accommodate the traffic types and volumes consequent on the proposed development (with particular reference to Heavy Goods Vehicles).
- Construction traffic will pose a hazard to other road users, including pedestrians and cyclists.
- Local residents and other road users will not adhere to any one-way traffic system implemented by the developer resulting in conflicting traffic movements.
- Given the narrow roadway width and the lack of pedestrian footpaths, it is not appropriate to route traffic along Copper Lane as part of any one-way system.

- Construction of the proposed development will lead to traffic disruption in the area and will have a negative impact on local businesses with a loss of income and employment.
- The potential for glint and glare to impact on the safety of road users.

6.3.8. Ecological Impacts:

- The ecological impact of the proposed development, including possible interference with the reproduction of aquatic insects (which may mistake the solar arrays for a water body).
- The integrity of European Sites must not be compromised in any way. All scientific evidence should be properly examined to ensure that there is no danger of the project giving rise to significant adverse direct, indirect or secondary effects.
- The Board should be satisfied that the proposal complies with all applicable EU law, with particular reference to the EIA Directive and Article 6 of the Habitats Directive 92/43/EEC.
- There is a significant body of evidence that large solar farms pose a threat to bird life, with particular reference to migratory species.
- The loss of natural habitat for both protected and non-protected species.
- The potential for the contamination of ground and surface waters through the leakage of polluting materials from solar panels.
- The perimeter fencing will direct wild deer towards the public road thereby endangering the safety of road users.

6.3.9. Other Issues:

 Where a planning authority has decided to refuse permission on the grounds that a proposed development materially contravenes the development plan, the Board may only grant permission by reference to the criteria set out in Section 37(2)(b) of the Planning and Development Act, 2000, as amended. In this respect, it is submitted that the circumstances of the subject application would not satisfy the requirements of Section 37(2)(b) of the Act and thus the Board is precluded from granting permission.

- There is legal precedent whereby the Planning Authority's interpretation of the Meath County Development Plan has been held to be correct and thus the decision to refuse permission should be upheld.
- There is a need for Environmental Impact Assessment and Strategic Environmental Assessment.
- Noise pollution and the associated disturbance of livestock during the construction phase.
- Detrimental impact on the built and natural heritage considerations of the wider area.
- Detrimental impact on tourism in the area.
- The lack of information on the long-term impact of solar farm developments on public health and well-being.
- The toxicity of the materials used in the production of solar panels and the potential health implications associated with same.
- The public safety risk posed by the proposed development in terms of fire risk, electrical hazard, electrocution etc.
- Concerns as regards the future disposal and recyclability of solar panels etc.
- The potential for any glint / glare / visibility of the proposal to impact on aviation / air traffic safety.
- The potential for an increased rate of stormwater runoff from the panels to result in the creation of rivulets thereby affecting the wider surface water drainage regime / water quality of the area.
- Concerns as regards the sourcing of aggregates and other materials from unauthorised / non-compliant developments.

6.4. Further Responses

None.

7.0 Assessment

- 7.1. From my reading of the file, inspection of the site, and assessment of the relevant policy provisions, I conclude that the key issues raised by the appeal are:
 - The principle of the proposed development
 - Landscape / visual impact
 - Impact on residential amenity
 - Traffic considerations
 - Archaeological & architectural heritage
 - Flooding implications
 - Ecological considerations
 - Other issues
 - Appropriate assessment

These are assessed as follows:

7.2. The Principle of the Proposed Development:

7.2.1. Given the nature and stated purpose of the proposed development, it is apparent that it has a role to play in realising Ireland's international, European and national commitments as regards the provision of energy from renewable sources and achieving a reduction in greenhouse gas emissions. In this regard, there are a multitude of policy provisions at national, regional and local level which all support the development of renewable energy projects, including solar farms, with a view to transitioning to a low carbon and climate resilient society. For example, the National Planning Framework: 'Project Ireland 2040' aims to reduce the national carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation as well as targets for greenhouse gas emissions reductions. More specifically, National Strategic Outcome 8 sets the goal of transitioning to a low carbon and climate resilient society and recognises that the diversification of energy production systems away from fossil fuels and towards a more renewables focused energy generation system (utilising sources including solar) will be necessary as supported by National Policy Objective 55 which 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'.

- 7.2.2. The current 'Programme for Government Our Shared Future' builds on the policy provisions of the NPF and commits to an average 7% reduction in greenhouse gas (GHG) emissions per annum over the 2021-2030 period (a 51% reduction over the decade) and the achievement of net zero emissions by 2050. It also emphasises that the reliable supply of safe, secure and clean energy will be essential in order to deliver a phase-out of fossil fuels and aims to take the necessary action to deliver at least 70% of renewable electricity by 2030.
- 7.2.3. More recent policy developments in support of the submitted proposal include the *Climate Action Plan, 2023 'Changing Ireland for the Better'*, which aims to accelerate the delivery of renewable electricity generation to the national grid with a target of achieving 80% of electricity demand being met from renewable energy by 2030 (including a target of providing up to 5GW of solar energy by 2025 with a longer-term target of 8GW by 2030).
- 7.2.4. The updated *Climate Action Plan, 2024* continues to highlight the challenges posed to the electricity sector in meeting its requirements under the relevant sectoral emissions ceiling and emphasises that the deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity are unprecedented and require urgent action across all actors to align with the national target. It reiterates the need to accelerate renewable electricity generation (in order to achieve 80% of electricity demand from renewable sources by 2030) and the targets of up to 5GW of solar energy by 2025 and 8GW by 2030.
- 7.2.5. Further policy support includes the *'Energy Security in Ireland to 2030: Energy Security Package'* published in November, 2023 which outlines a new strategy to ensure energy security in Ireland while achieving a sustainable transition to a carbon neutral energy system by 2050, a key component of which will be maximising the country's renewable energy potential by prioritising a 'Renewables-Led System'.
- 7.2.6. In a local context, the Meath County Development Plan, 2021-2027 contains a number of policy provisions in support of the transition to a climate resilient society and the development of renewable energy, including solar energy, subject to normal

planning criteria. Policies INF POL 34, INF POL 35 & DM POL 27 are of particular relevance in this regard. Objective INF OBJ 39 further aims to support Ireland's renewable energy commitments by facilitating the development and exploitation of renewable energy sources such as solar at suitable locations within the County.

- 7.2.7. Therefore, on the basis of the available information, I am satisfied that the development of utility-scale solar energy in the manner proposed is consistent with Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources, however, while I am amenable to the principle of the proposed development, any such proposals must be assessed on their individual merits and subject to normal planning considerations.
- At this point, while I would acknowledge the concerns raised by a number of parties 7.2.8. as regards the broader sustainability and economic feasibility of larger utility-scale solar energy developments in Ireland, in my opinion, any debate as to the merits or otherwise of solar energy from first principles is beyond the remit of the Board in its capacity as a decision-making body. In this respect, I would emphasise that it is not the function of the Board to formulate policy or to provide an in-depth critical analysis of the merits of a particular policy position. The Board's responsibilities extend only to the determination of appeals and certain other matters under the Planning and Development Act, 2000, as amended, and associated legislation, having regard to current policy and the proper planning and sustainable development of the area. Therefore, notwithstanding the various arguments but forward against the development of solar energy (including the alleged limitations and inefficiencies of the technology along with assertions as regards the carbon footprint and environmental impacts arising from the panel manufacturing process etc.), current Government policy advocates in favour of solar energy as a means by which to realise (in part) Ireland's international, European and national commitments as regards the provision of energy from renewable sources and reducing greenhouse gas emissions with a view to transitioning to a low carbon and climate resilient society. In this respect, I would reiterate that the proposed development is acceptable in principle, subject to normal planning considerations.
- 7.2.9. By way of further comment, I would also state the development of solar energy should not be construed as being prejudicial or otherwise detrimental to the

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assessment of any other proposals for alternative sources of renewable energy (such as those outlined in third party observations on file).

- With respect to the suggestion that the proposed development is premature pending 7.2.10. the preparation of a national strategy and / or guidance as regards the development of large scale solar PV installations (along with associated Strategic Environmental Assessment), it is of relevance to note that when the Board previously sought to refuse permission for a solar PV development in Co. Wexford (ABP Ref. No. PL26.247217) on the grounds that it would be premature pending the adoption of national, regional or local guidance for solar power, that decision was quashed by the High Court by way of an order of Certiorari. In this regard, I would draw the Board's attention to Para. 7.16.1 of the 'Development Management. Guidelines for Planning Authorities, 2007' wherein it is stated that for a development to be premature by reference to a commitment in a development plan to prepare a strategy, Local Area Plan or framework plan not yet completed, then there must be a realistic prospect of the strategy or plan in question being completed within a specific stated timeframe. At present, there is no indication on the part of the Minister for Housing, Local Government and Heritage that Ministerial Guidelines under Section 28 of the Planning and Development Act, 2000, as amended, are under preparation or will be forthcoming in the foreseeable future as regards utility-scale solar PV developments. Accordingly, I am satisfied that the proposed development cannot be held to be premature pending the issuing of any such national guidance and / or strategy. In any event, the overarching policy support already in place for solar PV development at a national level, as well as that contained in the County Development Plan, along with the increasing proliferation and acceptance of such developments nationwide, lend credence to the broader acceptability of the subject technology notwithstanding the absence of any more specific national strategy and / or guidance pertaining to such development.
- 7.2.11. For the purposes of completeness, and in reference to Policy Objective INF OBJ 47 of the current Meath County Development Plan, 2021-2027 which seeks '*To investigate the preparation of a Renewable Energy Strategy promoting technologies which are most viable in the County*', I would advise the Board that the issue of prematurity pending the preparation of any such strategy was previously considered in the Board's assessment of ABP Ref. No. PL17.248146 (which concerned the

proposed development of a solar PV project elsewhere in Co. Meath). In that instance, the reporting inspector considered an identical policy objective contained in the Meath County Development Plan, 2013-2019 and determined that as the objective only sought 'to investigate the preparation of a renewable energy strategy' (rather than to prepare the strategy itself), and as no timeframe had been specified, the issue of prematurity did not arise. In my opinion, such a conclusion remains valid in this instance.

- 7.2.12. In relation to the suggestion that the overall number of existing and / or permitted solar farms in the surrounding area is excessive, cognisance must be taken of Ireland's wider commitments as set out in national and European policy with regard to the reduction of greenhouse gas emissions and the development of energy from renewable sources. With these targets in mind, I would not consider it appropriate to refuse permission solely on the basis of the concentration of solar energy developments in a particular area. Moreover, in a broader context, I would suggest that it would not be uncommon for a particular development type (such as solar energy) to concentrate in a certain area where the prevailing circumstances may potentially favour that form of development, subject to proper planning and sustainable development considerations, including any cumulative visual impact.
- In reference to the assertion by a number of observers that the proposed 7.2.13. development fails to comply with the 'Planning Considerations for the Development of Ground Mounted Solar' (Irish Solar Energy Association, 2016) or the UK's 'Planning Guidance for the Development of Large Scale Solar Farms', it is of relevance at the outset to note that neither of these documents have been issued as Ministerial guidance pursuant to Section 28 of the Planning and Development Act, 2000, as amended, nor have they been approved by statute for use in Ireland. Secondly, it is my understanding that both of these documents are outdated in that 'Planning Considerations for the Development of Ground Mounted Solar' (seemingly in reference to the 'Planning and Development Guidance Recommendations for Utility Scale Solar Photovoltaic Schemes in Ireland' issued by the ISEA in 2016) has been superseded by the ISEA's 'Best Practice for Planning Guidance Report for Large Scale Energy Development in Ireland' (November, 2023) while the UK's Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems' (BRE, 2014) has been withdrawn from use in that jurisdiction. In assessing

the subject proposal, regard will be had to national and regional policy as well as the relevant provisions of the County Development Plan.

7.3. Landscape / Visual Impact:

7.3.1. In terms of assessing the landscape / visual impact of the proposed development, it is of relevance in the first instance to note that the subject site is located within the 'Central Lowlands' Landscape Character Area (LCA) as detailed on Map 02: 'Landscape Character Areas' of the Landscape Character Assessment included at Appendix 5 of the Meath County Development Plan, 2021-2027. This LCA is considered to be of 'High Value', 'Moderate Sensitivity' & 'Regional Importance' and is described as follows:

'Large lowland area composed of rolling drumlins interspersed with large estates and associated parkland. Thick wooded hedgerows, with some conifer plantations, and shelterbelts of ash and larch, separate medium to large fields. Deep roadside drainage ditches and banked hedgerows are a common feature of the landscape in the enclosed rural road corridors . . .

The landscape character around settlements tends to be a wellmanaged patchwork of small pastoral fields, dense hedgerows and small areas of broadleaved woodland . . . The landscape is predominantly rolling pastureland . . .

Views within this area are generally limited by the topography and mature vegetation except at the tops of drumlins where panoramic views are available particularly of the Hill of Tara uplands and Skryne Church'.

7.3.2. A broad analysis of the potential capacity of the '*Central Lowlands*' LCA to absorb certain development types is included in the Landscape Character Assessment. This states (by way of example) that the LCA has medium potential capacity to accommodate overhead cables, substations and communication masts due to the complexity of the area (which has a variety of land uses and a robust landscape structure); medium potential capacity to accommodate road infrastructure and upgrades to existing roads as the small-scale wooded nature of the landscape has the potential to screen such developments and there are few archaeological features

present; and low potential capacity to accommodate wind farms due to the high number of receptors but medium potential capacity to accommodate single turbines because extensive views could be more easily limited by vegetation and through careful location. Regrettably, the analysis does not specifically mention the potential capacity for the LCA to accommodate solar energy development, although it provides a useful guide for comparison purposes as to the limitations of the landscape in question.

- 7.3.3. In a local context, the surrounding area is primarily agricultural and dominated by an undulating rural landscape characteristic of the 'Central Lowlands' Landscape Character Area. It is typified by a well-managed patchwork of pastoral fields bounded by a combination of mature hedgerows, tree lines & ditches etc. which is in turn interspersed with intermittent instances of individual farmsteads and rural housing. Notable exceptions include the small rural settlement of Ardcath approximately 1km to the east and the town of Duleek c. 5km to the north.
- The site itself extends across a series of 26 No. agricultural fields (which form part of 7.3.4. a larger landholding), the majority of which are set as pasture, although overhead power lines traverse fields within the western / southwestern and eastern / northeastern limits of the site. The westernmost extent of the site area is bisected along a north-south axis by Local Road No. L5009 which extends between two junctions with the R152 Regional Road. A larger proportion of the site is bisected along an east-west axis by a minor roadway which extends eastwards from its junction with Local Road No. L5009 with the remainder of the development site located to the north of this roadway. A notable characteristic of the site topography is a shallow valley centred approximate midways along its length where the lands rise to the east and west (with a steeper gradient evident on travelling east). This valley accommodates the Athcarne Stream (adjoining Field Nos. 15, 16 & 17) which flows northwards through the lands before converging with the Coolfore Stream and continuing onwards to the River Hurley to the northwest. Beyond the site, the broader topography rises on travelling east towards the village of Ardcath with views over much of the site available from a minor road that forms the southern spur off a crossroads proximate to Balgeeth mound.
- 7.3.5. The planning application was initially accompanied by a 'Landscape Visual Appraisal' (LVA) (Technical Appendix 1) which examines the potential impact of the

proposed development on landscape and visual considerations, however, this has been superseded in large part by the '*Landscape and Visual Impact Appraisal*' (LVIA) received by the Planning Authority on 8th December, 2022 in response to a request for further information. This latter LVIA has adopted a study area extending 5km from the proposed development site for both landscape and visual assessments which can be extended as appropriate (the initial LVA also adopted a 5km study area although this was then refined to a 2km radius following fieldwork which found the site to be largely confined by mature field boundaries and built form). The two documents set out the baseline landscape data for the study area, including the site context and its location within the Central Lowlands LCA, before assessing the landscape effects of the proposed development on both the wider LCA (as well as adjoining LCAs within the study area) and the site itself, the effects of the proposed development on existing views (at 21 No. identified viewpoints as per the LVIA), and any cumulative landscape and visual effects.

- In terms of the landscape value attached to the various receptors identified within the 7.3.6. study area (including the wider Landscape Character Areas, ecological designations, heritage assets, nearby settlements, protected views and scenic routes, and road & residential receptors), it has been submitted that the agricultural arable and grassland cover within the application site is a relatively common feature of the surrounding landscape capable of simple replacement and thus is of a 'low' value. The various hedgerows and trees enclosing the site have been deemed to be typical of the surrounding area and are thus of a '*medium*' value. Other natural features within the rural landscape, such as mature trees, waterways and the historic field systems, are also thought to contribute to the character of the rural landscape and are therefore of a '*medium*' to '*high*' value. The built-up areas of nearby settlements along with instances of conventional / modern housing construction throughout the wider rural surrounds are considered to be of a '*low*' value (although I would suggest that regard should be had to the higher value afforded to heritage assets such as protected structures, recorded monuments and historic townscapes etc.)
- 7.3.7. With regard to the effect of the proposed development on the landscape fabric of the application site itself, the LVIA has reiterated the commonality of the agricultural cover and its low landscape value as well as the multiple instances of overhead lines traversing its fields. It has also been submitted that the low-lying nature of the lands

and the mature field boundaries afford the site a strong sense of enclosure thereby reducing its susceptibility to the type of development proposed and allowing for a greater degree of absorption. Accordingly, while the broader value of the site within the landscape is considered to be '*medium*', taking account of its low susceptibility to the type and scale of change proposed, the overall sensitivity of the site is judged to be '*low*'.

- 7.3.8. During the (six month) construction phase, it has been acknowledged that there will be a notable change in land use from farmland to a construction site attributable to the broader activities associated with the construction of the proposed development including the operation of machinery, the erection of temporary site offices, car parking, and the installation of the solar arrays etc. In this regard, it has been indicated that only minor regrading of the site will be required to provide a level base for the proposed buildings and / or trackways while any ground disturbance consequent on the installation of cabling etc. will be reinstated and reseeded to minimise any adverse effects. Reference has also been made to the offsetting of works (i.e. the security fencing) from existing hedgerows and drainage ditches and that the proposed access tracks and structures will be clustered close to the field boundaries, utilising existing farm tracks and field entrances where possible. Although some areas of vegetation will need to be removed to facilitate the introduction of some access tracks and security fencing, the retained field hedgerows will be supplemented with additional planting. It has therefore been submitted that landscape effects on the application site during the construction phase, given its low sensitivity, will be 'temporary' and 'moderate / minor adverse'.
- 7.3.9. The visual impact of the proposed development once operational will be more readily apparent and represents a noticeable change from the predominantly agricultural arable & grassland cover of the site. The most expansive element of the project comprises the erection of ground-mounted solar photovoltaic panels set within galvanised metal framework racks elevated above ground and assembled in southfacing rows (arrays) over the development area (the total height of which will not exceed 3.2m). Other visible elements of the proposal include the inverter and transformer stations. Some visual impact will also be attributable to the occasional movement of traffic to / from the development for maintenance purposes. However, the spacing and height of the solar arrays is such that the lands may be utilised for

grazing on a rotational basis thus retaining an agricultural use in tandem with the operation of the proposed development. The existing mature field boundaries and proposed supplementary planting will also be maintained which will have a beneficial effect in terms of mitigating the visual impact of the development throughout its operational phase. On the basis of the foregoing, the LVIA has determined that the landscape effects on the application site during the operational phase will initially be *'moderate / minor'* to *'minor adverse'* before falling to *'minor adverse'* to *'minor / no change'* by c. Year 5 as the proposed planting becomes increasingly established thereby serving to further contain and integrate the development into its surrounds.

- 7.3.10. Any future decommissioning of the development will involve the removal of all the existing ground structures and the subsequent reinstatement of the lands to their previous agricultural use. The hedgerows and screen planting will remain in place with beneficial residual effects attributable to the strengthened field boundaries. The landscape effects arising are thus described as 'moderate / minor' to 'minor adverse'. Post-decommissioning, when the site has reverted to its previous use along with the retention of the matured screen planting, the LVIA anticipates a 'minor beneficial' impact on the landscape character of the application site.
- With regard to the broader landscape effects of the proposal on the Central 7.3.11. Lowlands LCA, while the LVIA acknowledges the overall 'high' value of the wider LCA (with areas of higher value including the various trees and hedgerows and the undulating topography near the R152 Regional Road) it has been reiterated that the prevailing grassland cover on the subject site is of a 'low' value with the result that the immediate site surrounds merit a 'medium' landscape value. Notwithstanding that the Landscape Character Assessment appended to the Development Plan does not expressly consider the sensitivity of the LCA to solar energy development, the LVIA has determined that the high degree of enclosure afforded by the established hedgerows and tree lines, when taken in combination with the relatively low-lying nature of the proposed development, will ensure that the immediate surroundings and wider landscape are not likely to be indirectly affected. Therefore, on consideration of judgements for landscape susceptibility and value, the overall sensitivity of the site within the LCA is considered to be 'medium' as regards the proposed development type.

- 7.3.12. The construction phase of the project will inevitably impact the farmland within the confines of the site with the works including ground disturbance, some minor loss of hedgerow, and general disturbance, however, it has been submitted that views of same will be largely screened with only glimpses available from a limited number of locations such as through gaps in the hedgerow and field gate openings. It has also been emphasised that the disturbance to the landscape of the LCA will be both localised and temporary with the magnitude of the landscape change judged to be *'medium-low adverse'* locally and negligible beyond a distance of 360m. By extension, the LVIA has stated that there will be a temporary *'minor / no change'* adverse effect on the Central Lowlands LCA as a whole during the build period.
- Upon operation, the proposal will introduce a new large scale, manmade feature into 7.3.13. the predominantly agricultural landscape of the Central Lowlands LCA with the development having been designed to retain as much of the site's existing boundaries, features and agricultural land use as possible. In this respect, it is anticipated that the development will be contained through the retention, strengthening and supplementation of the existing field hedgerows and tree lines that are an important characteristic of the LCA thereby reducing its overall visibility. This planting will be maintained throughout the operation of the solar farm and will help to integrate the development into the landscape with a view to maintaining the broader high value character of the LCA. It has also been suggested that the low scale of the development, when taken in combination with the degree of enclosure offered by the strengthened field boundaries and the proposed screen planting, will further mitigate its visibility from neighbouring LCAs and that the localised 'industrialisation' of the Central Lowlands LCA consequent on the development will not detract from the key characteristics of other LCAs found within the study zone.
- 7.3.14. While it is acknowledged that the proposed development will alter the character of the Central Lowlands LCA locally from one of agriculture usage to that of solar energy generation with capacity for agricultural use (i.e. grazing), the scale of this change will be limited to a comparatively small number of residential receptors, road users and recreational receptors that may experience a partial to minor loss / alteration of key landscape characteristics over a localised geographic extent. The LVIA has thus concluded that any effects arising during the operation of the

proposed development on the LCA will be 'moderate / minor adverse' locally with a 'minor / no change' adverse effect for the LCA as a whole. The landscape effect locally is further expected to reduce to 'minor' adverse by Year 5 as the mitigatory planting matures helping to further contain and integrate the development into the landscape.

- 7.3.15. Although decommissioning of the proposed development will result in some minor localised disturbance, at the end of these temporary works the lands will be reinstated and revert to their former agricultural use thereby reversing any adverse effects on the landscape character. Post-decommissioning, and with the retention of the mitigatory planting (which will have since matured), there will be no change to the Central Lowlands LCA either locally or as a whole (the additional landscaping measures could also be considered to have a potentially '*minor beneficial*' effect on a character of the LCA).
- In relation to the possible landscape effects on the Bellewstown Hills LCA, the LVIA 7.3.16. notes that the Landscape Character Assessment appended to the County Development Plan has identified this LCA as being of 'Very High' landscape value and '*Moderate*' sensitivity. However, it subsequently states that although those areas of mature trees and hedgerows are of a high value, the remainder of the LCA comprises relatively flat farmland to the effect that the landscape value is only considered to be 'medium'. The assessment continues by suggesting that the characteristics of the landscape combine to afford a low susceptibility to the changes proposed given the level of screening offered by existing mature trees and hedgerows. It is then noted that the part of the study area falling within the Bellewstown Hills LCA includes Protected View No. 67 (identified on Map 8.6: 'Views and Prospects' of the Development Plan) which occupies a position along a 'County' Road between Carnes West and Carnes East' and is orientated in a southwest direction thereby encompassing views towards the application site. The LVIA proceeds to suggest that the level of visual screening offered by existing mature trees and hedging both on site and beyond provides for the absorption of the lowlying infrastructure of the proposed development to the effect that the immediate surroundings and wider landscape are not likely to be indirectly affected. Taking account of judgements for susceptibility and value, the overall sensitivity of the site within the LCA is thus considered to be 'medium-low'.

- 7.3.17. At this point, it should be emphasised that the application site does not extend into the Bellewstown Hills LCA (as it falls entirely within the 'Central Lowlands' LCA) although that Landscape Character Area makes up approximately 25% of the 5km study area employed in the appraisal.
- 7.3.18. Similar to the assessment made in respect of the Central Lowlands LCA, the construction phase of the project will give rise to works across the extent of the site, although these will be largely screened from view. Again, it has been submitted that the small scale of the visual effects will be experienced from only a limited number of locations within the immediate surrounds and that the impact will be both localised and temporary with the magnitude of the landscape change judged to be *'medium-low adverse'* locally and reducing to *'negligible'* adverse beyond a distance of 360m. The landscape effect locally is therefore expected to be temporary *'moderate / minor'* to *'minor'* adverse whereas the effect on the wider Bellewstown Hills LCA will likely be temporary *'minor / no change'* adverse.
- The landscape effect for the Bellewstown Hills LCA during the operational phase of 7.3.19. the development will be similar to that outlined for the Central Lowlands LCA. In summary, the proposal involves the introduction of a large solar farm into a predominantly agricultural landscape, the design of which has sought to assimilate the works into the surrounding landscape through measures such as the retention, strengthening and supplementation of existing hedgerows and tree lines. It has also been submitted that although the proposed development will alter the character of the Bellewstown Hills LCA locally, the initial scale and extent of this change will be comparatively small and limited to a number of residential receptors, road users and recreational receptors. Therefore, the LVIA has concluded that the visual effect of the proposed development on the LCA will be 'moderate / minor adverse' locally with a 'minor / no change' adverse effect for the LCA as a whole. The local landscape effect is further expected to reduce to '*minor*' adverse by Year 5 as the mitigatory planting matures helping to further contain and integrate the development into the landscape.
- 7.3.20. Decommissioning of the proposed development will result in some localised disturbance to the Bellewstown Hills LCA due to the nature of the works involved, however, at the end of these temporary works the lands will revert to their former agricultural use thereby reversing any adverse effects on landscape character. Post-

decommissioning, and with the retention of the mitigatory planting which will have since matured, it is anticipated that the proposal will have a '*minor beneficial*' effect locally on the character of the LCA.

- 7.3.21. With respect to the potential effects of the proposed development upon other designations within the wider landscape, including the setting of 'Historic Gardens and Designed Landscapes' (HGDLs) and ecologically sensitive sites, the LVIA does not anticipate any adverse impacts. In this regard, I would also refer the Board to the 'Archaeology & Architectural Heritage Impact Assessment' and the 'Ecological Appraisal' provided with the application along with my assessment of the pertinent issues as set out elsewhere in this report.
- 7.3.22. Having considered the wider landscape effects of the proposed development, the LVIA subsequently aims to establish the potential visibility of the proposal within the study area and the receptors likely to be affected. This has been determined by reference to a 'bare earth' Zone of Theoretical Visibility (ZTV), the identification of visual receptors that may experience views of the proposed development by way of desktop and field surveys, and the selection of representative viewpoints from which to assess the effect of the proposed development on existing views and visual amenity. Figure 1.3 of the LVIA shows the theoretical visibility of the proposed development as extending over approximately two-thirds of the study zone (which extends to a radius of 5km from the development site), however, I would concur with the LVIA that actual visibility within the ZTV is likely to be considerably less when account is taken of intervening features such as hedgerows and buildings etc.
- 7.3.23. It has been submitted that views of the proposed development will be largely confined to those residential and road receptors within 2km of the site's outer boundaries with actual visibility varying as a result of orientation, height, distance, and intervening screening. Views of the proposal will be greatest from receptors located along / off roadways in the immediate area, with particular reference to positions on either side of the valley which bisects the site given the topography and the intermittent screening in places.
- 7.3.24. More distant views will be possible from the east / northeast where the land is elevated allowing for views across to the proposed site and, in this respect, particular consideration should be given to the views available from Protected View No. 67 as

identified on Map 8.6: '*Views & Prospects*' of the Development Plan which is listed for protection.

View	Location	Direction	Description	Significance
67	County road	Southwest	Very long-distance views to	Regional
	between		south west and west across	
	Carnes West		open tillage landscape with	
	and Carnes		occasional settlement and very	
	East		large fields. View provided is	
			typical. There are similar views	
			from many equivalent vantage	
			points in this general area.	

- 7.3.25. The LVIA proceeds to assess the visual impact of the proposal from 21 No. viewpoints that have been deemed to be representative of various receptor types in the immediate vicinity looking towards the proposed development, although it should be noted that these viewpoints are from publicly accessible areas (i.e. roads) and thus may differ from the actual views experienced from private residences. Broadly speaking, the selected viewpoints aim to represent road and / or residential receptors sited alongside those roadways proximate to the application site as well as views listed for protection in the County Development Plan, with particular reference to View No. 67 (identified as Viewpoint No. 10) approximately 3.6km northeast of the site. The analysis has been informed by a series of photos showing the proposed development site from each of the viewpoints with photomontages illustrating how the proposed development will appear at Year 0 (with initial planting) and at Year 5 (with more established planting) for comparison purposes.
- 7.3.26. In my opinion, the visual impact of the proposed development will be most pronounced from localised receptors located along the western extent of Local Road No. L-50463-9 (which bisects the westernmost extent of the site area along an east-west axis) given the nature of the topography which dips into the valley of the Athcarne Stream. However, I am inclined to suggest that wider views of the development (including those available from Protected View No. 67) will be more limited due in part to the prevailing topography, the level of screening offered by

intervening features such as trees and hedgerows, the proposed additional mitigatory planting, and the separation distances from roads, residential dwellings and other receptors. Furthermore, while I would acknowledge that more overt views of the development will be visible from within the confines of certain properties (such as the upper floors of nearby dwelling houses), any such views are not of public interest and essentially amount to views enjoyed by a private individual from private property (as considered elsewhere in this report).

- 7.3.27. Having conducted a site inspection, and following a review of the available information, whilst I would concede that the proposed development will be visible to some extent, having regard to the surrounding topography, the specifics of the site context, and the presence of intervening features such as roadside boundary hedgerows etc., in addition to the mitigation to be provided by way of the planting / landscaping proposals set out in the application documentation, in my opinion, the overall visual impact of the proposal will be relatively localised and will not unduly detract from the wider landscape. In this regard, I am not convinced that the application site could be considered to be overtly elevated or exposed when taken in context and I would further advise the Board that although longer distance views of the proposed development may be available from certain vantage points, such as Protected View No. 67 to the northeast, its overall visibility will be diminished by the low-lying nature of the development, the separation distances involved, and the screening offered by intervening features such as existing buildings and vegetation.
- 7.3.28. With regard to the potential cumulative impact of the proposal when taken in conjunction with other solar array developments permitted in the wider area, whilst I would accept that there will be some instances when views of multiple solar arrays may be available, I would suggest that any such views will be limited in extent and would not warrant a refusal of permission.
- 7.3.29. Therefore, having regard to the site context, including its location within the 'Central Lowlands' Landscape Character Area, which is considered to be of 'Moderate Sensitivity' with the capacity to absorb a certain level of development without giving rise to significant visual intrusion, the design, scale and height of the proposed development, the nature of the prevailing topography, and the existing and proposed planting / screening measures, I am satisfied that the proposed development will not

unduly impact on the character of the wider landscape or the visual amenities of the local area.

7.4. Impact on Residential Amenity:

- 7.4.1. The proposed development site is located in a predominantly rural area with a low population density which is characterised by intermittent instances of individual farmsteads and rural housing. Nevertheless, there are several incidences of existing and / or permitted dwelling houses in the vicinity of the site and, therefore, concerns have been raised as regards the need to preserve and protect the residential amenity of the occupants of those properties. Particular consideration needs to be given to any potential impacts attributable to increased noise levels, glint & glare, construction activities, the loss / obstruction of views, and the proximity of the proposed works to nearby housing.
- 7.4.2. For the purposes of clarity, the Board is advised that amended details were submitted by the applicant in response to a request for further information which required the submission of an up-to-date representation of all existing buildings, structures and other features in the vicinity of the proposed development along with the identification of any sites with an extant grant of planning permission. This request stemmed from concerns raised by a number of third parties that certain properties had been omitted from the applicant's assessment of potential impacts on residential amenity. Accordingly, the following analysis has been informed by the updated assessments provided by way of further information as supplemented by my own observations during the course of a site inspection.

7.4.3. Noise:

From an operational perspective, solar energy developments are not significant producers of noise with the main source of noise being the associated inverter / transformer stations (there being no mechanical movement of the solar panels themselves which will be mounted on fixed metal framework racks with no moving parts). Moreover, solar farms will only generate power during daylight hours and although the noise from transformers will vary through the day, it will typically peak when the solar farm is generating at its maximum power output, usually when the sun is high in the sky just after noon (although it should be acknowledged that during the summer months when the sun rises earlier, the transformers will be in operation

earlier during the night-time hours of 04:00 – 07:00 hours). In the subject instance, it is proposed to construct 37 No. transformer stations throughout the development site as per the submitted layout drawings.

- The Noise Impact Assessment (NIA) received by the Planning Authority on the 8th 7.4.4. December, 2022 (as an updated version of Technical Appendix 6) in response to a request for further information aims to identify and describe any likely significant noise effects on key receptors during the operational phase of the proposed development (including any impacts attributable to the transformer stations). It has identified a total of 64 No. noise sensitive receptors (comprising either individual dwelling houses or groupings of residential properties) within 500m of the development site and states that while no baseline monitoring was conducted at these locations (due to the relatively low levels of noise produced by solar farms), a background noise level of 35dB has been assumed (which is stated to be typical of a rural night-time setting with no wind by reference to the Environmental Protection Agency's 'Environmental Management in the Extractive Industry (Non-Scheduled Minerals, Environmental Management Guidelines, 2016'). The NIA proceeds to detail how noise modelling software was utilised to determine the operational noise impact of the proposed development on the basis of sound power levels available from the manufacturer of plant expected to be similar to the candidate transformer station type intended for use in the proposed development. An analysis was then undertaken of the resultant noise levels predicted to be experienced at the identified receptors.
- 7.4.5. The predicted specific sound levels at each of the Noise Sensitive Receptors (NSRs) / receptors are detailed in Table 6.4 of the NIA and are further illustrated in Figure 6.1: *'Noise Assessment Map'* which identifies the locations of the various receptors relative to the proposed transformer locations. In terms of the methodology employed, it has been submitted that as the specific sound is not expected to include any intermittent or impulsive characteristics there is no need to apply any penalties to the predicted sound level in this regard. Furthermore, although it has been accepted that some of the equipment proposed may generate some element of tonal noise, this is not expected to be perceptible at the noise sensitive receptors due to the separation distances involved.

- 7.4.6. On comparison of the predicted specific sound levels with the adopted baseline noise level of 35dB_{LA90} at each of the receptors, it has been determined that the impacts arising will be negligible in most instances, with the exception of NSR Ref. Nos. 27, 28, 29, 30 & 38 where the impacts have been assessed to be 'Low'. In this respect, it should be noted that NSR Nos. 27 30 are located at a point where the proposed development extends along both sides of the public road to the front and rear of the properties concerned, although it would appear that the likely dominant noise source will be a transformer station proposed along the southern side of the roadway to the rear of the receptors.
- 7.4.7. With regard to NSR No. 27, although a sound level of 27.5dB has been predicted at this location, it is of note that this dwelling house is in the ownership of one of the landowners who has entered into a lease agreement with the applicant as regards the proposed development site. Accordingly, it would be reasonable to assume that this property owner is aware of the noise impact predicted and is amenable to same.
- 7.4.8. In relation to NSR No. 28, this would appear to relate to a vacant plot of land adjacent to a small complex of outbuildings, the curtilage / boundary of which will be located approximately 34.9m from a proposed transformer station. While this property will be the closest to the proposed transformer station (when compared to NSR Nos. 27, 29 & 30) with a higher predicted sound level of 28.5dB, I would suggest that any noise impact arising will be of little significance given that the land in question is presently vacant. In any event, the predicted sound level will not exceed the adopted baseline level of 35dB_{LA90}.
- 7.4.9. In reference to NSR Nos. 29 & 30, it can be confirmed that both these receptors are representative of existing third-party dwelling houses. Although the predicted noise levels at these properties are 26.3dB and 26.0dB respectively (lower than those of NSR Nos. 27 & 28), the boundary of the nearer property (NSR No. 29) is approximately 100m from the proposed transformer station at its nearest point while the dwelling houses themselves are in excess of 125m from the transformer. In my opinion, these separation distances are considerable and are likely to mitigate against any actual or perceived noise impact. Indeed, from previous experience and for comparison purposes, I would refer the Board to the '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 that to avoid any noise impacts from 110kV substations at sensitive receptors, a minimum distance of 5m is recommended between a substation and the land boundary of any noise sensitive property.

- 7.4.10. With respect to NSR No. 38, this property comprises another landowner-owned dwelling house where a proposed transformer station will be sited approximately 32m from the shared boundary. In this regard, I would reiterate my position that as the property owner involved has entered into a lease agreement with the applicant as regards the proposed development, they are most likely aware of the noise impact predicted and accepting of same.
- 7.4.11. Having reviewed the available information, it is apparent that NSR Ref. Nos. 27, 28, 29, 30 & 38 are representative of those receptors which will be closest to the proposed transformer stations and thus are predicted to experience the most significant noise impact, however, the impacts arising have been assessed to be 'Low'. While other receptors may be closer to the solar arrays, the panels themselves will not generate any noise to the effect that the impacts predicted are considered to be negligible. More broadly, in no instance is the predicted sound level shown to exceed the adopted baseline level of 35dBLA90 at each of the receptors. Furthermore, it is of note that although the level of noise from a solar farm will vary through the day, the daytime to night-time levels have been assumed to be the same for the purposes of the NIA and therefore the assessment's findings are thought to be representative of a worst-case scenario. In addition, it has been submitted that the adoption of a baseline level of 35dB is conservative given that the World Health Organisation's 'Night Noise Guidelines for Europe' advocate a night-time noise guideline value of 40dB for the primary prevention of subclinical adverse health effects related to night noise in the population.
- 7.4.12. By way of further comment, the Environmental Protection Agency's 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) (2016)' outlines daytime and night-time noise limits of 45dB and 35dB respectively in 'Areas of Low Background Noise' (this guidance is also referenced in the Association of Acoustic Consultants of Ireland's 'Environmental Noise Guidance for Local Authority Planning & Enforcement Departments, 2021' as regards the assessment of noise from solar farms). This would seem to lend further credence to the adoption of a baseline level of 35dB as providing for a conservative

noise impact assessment given that the proposed development will primarily only be in operation during daytime hours.

7.4.13. Therefore, having regard to the foregoing, including the nature, scale and design of the proposed development, the site context and receiving environment, and the separation distances between noise sensitive receptors and those elements of the proposed development that could generate noise, it is my opinion that the operational noise impact of proposed development will not be of such significance as to have a detrimental impact on the residential amenity of nearby properties.

7.4.14. Glint and Glare Assessment:

In assessing the potential for glint and glare attributable to the proposed development and any associated impact on residential amenity or road safety etc., it should be noted in the first instance that the subject proposal does not incorporate tracking panels and that the arrays are to be mounted in a fixed position along an east-west alignment and orientated to face due south. Furthermore, solar photovoltaic panels, given the very nature of their design, need to absorb (as opposed to reflect) solar radiation and are therefore finished in an anti-reflective coating so as to absorb as much light as possible. In this regard, Paragraph 7.27 of the updated 'Appendix D: Glint and Glare Assessment' (GGA) submitted in response to a request for further information details that several studies have shown the levels of reflectance from photovoltaic panels to be similar to that of water and much lower than standard glass, steel, snow and white concrete by comparison. It states that similar levels of reflectance can be found in rural environments from shed roofs and the lines of plastic mulch used in crop production. In support of the foregoing, Appendix '7I' of the GGA includes a 'Solar Module Glare and Reflectance Technical *Memo'* prepared in respect of 'SunPower' PV modules wherein it is detailed that the reflected energy percentage of 'Solar Glass' is far below that of standard glass and more on a par with smooth water. In addition, the material reflectivity of solar glass is stated to be noticeably less than standard glass, plexiglass, plastic, steel and snow. It is further stated that the solar glass in question (SunPower solar modules) uses "high-transmission, low iron glass" which absorbs more light, producing smaller amounts of glare and reflectance than normal glass, while its incorporation of a 'stippling' effect (whereby the surface of the glass is textured with small types of

indentations) allows for more light energy to be channelled / transmitted through the glass while diffusing the reflected light energy.

- The updated 'Glint and Glare Assessment' prepared by Neo Environmental aims to 7.4.15. assess the 'worst-case' scenario potential impacts of the proposed development on ground-based receptors such as roads, rail, and residential properties as well as aviation assets utilising 'bare earth' simulations which do not take intervening vegetation or other obstacles into account. For the assessment of ground-based receptors a 750m radius study area was deemed appropriate as this was thought to contain a good spread of residential and road receptors in most directions from the proposed development. In this regard, it should be noted that the greater the distance between a receptor and a solar farm, the less chance it has of being affected by glint or glare due to the scattering of the reflected beam and atmospheric attenuation, in addition to the likely obstruction from ground sources such as any intervening vegetation or buildings. In instances where there are a number of residential units in close proximity, a representative dwelling or dwellings has / have been chosen for assessment as the impacts will not vary to any significant degree between the individual properties. With respect to aviation assets, it has been submitted that glint is only considered to be an issue for aviation safety where the solar farm lies in close proximity to runways, particularly when an aircraft is descending to land, and that en-route activities are not of concern as flights will most likely be at a higher altitude than the solar reflection. Accordingly, a 30km study area has been chosen for the analysis of any possible impacts on aviation receptors e.g. aerodromes. The assessment subsequently details the methodology employed in determining the degree of reflection theoretically possible at identified receptors (on the assumption of 'bare ground') and the results of geometric reflection calculations undertaken as part of the prediction modelling (*N.B.* Reflection is considered to include both 'glint' and 'glare').
- 7.4.16. A total of 80 No. residential receptors and 72 No. road receptors have been identified within a 750m radius of the proposed development. There are no railway lines within the study area which require assessment and thus the impact on railway receptors has been determined to be 'None'. Not all of the aforementioned ground-based receptors have the potential to be impacted by solar reflection given the need to account for 'non-reflection zones' as set out in Paras. 7.82 to 7.85 of the GGA and

detailed in Figure Nos. 7.1 & 7.2 of the assessment. In addition, there are 5 No. aerodromes within 30km of the proposed development with Navan Airfield, Trim Airfield & Dublin Airport requiring detailed assessments due to these airfields being within their respective safeguarding buffer zones as outlined in Para. 7.69 of the GGA (generally stated to be within 20km for large international aerodromes, 10km for military aerodromes, and 5km for small aerodromes).

- 7.4.17. There are 15 No. residential receptors (Nos. 66-80) within the predicted no-reflection zones as identified in Table 7-1 and Figure 7.1 of the GGA. Similarly, there are 15 No. road receptors (Nos. 58-72) within the no-reflection zones as per Table 7-2 and Figure 7.2. Accordingly, these receptors do not warrant further investigation as part of the glint and glare assessment.
- 7.4.18. Having identified those residential, road and aviation receptors with the potential to be impacted by the proposed development, geometric analysis comparing the azimuth and horizontal angle of the receptors from the proposed development and the solar reflection was conducted. Although this modelling has assumed a 'bare ground' scenario with no account having been taken of any obstruction offered by intervening vegetation or buildings, cognisance has been taken of such in the analysis set out later in the GGA.
- With respect to those 65 No. residential receptors which have the potential to 7.4.19. experience solar reflection, the results of the detailed analysis of the glint and glare impacts set out in Appendices D.2 & D.3 (of the GGA) are summarised in Table 7-13 with the magnitude of the impacts at each receptor being categorised as 'None', 'Low', 'Medium' or 'High'. Although no impact has been predicted to occur at 1 No. of the receptors, the modelling has recorded a theoretical 'High' impact at 43 No. receptors, a 'Medium' impact at 3 No. receptors and a 'Low' impact at 18 No. receptors. Paras. 7.114 – 7.194 of the GGA proceed to assess the specific circumstances of each individual receptor 'on the ground' by taking account of factors such as topography and the presence of intervening vegetation & buildings, and whether these would be sufficient to screen all views of the proposed development where glint and glare could be possible. The conclusion drawn from this analysis is that the 'actual visibility' of the proposal when developed (and in the absence of any additional mitigation) will be significantly less than the magnitude of the modelled impact. In effect, it has been submitted that the glint and glare impacts

at all of the residential receptors will reduce to 'None' once account is taken of the 'on the ground' scenario, with the exception of Receptor Nos. 32-35 & 43 which will continue to experience a 'High' impact and Receptor Nos. 37, 38, 40, 42, 44-52, 58, 61, 62, 64 which are all predicted to experience a 'Low' impact (as per Table 7-16).

- 7.4.20. Notably, Receptor Nos. 32 & 43 relate to dwelling houses in the ownership of the landowners who have entered into a lease agreement with the applicant as regards the proposed development site and, therefore, it could be inferred that they are both aware and accepting of any glint and / or glare effects impacting their properties. It should also be noted that Receptor No. 33 (which corresponds with a vacant plot of land) is not currently in residential use and thus will not suffer from any loss of residential amenity consequent on any glint / glare impact.
- 7.4.21. In relation to the 57 No. road receptors with the potential to experience solar reflection, the results of the modelling set out in Appendices D.4 & D.5 are summarised in Table 7.14 with a theoretical 'High' impact predicted at 54 No. receptors and no impact at the remaining 3 No. receptors. The GGA subsequently details that the 'actual visibility' of the proposal (in the absence of mitigation) when taking account of 'on the ground' factors will be such that a 'High' impact is predicted at 15 No. receptors (Nos. 15, 16, 18, 21-24, 27-29, 36, 38 & 48-50), a 'Low' impact at 6 No. receptors (Nos. 33, 34, 37, 51, 53 & 54) and no impact at the remaining 36 No. receptors.
- 7.4.22. On the basis of the foregoing results, it has been established that screening will be required to ensure that the 'High' impacts identified for Residential Receptor Nos. 32-35 & 43 (while noting the ownership of Nos. 32 & 43 and the non-residential use of No. 33) and Road Receptor Nos. 15, 16, 18, 21-24, 27-29, 36, 38 & 48-50) are satisfactorily mitigated. In this regard, I would refer the Board to Para. 7.203 of the GGA which details that supplementary tree and hedgerow planting will be undertaken at various locations throughout the site to provide screening to the identified receptors thereby reducing the predicted impacts at those locations to 'None'. Some of these mitigation measures can be derived from the 'Landscape and Ecology Management Plan' submitted with the application.
- 7.4.23. With regard to those remaining residential and road receptors where a 'Low' magnitude of impact could potentially be experienced (i.e. a solar reflection impact of

between 0 and 20 hours per year or between 0 minutes and 20 minutes per day), it has been submitted that any such impacts would not give rise to significant effects and thus do not warrant mitigation.

- In reference to the potential impact on aviation assets (i.e. approach paths and Air 7.4.24. Traffic Control Towers) at Navan Airfield, Trim Airfield & Dublin Airport, which require detailed assessment due to their locations within the relevant safeguarding buffer zones, it has been submitted that regard has been had to available guidance in the assessment of the results derived from the computer modelling. Para Nos. 7.96 -7.107 proceed to set out key information as regards each of the aerodromes, including the relevant Airport Reference Points, details of the runways (e.g. designation, true bearing, length, width, threshold location and height / elevation) and the presence (if any) of Air Traffic Control Towers (with Dublin Airport having both old and new ATCTs). Table 7-15 summarises the modelling results for each of the runway approach paths (with detailed results and ocular impact charts contained in Appendices D.6 & D.7) from which it can derived that only 'Green Glare' with a 'low potential for after-image' is predicted to occur on Runway 10 at Trim Airfield. This is considered to be within acceptable tolerances according to guidance issued by the US Federal Aviation Administration as summarised in Para Nos. 7.35-7.39 of the GGA. No glare is predicted on the approach path for Runway 28 at Trim Airfield, the approach paths for the runways at Navan Airfield, or the ATCTs and approach paths for the runways at Dublin Airport. Therefore, it has been submitted that the impact on aviation assets consequent on the proposed development will not be significant.
- 7.4.25. At this point, I would advise the Board of the following limitations of glare prediction modelling:
 - The model does not consider obstacles between the receptors and the proposed solar farm that may obstruct observed glare (e.g. buildings, trees, hills etc.)
 - The model does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact on actual glare results.

- Due to variations in atmospheric conditions, temperature, pressure and conditions, observed values may vary slightly from calculated positions.
- The model does not account for the effects of diffraction; however, buffers have been applied as a factor of safety.
- The model assumes clear skies at all times and does not account for meteorological effects such as cloud cover, fog, or any other weather event which may screen the sun.
- 7.4.26. It should also be emphasised that solar reflection effects will only be experienced in specific circumstances e.g. an observer within a dwelling would have to be positioned at a window directly facing the solar panels on a sunny day at a time when a reflection is geometrically possible in order to experience any effect. With regard to road users, an observer would have to look away from the direction of travel in most instances to view a solar reflection whilst any such effects would be of a fleeting nature from a moving vehicle. In terms of the intensity of the reflections, I would reiterate that these will be comparable to those emanating from water whilst reflections from surfaces in an outdoor environment are regularly encountered by road users.
- 7.4.27. On balance, and in the absence of any evidence to the contrary, I am amenable to accepting the findings of the updated Glint and Glare Assessment and that the proposed development will not have a significant impact on the residential amenity of nearby properties or the safety of road users and aviation assets. Furthermore, I would accept that the effects glint and glare will only occur during suitable weather conditions whilst any such impacts with be of limited duration and will be reliant on specific circumstances such as motorists looking towards the development and away from their direction of travel. In the event the Board is not satisfied in this regard, it may wish to consider seeking further information or the imposition of conditions omitting elements of the proposed solar arrays or perhaps requiring the development to be revised pursuant to a further investigation of any glint and glare impacts.

7.4.28. Construction Works:

With regard to the potential impact of the construction of the proposed development on the residential amenities of surrounding property, whilst I would acknowledge that the works involved could give rise to some degree of disturbance / inconvenience to local residents, given the nature and scale of the development, and as any constructional impacts will be of an interim nature, I am inclined to conclude that such matters can be satisfactorily mitigated by way of condition (including adherence to the mitigation measures contained in the Outline Construction Environmental Management Plan).

7.4.29. Visibility / Obstruction of Views:

While I would acknowledge that there may be some concerns that the proposed development will have a detrimental impact on the residential amenity of nearby dwellings by reason of its visibility within views over the wider area available from those properties, it is of the utmost relevance to note that any such views are not of public interest nor are they expressly identified as views worthy of preservation in the relevant Development Plan. They are essentially views enjoyed by a private individual from private property. A private individual does not have a right to a view and whilst a particular view from a property is desirable, it is not definitive nor is it a legal entitlement. Therefore, while I would acknowledge that the proposed development will be visible from certain dwellings in the area and that there will be a change in the character of views of the site, I am not of the opinion that this could be reasonably held to amount to a loss of residential amenity.

7.4.30. The Proximity of Neighbouring Housing:

Both the Planning Authority and a number of third parties have raised concerns as regards the proximity of the proposed development to certain dwelling houses and / or sites with the benefit of planning permission (incl. PA Ref. Nos. AA201784 & AA207185). Specific reference is made in the final report of the Planning Authority to the scale, layout and proximity of the proposed development relative to Receptor Nos. 32, 33, 34 & 35 identified in Figure 7.1: *'Residential Based Receptors'* of the updated 'Glint and Glare Assessment' (as submitted in response to a request for further information) whereas third party observations have also been received in relation to Receptor Nos. 17, 23, 31 & 63 (which are located proximate to Field Nos. 2, 1, 4 & 7 respectively).

7.4.31. While I would acknowledge that differing setbacks from neighbouring properties have been employed throughout the proposed development, it should be noted that there are no recommended separation distances between solar farm developments and residential units (either at national level by way of Ministerial guidelines etc. or at a local level within the County Development Plan). Although some guidance as regards proximity to housing has been issued by the Irish Solar Energy Association in its '*Best Practice Planning Guidance Report for Large Scale Solar Energy Development in Ireland, 2023*' (with reference being made to a suggested minimum separation distance of 22m), it must be emphasised that this guidance is non-statutory and non-binding. It is also unclear from that guidance whether the separation distance is to be measured from the nearest solar panel, the site boundary, the curtilage of the residential property, or the dwelling itself. Accordingly, I would suggest that the proximity alone of the proposed development to neighbouring housing would not in itself warrant a refusal of permission.

- In my opinion, the pertinent issue requiring consideration is whether the proximity of 7.4.32. any particular aspect of the proposed development will give rise to a loss of residential amenity such as by reason of noise, glint and / or glare, overshadowing etc. In this regard, it has already been established that the separation distances between noise sensitive receptors and those elements of the proposed development that could generate noise (i.e. the inverter / transformer substations) are sufficient to obviate any operational noise impact on the residential amenity of nearby properties. Similarly, the updated Glint and Glare Assessment has determined that the proposed development will not have a significant impact on the residential amenity of nearby properties, subject to the implementation of mitigatory planting at certain locations. Furthermore, the layout of the proposal is such that security fencing will be set back 5m from the site boundary while the solar arrays themselves will be sited at an increased separation distance from neighbouring properties and dwelling houses. Other considerations include the limited height of the arrays at 3.2m over ground level and the proposal to implement mitigatory planting at various locations in order to partially screen the development.
- 7.4.33. Therefore, having regard to the nature, scale and design of the proposed development, the site context and receiving environment, and the separation distances involved, on balance, I am satisfied that the proximity of the proposed development will not be of such significance as to have a detrimental impact on the residential amenity of nearby properties.

7.5. Traffic Considerations:

- 7.5.1. Concerns have been raised that the surrounding road network is of an inadequate construction and lacks the capacity to accommodate the additional traffic volumes consequent on the proposed development (with particular reference to Heavy Goods Vehicles) to the effect that the proposal will endanger public safety by reason of traffic hazard. It has been further submitted that the proposed construction works will lead to significant traffic disruption in the area to the detriment of local residents and businesses, and that existing road users are not amenable to the implementation of a temporary one-way traffic system as has been suggested by the applicant (in response to a request for further information) with a view to minimising the potential for traffic conflicts.
- 7.5.2. The Construction Traffic Management Plan (CTMP) submitted with the application estimates the traffic volumes expected to be generated during the construction and operational phases of the development. Within this document it is anticipated that the construction works will occur over a six-month period during which a combination of HGVs (for component and material deliveries) and cars / vans (for construction workers / staff) will visit the site.
- 7.5.3. An estimation of HGV movements is set out in Table 5-2 of the CTMP wherein it is detailed that approximately 1,676 No. vehicles will visit the site over the construction period giving rise to 3,352 No. movements. These figures are considered to represent a best estimation of the likely HGV volumes by reference to the construction of comparably sized solar farms, however, it has been emphasised that they are for guidance purposes only and that the overall number of site visits may differ due to factors such as local conditions, weather restrictions and contractor working practices etc. HGV movements are expected to be more intensive in the first few weeks of construction with a daily estimation of c. 25 No. HGV deliveries (i.e. 50 No. HGV movements) while other car / van movements are likely to be constant throughout.
- 7.5.4. It is regrettable that the submitted documentation does not include an overall figure for the total volume of construction traffic inclusive of all vehicle types e.g. LGVs, vans & cars etc. However, I would draw the Board's attention to Para. 5.73 of the CTMP which forecasts that there will be approximately 50 No. staff on site at any

one time during the construction phase (although this will vary subject to the overall programme of works). It is further anticipated that there will be a degree of vehicle sharing by staff and, therefore, less than 50 No. staff vehicles (with an estimated maximum of 30 - 40 No. vehicles per day during peak construction periods) are expected to arrive on site each day. This would broadly correspond with Para 8.53 of the Outline Construction Environmental Management Plan which refers to a maximum of 50 No. staff on site at any one time during the construction (and decommissioning) periods, subject to the programme of works. Accordingly, it would seem reasonable to surmise that up to 50 No. staff vehicles (LGVs, private cars etc.) could potentially visit the site daily giving rise to an additional 100 No. traffic movements. It can therefore be estimated that the maximum combined total of HGVs and other traffic visiting the site daily will be approximately 75 No. vehicles generating up to 150 No. movements to / from the site per day with no account having been taken of any car-pooling / vehicle sharing.

- 7.5.5. Having regard to the submitted information, the nature and scale of the proposed development, the comparatively short timescale for construction and the works involved, and my past experience of similar projects, I am satisfied that the anticipated volumes of construction traffic appear reasonable.
- 7.5.6. The proposed development site will be accessed from 4 No. access points along the local road network (comprising 3 No. new accesses and 1 No. existing access arrangement) as shown in Figure 5.1: '*Proposed Haul Route*' (appended to the 'Construction Traffic Management Plan' submitted with the original application documentation) relative to the haul route first proposed (since superseded in response to a request of further information) and the relevant site layout drawings. The haul route to the application site will likely be from the N2 National Road with vehicles exiting onto the R152 (Drogheda) Regional Road before traveling approximately 3.6km and making a right-hand turn onto Local Road L5009. From this point, traffic will travel for c. 400m before turning left into Site Access No. 1. For Site Access No. 2, traffic will continue along Local Road No. L5009 for c. 250m before turning left onto an unnamed minor road, which dissects the western extent of the solar farm, and following this road for approximately 400m before making a righthand turn into Site Access No. 2. Vehicles can then continue past this point for a further 100m before making a left-hand turn into Site Access No. 3. With respect to

Site Access No. 4, after turning left off Local Road No. L5009 and onto the unnamed minor road which dissects the western fields of the development, traffic will travel c. 310m before turning left onto another minor roadway and following this road for c. 1.7km before turning left into an existing access arrangement beside the Corry Farm & Balgeeth Cottage.

- Having conducted a site inspection, I would acknowledge that the haul route as 7.5.7. initially proposed could potentially involve construction traffic travelling approximately 2.7km along a minor rural road network in order to avail of Site Access No. 4 with a return trip along the same path. However, it should be noted that this is the furthest away access point from the regional road and the applicant has sought to take the most direct route available thereby minimising overall usage of the local road system. In addition, it is of relevance to note that (in the original proposal) not all construction traffic would be required to utilise the full extent of the haul route (with a substantial proportion of the overall traffic volumes only travelling along a comparatively short section of the route to Site Access Nos. 1, 2 & 3) given that it would continue to operate as a two-way traffic system in keeping with the current use of the public road (although this has been changed in the revised proposals submitted in response to the request for further information). Nevertheless, I would accept that legitimate concerns have been raised as regards the overall condition, width and capacity of the local road network to accommodate the proposed development. Most notably, the carriageway is generally of a narrow width with limited passing opportunities, which would be of particular concern for larger vehicles and / or HGVs typically associated with construction works.
- 7.5.8. In its initial assessment of the proposal, the Transportation Department of the Local Authority also raised concerns as regards the narrow width of the local road network and lack of passing bays along the proposed haul route. It also considered the sightlines available at the junction of Local Road No. L5009 with the R152 Regional Road to be substandard. Accordingly, at the behest of the Transportation Department, the request for further information issued by the Planning Authority sought the submission of a revised Construction Traffic Management Plan that included proposals to address potential conflicts between arriving and departing HGVs and local traffic with the suggestion that consideration be given to a one-way haul route.

- In response to the request for further information, the applicant has sought to 7.5.9. emphasise that most HGV deliveries will travel directly to the construction compounds accessed via Site Access Nos. 1 & 4 where equipment and material will be unloaded and transported to other parts of the site area by smaller vehicles. The only material likely to go directly to the site area where it is required will be the aggregates for any access track construction (which is to be sourced from local guarries with an agreement to be put in place with these companies so that deliveries are staggered to avoid conflict at the access points). Moreover, following discussions with the Local Authority, and in direct response to its concerns as regards the inadequacy of the sightlines onto the regional road and the undesirability of the initial haul route which sought to utilise narrow roadways in the absence of pull-in bays to facilitate local traffic, the applicant has submitted proposals for the implementation of a one-way system for construction (HGV) traffic. In this regard, the new haul route will follow that previously proposed as far as Site Access No. 4 at which point it will continue eastwards before making a series of left-hand turns and following 'Copper Lane' back to the Regional Road. It is anticipated that this diversion of HGVs eastwards along a one-way system will reduce the risk of such vehicles meeting on the narrow local roads.
- On balance, the proposed one-way haul route arrangement (while noting the short 7.5.10. deviation from same required for Site Access Nos. 2 & 3) would appear to address the Planning Authority's concerns as regards deficiencies in the sightlines from Local Road No. L5009 onto the R152 Regional Road. It will also negate the possibility of HGV construction traffic meeting upon travelling in opposing directions along the local road network with the associated potential for conflict / congestion. However, it is unclear from the information available whether the one-way system is intended to be deployed solely for construction-related HGVs or whether it will apply to all construction traffic or, more particularly, to all users of the public road (including local residents, visitors and agricultural machinery etc.). While smaller goods vehicles travelling in opposing directions along the local road network may not give rise to the same potential for traffic conflicts as HGVs (and could perhaps be compared to a family car meeting a tractor or similar such appliance), cognisance should be taken of the increased volumes of such traffic expected to be generated during the construction works.

- 7.5.11. In its final assessment of the proposal, the Transportation Department of the Local Authority would seem to suggest that the proposed one-way haul route is undesirable given its proposed use of narrow roads without the provision of pull-in bays. However, the report subsequently states that in the event of a grant of permission that a condition should be imposed requiring the submission of a revised Construction Traffic Management Plan, for written agreement, prior to the commencement of development, which identifies a suitable haul route with pull-in bays to facilitate passing traffic.
- 7.5.12. In my opinion, it would seem reasonable to infer from the foregoing that the Transportation Department was satisfied that the provision of a suitable haul route to the proposed development site could be achieved by way of condition and that a refusal on traffic grounds was not warranted. In this regard, I would suggest that the implementation of an appropriate construction traffic management system could potentially address any outstanding concerns.
- 7.5.13. At this point, I would draw the Board's attention to the various mitigation / management measures set out in the CTMP which are to be put in place for the duration of the works in order to minimise the impact of construction traffic, including the implementation of a delivery booking system to ensure that site deliveries are spread out across the week or any given day to minimise potential disruption; the scheduling of deliveries to avoid peak times; limitations on working hours; adherence to an identified haul route; temporary traffic management, signage and road safety measures; and the use of banksmen to assist with the manoeuvring of delivery vehicles to / from the site.
- 7.5.14. In relation to the future operation and maintenance of the proposed development, I would anticipate that the operational traffic levels arising will be quite low and unlikely to give rise to any significant impact on traffic safety. In this regard, Para. 5.79 of the CMTP confirms that the operational phase of the development is expected to have a negligible trip generation potential with approximately c. 10 15 LGVs visiting the site every year for scheduled maintenance checks and additional visits as required to attend to remedial issues when necessary. Although no mention has been made of the traffic generation attributable to any ongoing agricultural use of the lands (e.g. sheep grazing), cognisance should be taken of the existing and historical use of the site area as farmland.

7.5.15. On the basis of the foregoing, it is inevitable that the construction and operation of the proposed development will result in an overall increase in traffic volumes in the vicinity of the site, however, I am also cognisant that any disruption to local road users will be of limited duration given the timing of the works themselves and the anticipated six-month construction timeline. Moreover, it is my opinion that, subject to the implementation of an appropriate traffic management plan during the construction stage, the surrounding road network has sufficient capacity to accommodate the traffic volumes arising to the effect that the proposal will not pose a risk to traffic / public safety.

7.6. Archaeological & Architectural Heritage:

- 7.6.1. In terms of the archaeological and architectural heritage implications of the proposed development, in the first instance it can be confirmed from a review of the available information, including the '*Archaeology & Architectural Heritage Impact Assessment*' contained in Technical Appendix 3 of the supporting documentation provided with the application, that there are 40 No. sites of interest within a 5km study zone of the proposed development site. These archaeological and architectural heritage assets are shown in Figures 3.1 & 3.2 of Appendix 3A and are listed in Table 2 of Appendix 3B (with further details provided on Page Nos. 32-40 of the Archaeology & Architectural Heritage Impact Assessment).
- 7.6.2. From an archaeological perspective, there are no Recorded Monuments or known features of archaeological significance within the confines of the application site, although a number of items of archaeological interest have previously been recorded in the wider area. More broadly, it has been reported (by reference to the Record of Monuments and Places, the Record of Protected Structures and the National Inventory of Architectural Heritage) that there are 5 No. National Monuments in State Care and 20 No. archaeological sites in the Record of Monuments and Places within the relevant study zones (as shown in Figure 3.1 & Figure 3.2 of Technical Appendix 3A).

N.B. The Board is advised that although a 5km study zone was employed for highgrade heritage assets such as World Heritage Sites, National Monuments in State Care, and Historic Gardens & Designed Landscapes, a 2km study zone was adopted for sites and monuments within the Record of Monuments and Places as well as Protected Structures, historic buildings recorded in the National Inventory of Architectural Heritage, and Architectural Conservation Areas.

- 7.6.3. The closest feature of archaeological interest is Ref. No. NA21 / RMP Ref. No. ME033-007 (*Sheela-na-gig*) (a female exhibitionist figure discovered hidden in a masonry pier at the entrance to a farmhouse 'several years ago' and kept at the farm) which is / was situated approximately 58m east of an existing site access (identified as Proposed Entrance No. 4) within the confines of a neighbouring farm complex. The second most proximate feature is an oval mound recorded as Ref. No. NA22 / RMP Ref. No. ME033-008 (*Barrow mound barrow*) and located approximately 225m east of the southeastern corner of the development site in Balgeeth. The remaining features of archaeological interest are at increasingly greater distances from the application site. The entirety of the proposed development site falls outside the notification zones of any recorded monument or feature of archaeological interest.
- 7.6.4. With regard to the potential for unrecorded sub-surface archaeological features to be present on site, a desk-top analysis was undertaken as part of the applicant's assessment which included an examination of written resources such as historical databases and various archives (including the Record of Monuments and Places and the Sites and Monuments Record); a review of available aerial photography in order to identify any cropmarks or other markings that could be indicative of previously unknown features within the site; map regression analysis to review any changes in land and field boundaries that could potentially reveal possible areas of archaeological interest; and an analysis of placenames (which often determine a historical land use associated with an area when other evidence has since been lost). This was complemented by a walkover survey of the site. The results of these investigations have established that while there have been some minor changes to the site and its surrounds over the years, including the removal of several internal field boundaries and the addition of new trackways etc., the lands have predominantly remained in agricultural use. Moreover, no discernible evidence has been identified which could be indicative of the presence or heightened potential for hitherto unknown archaeological features on site.
- 7.6.5. In terms of architectural heritage considerations, while there are no such features on site, Figure 3.1 of Technical Appendix 3A identifies 7 No. Historic Gardens and

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Designed Landscapes (HGDLs) within the (5km) study area with the closest such feature being Athcarne Castle (also a National Monument in State Care) located approximately 1.25km north-northwest of the application site. In addition, Figure 3.2 shows a further 8 No. 'Historic Structures' (derived from the Record of Protected Structures and the National Inventory of Architectural Heritage) within the 2km study area with the nearest such properties being:

- Ref. No. NA13 (RPS Ref No. 91180 / NIAH Reg. No. 14403303): A farmyard complex located approximately 50m west of the site along the opposite of an intervening roadway and beyond an intervening hedgerow and existing dwelling house.
- Ref. No. NA14 (RPS Ref. No. 91181): A thatched cottage to the immediate east of the existing site access identified as Proposed Entrance No. 4.

(By way of clarity, the reference numbers used in Table 2 of Appendix 3B as regards protected structures have been taken from the Meath County Development Pan, 2013-2019 which has since been superseded by the current Meath County Development Plan, 2021-2027. The corresponding RPS Ref. Nos. as set out above have been derived from the current Development Plan and consideration has been given to the most up-to-date Record of Protected Structures in my assessment).

- 7.6.6. In the absence of any known archaeological or architectural heritage assets on site, I would concur with the findings of the 'Archaeology & Architectural Heritage Impact Assessment' that the proposed development will not have any direct impact on such features.
- 7.6.7. With regard to the possibility of unrecorded sub-surface archaeological features on site, I would accept that the available information can reasonably be interpreted as indicating that the site has a low potential for any archaeological remains of significance. Although the applicant has acknowledged that specific impacts cannot be accurately ascertained without further investigative works such as archaeological testing, it has been suggested that the likelihood of any such impacts can be estimated by considering the level of ground disturbance associated with the proposed development. In this respect, reference has been made to the excavations for the cable trenches and the CCTV foundation bases as well as the ground disturbance associated with the construction of the transformer stations. Topsoil

stripping will also be required for the access / internal site tracks and the temporary construction compound. The metal framework for the solar panels will be supported by directly driven piles thereby removing the need for deeper foundations (i.e. no concrete works will be required to support the mounting frames) while poles will also be inserted into the ground to support the perimeter fence. It is anticipated that vehicle movements will be largely accommodated by the internal site tracks and that any off-road driving (where required) is unlikely to have any notable effect on subsurface archaeology (such as through ground compression or rutting in wet / adverse conditions) given that the application site is already subject to the movement agricultural machinery. Similarly, the machinery to be used in the piling operations will be comparable in weight to standard agricultural vehicles and will be fitted with rubber tracks (as opposed to wheels) to minimise subsurface impacts. Conventional agricultural machinery will also be used to manoeuvre panels in areas without an access track. Accordingly, it has been submitted that the potential for encountering or disturbing any subsurface archaeological features of interest during the construction phase will be relatively low when compared to other types of development.

In terms of indirect impacts on heritage assets, concerns have been raised as 7.6.8. regards the potential detrimental impact of the proposed development on the archaeological, architectural and cultural heritage value of the wider area which is considered to be a defining feature of the surrounding landscape. In this regard, I would refer the Board to the Landscape and Visual Impact Assessment prepared in support of the application and, in particular, to the locations of those archaeological and architectural heritage assets identified within the study area as shown in Figures 3.1 & 3.2 of Technical Appendix 3A. More specifically, cognisance should be taken of the locations of those features of heritage interest within the Zone of Thereoetical Visibility shown included in Figures 3.1 & 3.2 (while also noting that the ZTV utilises 'bare earth' simulations which do not take into account intervening vegetation or other obstacles that may help screen views with the result that the projections represent a conservative 'worst-case' scenario'). In summary, it has been concluded that none of the National Monuments in State Care within the study area will be impacted by the proposed development with only 'low' indirect effects anticipated for all the HGDLs and 'Historic Structures' (RPS / NIAH). With respect to the remaining

items of archaeological interest, a 'low' indirect effect is predicted to occur at Ref. No. NA21 / RMP Ref. No. ME033-007 (Sheela-na-gig) with 'negligible' effects on all other features.

- 7.6.9. Although the proposed development is not predicted to directly impact on any known features of archaeological and / or architectural heritage interest within the study area (with any indirect impacts expected to be of 'low' to 'negligible' significance), the submitted details have acknowledged a low potential for hitherto unknown subsurface archaeological remains to be present on site. Therefore, by way of mitigation, it is proposed to undertake a programme of archaeological works prior to and / or during the construction stage of the proposed development in order to identify and preserve any previously unknown subsurface remains by record or in situ (as appropriate). It has been stated that this may take the form of predevelopment investigation such as geophysical survey and / or test trenching, and / or construction stage mitigation, the residual direct impact on hitherto unknown subsurface archaeological remains is expected to be negligible.
- 7.6.10. At this point, I would advise the Board that the Department of Housing, Local Government and Heritage has indicated that it is broadly amenable to the archaeological mitigation proposed, subject to the inclusion of a suitable condition requiring pre-development testing in the event of a grant of permission.
- 7.6.11. Following a review of the available information, and having regard to the nature and design of the proposed development (including its comparatively low height), its separation and siting relative to known items of archaeological and / or architectural heritage interest, with particular reference to the level of screening offered by intervening features (such as vegetation and existing structures), and the location of those sites of interest (i.e. Ref. Nos. NA14: 'Thatched Cottage' & NA21: 'Sheela-na-gig') closest to the proposed development within existing complexes of buildings, it is my opinion that the proposed development, subject to the implementation of suitable mitigation measures, is unlikely to give rise to any detrimental impact on items of archaeological and / or architectural heritage interest.

7.7. Flooding Implications:

- 7.7.1. From a review of the available information, consideration needs to be given to the potential flooding implications of the proposed development given that the Athcarne / Balgeeth Stream flows directly through the application site (between Field Nos. 15 & 16 and 17) while the Coolfore Stream flows alongside the northern site boundary (bordering Field Nos. 20, 22 & 26) before subsequently converging with the Athcarne Stream and continuing onwards to meet the River Hurley to the northwest. In this respect, I would advise the Board that while an examination of the most up-to-date flood mapping prepared by the Office of Public Works as part of its CFRAM programme (which is available on www.floodinfo.ie and has informed the development of Flood Risk Management Plans for specific areas) does not show any flood events within or bounding the development site, the applicant's site specific 'Flood Risk and Drainage Impact Assessment' (Technical Appendix 4) identifies an area of indicative fluvial flooding within the confines of the site (Field Nos. 15, 16 & 17) alongside the Athcarne Stream. This floodplain was previously recorded as part of the OPW's Preliminary Flood Risk Assessment, 2011 (PFRA) which in turn informed the flood mapping included in the Strategic Flood Risk Assessment (SFRA) appended to the Meath County Development Plan, 2021-2027. Both the PFRA and the SFRA show the area of land in guestion as being at risk of fluvial flooding from the Athcarne Stream and thus the affected lands fall within Flood Zones 'A' and 'B' (i.e. within the 1.0% & 0.1% AEP flood extents respectively as defined by the 'Planning System and Flood Risk Management, Guidelines for Planning Authorities').
- 7.7.2. In light of the foregoing, the applicant's site-specific 'Flood Risk Assessment' and 'Drainage Impact Assessment' (SSFRA) includes a detailed hydrological analysis for the catchment of the Athcarne Stream (incorporating the main Athcarne Stream and the smaller Coolfore Stream) in the vicinity of the site which was carried out in order to estimate peak design flows with a view to informing a hydraulic model of the watercourse and to more accurately establish the relevant flood zones on site.
- 7.7.3. By way of explanation, the SSFRA states that although the standard flood estimation method employed in Ireland is the Office of Public Works' Flood Studies Update 3 Variable (OPW FSU 3V), this is unsuited for use when assessing catchments of less than 25km² in area. Therefore, given that the total catchment area for the catchment area for the Athcarne Stream, including the sub-catchment of the smaller Coolfore

Stream, measures approximately 6.54km² (the catchment area of the Athcarne Stream upstream of its confluence with the Coolfore Stream is 5.72km²) the Institute of Hydrology Small Catchment Method (IH124) has been adopted for flow estimations of the watercourse. For the purposes of comparison, the alternative FSH 4.2a regression method (FSU WP4.2, 2012), which is an equation based on catchment descriptors that have been developed specifically for use in smaller catchments, has also been used in the assessment.

- 7.7.4. The estimated peak flows for the Athcarne Stream catchment area for the 1 in 100year and 1 in 1,000-year events utilising the IH124 and FSU 4.2a methodologies are set out in Table 4-5 of the SSFRA. Although the IH124 methodology provides relatively higher flow estimates when compared to other methods and is likely an overestimate, as the site / watercourse is ungauged and no further site-specific data is available, the SSFRA has adopted the more conservative flow estimate derived from the IH124 method to inform the site-specific hydraulic modelling (Table 4-6 of the SSFRA shows the final estimated 100 and 100-year flow for the respective catchments i.e. the overall catchment and the Coolfore and Athcarne subcatchments).
- 7.7.5. The results of the hydraulic modelling have established the maximum predicted water levels at identified reference points during the 1 in 100-year and 1 in 1,000-year events with minor flooding predicted at the boundaries of those fields alongside the Athcarne Stream (which is confined to small areas directly bedside the watercourse). Very little overtopping is predicted from the Coolfore Stream with all flow contained within the channel. In this regard, the Board is referred to Figure 4.7 of Appendix 4D which shows the 1 in 1,000-year flood extent within the site. A modelling sensitivity analysis was subsequently undertaken to illustrate the effect of changing certain model parameters (as per Table 4-8 of the SSFRA) on its outputs i.e. flood levels, and the results of this analysis are set out in Table 4-9 with the minor changes predicted in flood levels not considered to give rise to any significant change in the flooding mechanism or the resulting flood extent.
- 7.7.6. Having considered the results of the hydraulic modelling, which serves to establish the 1.0% & 0.1% AEP flood extents to a greater degree of accuracy thereby allowing for identification of Flood Zones A & B, I would refer the Board to Figure 4.4 of Appendix 4D (Drg. No. NEO00873_069I_B Figure 4.4: 'Site Layout: 1 in 1,000 Year

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Flood Zone') which shows how the predicted 1 in 1,000-year flood extent on site has informed the layout of the proposed development. Most notably, all of the essential infrastructure associated with the proposed development (i.e. the solar panel arrays, inverters / transformers, and other electrical infrastructure), which could be classified as '*highly vulnerable'* by reference to Table 3.1 of the '*Planning System and Flood Risk Management, Guidelines for Planning Authorities'*, will be located in Flood Zone 'C' with only '*water-compatible development*' such as the access tracks, fencing and CCTV proposed in Flood Zones 'A' and 'B'. Accordingly, given that the siting of the various development components can be held to be 'appropriate' as per the matrix of vulnerability versus flood zone set out in Table 3.2 of the Guidelines, it has been submitted that the proposal is acceptable from a flood risk management perspective without recourse to the '*Justification Test'*.

- 7.7.7. The Drainage Impact Assessment (DIA) which serves to supplement SSFRA recognises that surface water arising from a developed area should, as far as practicable, be managed to mimic the surface water flows from the site prior to its development, while also reducing the flood risk both to the site itself and elsewhere. In this regard, the DIA details how rainwater falling onto the solar panels will be drained via infiltration to ground at the same rate as the existing greenfield site to the effect that the array is not considered to comprise an impermeable area. Similarly, the proposed access tracks will be constructed from a permeable material to allow for the percolation of rainwater to ground at the same rate as present.
- 7.7.8. The only impermeable surfaces associated with the proposed development will arise from the construction of the inverter / transformer stations along with their underlying foundation pads, however, due to the small size of these areas (totalling 367.8m²), it is anticipated that the low levels of runoff expected to be generated can be accommodated by way of infiltration to ground with any associated impacts likely to be negligible (in the event surface water runoff were to accumulate at any of these locations, it has been suggested that a soakaway could be constructed to allow for percolation to ground).
- 7.7.9. The DIA proceeds to calculate the pre- and post- development runoff rates from the site to the effect that the runoff rate for the 1 in 100-year, 360-minute storm event, inclusive of a 20% climate change allowance, with the development in place, would be 10m³ if left unmanaged. In response, the surface water drainage strategy for the

proposed development aims to ensure that there will be no increase in downstream flood risk by managing the rate at which runoff is discharged to the local water environment (i.e. the Athcarne & Coolfore Streams) through the implementation of a Sustainable Drainage System (SuDS). In this regard, it has been calculated that the indicative storm water volumes arising from the proposed development (in reference to the introduction of the impermeable surfaces) will require a maximum storage requirement of 33m³ to attenuate a 1 in 100-year storm event (with a 20% allowance for climate change). This attenuation is to be provided through the construction of 17 No. soakaway channels with a combined storage volume of approximately 108m³ (which is greater than the volume of additional runoff generated as a result of impermeable surfaces), the design of which aims to limit the rate of surface water discharge from the proposed development to that of the pre-development site. Such an arrangement not only adequately mitigates the increase in flow rates consequent on the proposed development but would also seem to represent an improvement over the current conditions. The SuDS features are to be implemented during the construction phase of the development and subsequently maintained throughout its lifespan.

- 7.7.10. Additional drainage measures to be implemented on site include the following:
 - The current grass cover is to be retained or reinstated adjacent to and under the solar panels in order to maximise bio-retention.
 - The access tracks will be unpaved and constructed from local stone.
 Temporary swales or similar will be utilised to collect runoff from access tracks with discharge to ground through percolation areas. Where swales are utilised, frequent checks of dams formed from gravels and other excavated material will be undertaken.
 - The scale of the transformer stations is unlikely to warrant a formalised drainage system. Runoff from this infrastructure and any associated hardstanding will be directed to a percolation area for discharge to ground. Should surface water accumulate around any of these locations then a soakaway can be constructed to allow water to soak into the underlying subsoils.

7.7.11. Therefore, having considered the available information, I am generally satisfied that the proposed development complies with the relevant provisions of the Development Plan and the '*Planning System and Flood Risk Management, Guidelines for Planning Authorities*' and will not increase flood risk or negatively impact on the flood regime of the surrounding area such as by way of increased surface water runoff or the displacement of floodwaters.

7.8. Ecological Considerations:

- 7.8.1. In assessing the potential impact of the proposed development on ecological / biodiversity considerations, I would refer the Board to the Ecological Appraisal (Technical Appendix 2) submitted with the application (and the accompanying Natura Impact Statement) as supplemented by the additional details provided in Para Nos.
 2.48 2.66 of the response to the request for further information.
- 7.8.2. By way of summation, the Ecological Appraisal has determined that the proposed development will not impact on any designated protected sites (i.e. SACs, SPAs, NHAs or pNHAs etc.). With respect to Natura 2000 sites, these have been outlined and assessed as part of the accompanying Natura Impact Statement wherein it has been determined that the proposed development will not have any significant adverse effect on the conservation objectives or integrity of those sites, either alone or in combination with other plans or projects. Similarly, it has been held that no impacts will be caused to any proposed Natural Heritage Areas within the study area (and beyond) due to a lack of connectivity.
- 7.8.3. There are no habitats within the proposed development site that conform to those listed under Annex I of the EU Habitats Directive with the lands instead being dominated by habitats of a lower ecological value, including Improved Agricultural Grassland (GA1), Arable Crops (BC1), Tilled Land (BC3) and Buildings & Artificial Surfaces (BL3), with occasional occurrences of Wet Grassland (GS4), (Mixed) Broadleaved Woodland (WD1), (Mixed) Broadleaved / Conifer Woodland (WD2), Scrub (WS1) and Immature Woodland (WS2), in addition to Watercourses (FW2), Drainage Ditches (FW4) associated with Hedgerows (WL1), Treelines (WL2) and Stone Walls (BL1). No rare or protected flora species have been recorded on site nor are there any records of rare and / or protected flora within the 2km square grid surrounding the development held by the National Biodiversity Data Centre. The site

survey did not record any instances of invasive plant species listed in Part (1) of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011, as amended, and although Himalayan Knotweed is known to be present in 2km grid square Ref. O05J, the application site is not covered by this grid square. While Sycamore is present at multiple locations within the hedgerows and tree lines defining the site boundary, this is a common tree species and is not considered to be of significant concern. Broadly speaking, the habitats on site are mainly of an agricultural nature and used for pasture and cropping.

- 7.8.4. In terms of fauna, the results of a desk-top review of sources held by the National Biodiversity Data Centre are set out in Table 2-9 of the Ecological Appraisal with a view to identifying those protected / notable species which could potentially be present on site. These findings are refined further by reference to the observations recorded during the field surveys undertaken on site.
- 7.8.5. With respect to protected non-volant mammals, although no field signs of badger were observed on site, the habitats present afford foraging, commuting and sett creation opportunities for the species while local knowledge has identified the approximate locations of two potential badger setts beyond the site boundary (please refer to Target Notes 14 & 20 of Table 2-8: '*Target Notes*' and the corresponding identifications on Figure 2.2: '*Habitat Map'*). Similarly, notwithstanding any direct evidence for Hedgehog on site, the habitats present, including the treelines, hedgerow and scrub, will provide suitable foraging opportunities for the species. The presence of the Irish Hare on site has also not been discounted. Although the desktop study did not identify any records of Otter within 2km of the site, and while most of the habitats within the site are sub-optimal for otter as they predominantly comprise large agricultural grassland fields bounded by treelines and narrow field drains, both the Coolfore and Athcarne Streams within and adjacent to the site are considered to provide suitable habitat for both foraging and commuting otter.
- 7.8.6. No record of any other protected non-volant mammals were identified during the site survey or the desk-top review.
- 7.8.7. Non-protected mammal species observed on site include the Red Fox and the European Rabbit (the latter being considered an invasive species widespread across Ireland).

- 7.8.8. In relation to the possible presence of bat species on site, although it is regrettable that no bat detection surveys were conducted on site, regard has been had to the National Biodiversity Data Centre's Bat Suitability Index with four species of bat having been identified from the desk-top search i.e. Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle and Lesser Noctule / Leisler's Bat. While the large open fields of agricultural grassland are thought to offer little for foraging bats, the treelines along the field boundaries could provide commuting pathways to the wider landscape and roosting locations. In addition, some features with Bat Roosting Potential (BRP) have been identified on site (Target Notes 2, 3 & 19) although the extent of vegetative growth on some trees is so dense in places as to obstruct views of potential roost features.
- 7.8.9. While no formal bird surveys were carried out in support of the proposal, Table 2-9 of the Ecological Appraisal has identified those protected / notable bird species with the potential to be present on site (all of which feature in the 'red' or 'amber' lists of the Birds of Conservation Concern in Ireland, 2020-2026). Incidental observations during the walkover survey recorded common farmland bird species as well as buzzards flying overhead (Target Nodes 7, 10 & 12), however, none of these are of conservation concern. More broadly, it is considered that the application site provides suitable foraging and nesting habitat that could support a large array of bird species, including those recorded in Table 2-9.
- 7.8.10. No reptiles or amphibians were recorded during the site surveys, however, the site offers potential habitat, such as hedgerows, drainage ditches and streams, for herptiles such as Common Frog.
- 7.8.11. No records of notable or protected species of invertebrates were identified in the data search nor were any such species recorded the walkover survey.
- 7.8.12. Having established the baseline conditions on site, the Ecological Appraisal proceeds to detail the potential ecological impacts arising during the construction and operation phases of the proposed development. It advises that standard best practice pollution prevention measures along with waste management protocols and environmental monitoring are to be put in place during the construction stage to reduce the potential for ecological impacts. In this regard, it has been emphasised

that these are standard requirements separate from any other mitigation measures outlined in the appraisal.

- In reference to those designated sites (i.e. Natural Heritage Areas & Proposed 7.8.13. Natural Heritage Areas) within 5km of the development site boundary (as identified in Figure 2.1: 'Environmental Designations' of Appendix 2A of the Ecological Appraisal), notwithstanding the relative proximity of the Balrath Woods pNHA (Site Code: 001579) approximately 4.4km to the northwest and the Cromwells's Bush Fen pNHA (Site Code: 001576) c. 4.6km to the northeast, no impacts on either of these proposed Natural Heritage Areas are anticipated due to the absence of any known hydrological, ecological or ornithological connectivity between those areas and the application site. Similarly, given the separation distances concerned and factors such as differing surface water catchments, in my opinion, it is reasonable to conclude that there are no connectivity pathways between the development site or any other NHA / pNHA sited beyond the limits of the 5km study area. Furthermore, and for the purposes of clarity, it can be confirmed that there are no NHAs located within either a 5km or 15km radius of the application site contrary to Para. 2.54 of the Ecological Appraisal.
- 7.8.14. In relation to the likelihood for the proposed development to have a significant effect on a Natura 2000 site in view of the Conservation Objectives of that site, in the first instance I would refer the Board to the assessment set out in the accompanying Natura Impact Statement wherein it has been determined that the proposed development, subject to the implementation of suitable mitigation measures, will not have any significant adverse effect on the conservation objectives or integrity of those sites, either alone or in combination with other plans or projects.
- 7.8.15. By way of summation, the Ecological Appraisal details that given the lack of any known hydrological, ecological or ornithological connectivity, there is no route for the proposed development to have any potential negative impact on the qualifying habitats or species of the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), the Boyne Estuary Special Protection Area (Site Code: 004080) and the Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957). These sites have thus been 'scoped out' from any further assessment. Notably, while it has been acknowledged that several bird species for which the Boyne Estuary SPA has been designated could potentially utilise the 'Improved

Grassland' habitats on the subject site for feeding purposes, given the separation distances involved and the abundance of similar habitat between the site and the SPA, it has been concluded that the small loss of improved agricultural grassland involved would not be of significance and thus no significant effects arise for qualifying species of the SPA.

- 7.8.16. With regard to the River Boyne and Blackwater Special Area of Conservation (Site Code: 002299), it has been submitted that the potential arises for ecological connectivity notwithstanding the lack of a hydrological pathway. More specifically, given the drainage ditches and stream habitats present within the application site and the commuting and foraging capabilities of the otter (a qualifying species of the SAC), it is considered that this species could be present on site. While factors such as the implementation of best practice pollution prevention measures and integral design measures will limit the potential effects on this qualifying species, additional mitigation measures are set out in the NIS to reduce the effects further.
- 7.8.17. The River Nanny Estuary and Shore Special Protection Area (Site Code: 004158) is considered to be ornithologically connected to the application site given that it has been designated for certain bird species which could utilise habitats available within the site boundary. However, following consideration of several factors, including the lack of suitable habitat on site for certain qualifying species, the separation distances involved, the availability of more favourable habitat closer to the SPA, and the absence of any sightings or records of certain species on site, no significant effects on qualifying species of the SPA are expected. While the SPA is also hydrologically connected with the application site via the Coolfore and Athcarne Streams which drain to the Hurley River before feeding into the River Nanny and onwards to the designated site, in light of the adopted design principles, the implementation of best practice measures, and the nature of the activities to occur within the application site, no significant effects for the SPA are predicted.
- 7.8.18. At this point, I would advise the Board that the North-West Irish Sea Special Protection Area (Site Code: 004236) has not been referenced in the Ecological Appraisal (or the NIS) despite its siting approximately 13km east-northeast of the application site (within the 15km study area adopted for Natura 2000 sites). The explanation for this omission is that the Ecological Appraisal was prepared in April, 2022 whereas the North-West Irish Sea SPA was only designated in 2023. This SPA

constitutes an important resource for marine birds and has been designated for the protection of specified species of marine birds of special conservation interest. Further consideration as to the potential for the proposed development to impact on this designated site is set out in the Appropriate Assessment contained elsewhere in this report, however, having regard to the nature, scale and design of the proposed development, the nature of the receiving environment, the separation distances involved, and the lack of any ecological connections, it can be concluded that the proposal would not be likely to give rise to significant effects on the SPA, in view of its Conservation Objectives.

- While the proposed development will inevitably result in the loss of some habitat on 7.8.19. site, this will generally be confined to those of a lower ecological value such as improved grassland. Furthermore, no rare or protected flora will be affected nor will there be any disturbance of any high impact invasive flora. Although the development will necessitate the removal of several short sections of hedgerow to install access tracks, cabling and security fencing etc., the minor impact arising from this aspect of the works can be mitigated in part through the infilling of gaps in the existing hedgerow and by adding new hedgerow where appropriate. The broader diversity of the site and its ability to support wildlife will also be improved through the implementation of a Biodiversity Management Plan (an updated version of which is included at Appendix I of the response to the request for further information) and an accompanying Landscape and Ecology Management Plan which includes measures such as the creation and maintenance of a species-rich diverse grassland; the planting of a wildflower and bird seed meadow; the provision of wildlife shelters (i.e. bat boxes, bird boxes, hibernaculum & invertebrate hotels) for priority and locally important species; and the maximising of the floral and faunal biodiversity of created and retained habitats.
- 7.8.20. In relation to badger, although no field signs were observed during the site surveys, discussions with the landowner have identified the approximate location of two potential badger setts within 50m of the site boundary. Moreover, it has been established that the habitats present on site are broadly suitable for the species. Accordingly, given the mobile nature of the species and as new setts could be built prior to construction, the potential arises for the disturbance of badger during the construction works. Excavations can also destroy badger setts, and any excavations

left open overnight can trap badgers. The installation of security fencing or hoarding can also disrupt pathways and cut off foraging areas. Therefore, by way of mitigation, it is proposed to undertake a pre-construction badger survey with any identified setts to be marked and provided with a 30m buffer during the construction stage. In addition, all excavations are to be securely covered or closed off at the end of each working day to prevent the accidental trapping of badgers (where this is not possible, a means of escape, such as a ramp, is to be provided to allow for safe exit from the excavation) with daily checks to be carried out. Finally, from an operational perspective, all security fencing is to be fitted with mammal gates to allow for the free movement of badgers through the site.

- 7.8.21. Despite the absence of any records of otter within 2km of the site and the broader unsuitability of the habitats present on site for the species, it is acknowledged that the Coolfore and Athcarne Streams may provide suitable habitat for both foraging and commuting otter. This has the effect of giving rise to the possibility that any otter availing of the site could be disturbed during construction works. Pollution from contaminated ground or surface waters could also enter the aquatic system and affect otter indirectly (e.g. through a loss of prey species). In response, the submitted design includes for the provision of a 5m buffer from all field drains and a further buffer from the Coolfore and Athcarne Streams (the size of which changes depending on flood risk) with a view to reducing any negative impact on otters that may be using these features. It is also envisaged that the implementation of best practice pollution prevention measures will serve to minimise the potential for contamination of the aquatic habitat. Other good practice measures include the securing / covering of excavations to avoid any accidental trapping and the provision of escape routes as required. Mammal gates within the perimeter security fencing will also accommodate the movement of otters through the site. Further mitigation is to be provided by way of a pre-construction otter survey with any additional measures dependent on its findings.
- 7.8.22. With respect to hedgehog and other non-volant mammals (such as rabbit and fox etc.), it has been submitted that there will be a negligible loss or fragmentation of the hedgerow, treelines and scrub habitats on site that could support such species. Recorded mammal (rabbit) burrows on site are within existing hedgerow buffers that are to be retained for the most part and supplemented in other areas with infill

hedgerows as per the Biodiversity Management Plan & Landscape and Ecology Management Plan. Broader habitat improvements for species such as hedgehog and other mammals will also result from the proposed Biodiversity Management Plan which will provide for the infilling / improvement of hedgerow and the introduction of a species-rich grassland. Although some level of disturbance during the construction stage will be inevitable, it is anticipated that this will be largely limited to noise, dust and vibration impacts. In this regard, it has been suggested that cognisance should be taken of the baseline conditions on site which include the periodic disturbance on a smaller but not incomparable scale attributable to agricultural activities several times a year. Any disturbance during the operation stage, such as that arising from routine visits and general maintenance, is expected to be minimal, while the mammal gates within the perimeter fencing will allow for the movement of wildlife.

7.8.23. Any impact on any bat species present on site will primarily derive from the disruption of commuting pathways along treelines or the loss of roosting habitat (potential or otherwise). In response, the design and layout of the proposal includes for the provision of a buffer between the development works and all drains, watercourses, treelines and hedgerows (no buildings are to be disturbed as a result of the development). By way of further mitigation, it has been submitted that should any mature trees with roosting potential require removal, these will first be surveyed for Potential Roost Features (PRF) in line with Bat Conservation Trust guidelines with additional surveying to be carried out should the PRF check determine the tree to be of medium or high bat roosting potential. Soft felling techniques will also be used if low potential exists to ensure that no cavities are cut through while branches or trunk pieces with cavities will be lowered carefully to the ground and left with the access hole upward facing overnight to allow any bats to leave. It is also proposed to install (c. 8 No.) bat boxes throughout the site as per the Biodiversity Management Plan with a view to increasing the opportunities for roosting bats in the area. The addition of invertebrate hotels, more species-rich grassland and flower meadows, treeline planting and the infilling of existing hedgerows, will also provide additional roosting opportunities while simultaneously increasing the diversity of flora & fauna within the site thereby improving the availability of food sources for foraging bat species.

- The principle impacts on avifauna include the direct loss or deterioration of habitats 7.8.24. and the displacement, injury or disturbance of bird species, particularly if the works were to take place during the breeding season in the absence of mitigation. Given the site location and the nature of the works proposed, some degree of impact on certain bird species as a result of a loss of habitat or disturbance etc. is unavoidable, however, this must be taken in context given that the subject proposal will primarily result in the loss of lower order habitat of a lesser ecological value and that similar lands are readily available elsewhere in the immediate vicinity while the minor loss of hedgerow will be compensated in part through reinstatement proposals. Furthermore, the short-term disturbance of birds during the construction phase can be mitigated by ensuring that works such as the removal of hedgerow are carried out outside of the nesting and breeding seasons. Other measures such as the inclusion of a buffer from drains, watercourses, treelines and hedgerows, the addition of invertebrate hotels, the planting of more species-rich grassland and flower meadows, the infilling of existing hedgerows, and the installation of bird boxes, will also all serve to minimise the impact of the proposed development on bird species locally. In the event the Board is not entirely satisfied as regards the foregoing measures, it may wish to consider a requirement for pre-construction surveys to identify any nests present within the area prior to the commencement of development (where amber or red listed species nests are identified, these should be isolated until such time as the chicks have fledged or breeding has failed).
- 7.8.25. Given the broader absence of any recorded instances of reptiles or amphibians on site, no significant effects on these species are expected. The submitted proposal also provides for a buffer from all field drains while the Biodiversity Management Plan includes for the provision of 4 No. hibernaculum aimed at providing shelter for reptiles and amphibians to hibernate.
- 7.8.26. Invertebrate hotels are to be provided as part of the Biodiversity Management Plan with a view to creating an enhanced range of habitats for invertebrates, including pollinator species, thereby having a positive ecological effect. These will be checked once every summer after installation with any missing or damaged hotels replaced within seven weeks. In specific reference to grasshopper, the response to the request for further information states that this species stands to benefit from the overall improvement of biodiversity on site as a result of the proposed development

through the provision of a species-rich grassland, invertebrate hotels and wildflower meadows.

7.8.27. Having considered the available information, while the proposed development will result in some loss of vegetation and a broader loss of predominantly lower value habitat with an associated potential for the disturbance / displacement of wildlife both on site and within adjacent lands, it is my opinion that the impacts identified are comparatively minor and can be satisfactorily mitigated by way of condition and through adherence to the measures set out in the submitted documentation. The residual impacts arising are not considered to be significant having regard to the relatively low ecological value of the existing habitats.

7.9. Other Issues:

7.9.1. The Loss of Agricultural Lands:

A number of third-party observers have asserted that the subject site is inappropriate for the development of a solar farm on the basis that it will result in the loss of good quality / highly productive arable and pastoral farmland. These concerns would seem to stem from the UK's 'Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems' (BRE, 2014) (since withdrawn) which stated that large scale ground mounted solar PV arrays should ideally utilise previously developed land, brownfield land, contaminated land, industrial land or 'agricultural *land preferably of classification 3b, 4 or 5'* (deriving from the 'Agricultural Land Classification' applied in the UK). This approach referred to the UK's then 'National Planning Policy Framework' which required the presence of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) to be taken into account alongside other sustainability considerations in the site selection criteria for solar energy development. In effect, it was a preference that solar energy development be directed to agricultural lands of a lower classification (with national policy not normally supporting development on the best agricultural land). However, it should be emphasised that the aforementioned guidance has been withdrawn from use and it is notable that the UK's 'National Policy Statement for Renewable Energy Infrastructure (EN-3)' (November, 2023) has since adopted a more relaxed position by stating that land type should not be a predominating factor in determining the suitability of the site location for solar energy

and that while the use of poorer quality land is preferred to higher quality agricultural land where possible, the development of ground mounted solar arrays is not prohibited on the best and most versatile agricultural land.

- While I would acknowledge the concerns raised, it should be noted at the outset that 7.9.2. Ireland does not employ a comparable grading system for agricultural land and that there is no national guidance or policy in place which would preclude the development of solar farms on agricultural lands currently used for tillage or grazing purposes. Moreover, there is no provision in the current Meath County Development Plan, 2021-2027 which serves to prohibit the development of solar energy on any type of agricultural land nor is there any suggestion that solar energy development should be directed to more marginal or lower quality agricultural lands through the application of some means of sequential test. Policy INF POL 34 of the Plan simply aims to promote sustainable energy sources where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity, natural and built heritage, residential or local amenities. Similarly, Objective INF OBJ 39 states that in order to support Ireland's renewable energy commitments, the development and exploitation of renewable energy sources (including solar) will be facilitated at suitable locations where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county. When taken in conjunction with Objective DM OBJ 76 of the Plan, it is apparent from the foregoing that proposals for solar energy development in the county are to be assessed on their individual merits with no blanket preclusion from a particular land type or use. In my opinion, such an approach would seem reasonable given the array of other constraints which potentially limit the development of solar farms in the county e.g. environmental sensitivities, archaeological & cultural heritage considerations, topographical features, the proximity of sensitive receptors, and the identification of suitable lands in relative proximity to electrical grid infrastructure.
- 7.9.3. By way of further consideration, I am also mindful that it is the policy of the NPF to enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the sustainable diversification of the rural economy into new sectors and. in particular. those with a low or zero carbon

output. In this respect, the proposed development would support economic growth in the rural area through farm diversification as supported by the Development Plan and complies with Objective ED POL 19: '*To support and facilitate sustainable agriculture, agri-food, horticulture, forestry, renewable energy and other rural enterprises at suitable locations in the County*'. It is also worth noting the temporary duration and general reversibility of the development and that the site will still be able to accommodate low intensity grazing with the development in place thereby maintaining some element of agricultural use.

- 7.9.4. Accordingly, notwithstanding that the subject site may constitute higher quality / more productive agricultural land, and having considered the foregoing, with particular reference to the absence of any overriding policy provision at either national or local level which would limit the development of solar energy on certain agricultural land types, I am satisfied that the proposed development is acceptable in principle.
- 7.9.5. Lack of Consultation:

With respect to the concerns raised as regards an alleged lack of public consultation prior to the lodgement of the subject application, I would suggest that such matters are beyond the remit of the Board given that they are not expressly provided for under existing legislative provisions. While documents such as the Irish Solar Energy Association's 'Best Practice Planning Guidance Report for Large Scale Solar Energy Development in Ireland (November, 2023)' advocate the merits of community engagement with regard to the development of solar energy and actually recommend that the developers of solar energy projects engage in active consultation and dialogue with the local community in advance of the submission of a formal planning application, this is not a mandatory requirement. Instead, it must be accepted that the submission of the subject application accorded with the regulatory provisions of the Planning and Development Regulations, 2001, as amended, included those requirements pertaining to statutory public notification, and that any interested parties were entailed to lodge submissions / observations on the application within the appropriate period and subject to the payment of the prescribed fee.

7.9.6. Public Health:

Concerns have been raised as regards a broader lack of information on the longterm impact (if any) of solar farm developments on public health and wellbeing, although it is my understanding that no such concerns arise beyond those potentially attributable to excessive noise levels and / or glint & glare (which are assessed elsewhere in this report). In response, I would suggest that it is of note that the development of solar energy and the attachment of solar panels to individual properties, including dwelling houses, has been mandated by Government with no particular concerns having been expressed as regards any potential public health implications. Indeed, various models of solar energy development are now commonplace throughout Ireland and beyond. In any event, I am not in a position to undertake an extensive in-depth analysis of the wider debate as regards any alleged impact of solar energy development on human health nor do I consider it to be within the remit of the Board to undertake such an exercise. Such matters are more appropriately dealt with by health professionals and by way of Government mandate.

7.9.7. Potential Devaluation of Property:

Observers to the appeal have raised concerns that the proposed development could potentially give rise to a devaluation of property. Any such impacts would be related to other effects in respect of visual amenity, noise etc. and these have been considered elsewhere in this report. In my opinion, no unacceptable or significant effects arise as regards the amenities of property in the vicinity which could be considered to have an adverse impact on property valuations.

7.9.8. Impact on Wild Deer Movements:

Reference has been made to the possibility that the proposed security fencing will introduce a barrier to the free movement of wild deer in the area thereby channelling animals towards the public road and endangering the safety of road users.

7.9.9. While I would acknowledge the legitimacy of the concerns raised, I am unaware of any instances whereby the erection of security fencing as part of a solar energy development in a rural area has given rise to difficulties as regards the movement of deer. Furthermore, given that the erection and maintenance of various boundary treatments (including ditches, hedgerows and stock-proof fencing etc.) is not uncommon in rural areas, the broader adaptability of deer to the introduction of
human activity / interventions, the availability of alternative routes for the movement of deer in the wider area, and the increasing prevalence of solar energy development in rural areas, I am unconvinced that the concerns raised would warrant a refusal of permission.

7.9.10. Impact on Tourism:

County Meath is a well-established tourist destination with offerings such as the Boyne Valley (including the Brú na Bóinne UNESCO World Heritage Site) and it is hoped to develop this sector further through the implementation of initiatives such as the Boyne Valley Tourism Strategy 2016-2020 and Ireland's Ancient East Programme. However, while I would acknowledge the broader aims of the Development Plan to support the development of sustainable tourism, these should not be considered in isolation or to the detriment of the remaining policy objectives of the Plan, including those pertinent to the development of renewable energy. In this regard, given the site location within a landscape of 'Moderate Sensitivity' at a remove from key tourist routes / destinations, I am satisfied that the proposed development would not give rise to any significant adverse impact on tourism in the wider area.

7.10. Appropriate Assessment:

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

The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under Part XAB, Section 177U of the Planning and Development Act, 2000 (as amended) are considered fully in this section.

7.10.2. Background on the Application:

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

- 7.10.3. The applicant has submitted a screening exercise for Appropriate Assessment with the planning application which has been incorporated into Para Nos. 1.45 – 1.52 of the Natura Impact Statement prepared by Neo Environmental and dated 27th April, 2022.
- 7.10.4. This screening exercise has been prepared in line with current best practice guidance and provides a description of the proposed development (by reference to Para Nos. 1.9 1.10 of the NIS) and identifies the potential for significant effects on European Sites within a possible 15km zone of influence of the development and whether the proposed development is likely to have any significant effects upon any Natura 2000 sites found to have connectivity with the proposed development. It has been informed in part by the accompanying Ecological Appraisal (with particular reference to Para Nos. 2.100 2.130).
- 7.10.5. The screening has identified 5 No. Natura 2000 sites within a 15km radius of the application site with connectivity pathways for potential impacts having been found in respect of three of those sites as follows:
 - <u>The River Nanny Estuary and Shore Special Protection Area (Site Code:</u> 004158):

The Athcarne / Balgeeth Stream flows directly through the application site (between Field Nos. 15 & 16 and 17) while the Coolfore Stream flows alongside the northern site boundary (bordering Field Nos. 20, 22 & 26) before subsequently converging with the Athcarne Stream and continuing onwards to meet the River Hurley to the northwest. This river subsequently feeds into the River Nanny thereby providing a **hydrological** connection between the development site and the SPA.

In addition, of the species for which the SPA has been designated, both Oystercatcher and Golden Plover are known to breed in open farmland habitat such as that available at the application site and, therefore, there is the potential for **ornithological** connectivity between the proposed development site and the SPA.

- <u>The Boyne Estuary Special Protection Area (Site Code: 004080):</u>

Upon review of the qualifying interests for which the SPA has been designated, Oystercatcher, Golden Plover and Lapwing are known to use

open farmland habitat such as that available at the application site. Therefore, there is the potential for **ornithological** connectivity between the proposed development site and the SPA.

- <u>The River Boyne and Blackwater Special Area of Conservation (Site Code:</u> 002299):

Notwithstanding the lack of a hydrological pathway, given the drainage ditches and stream habitats present within the application site and the commuting and foraging capabilities of otter (a qualifying species of the SAC), the potential arises for **ecological** connectivity between the application site and this SAC.

- 7.10.6. With respect to the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), which has been designated as being of special conservation interest for Kingfisher, given that the territory of this species typically covers at least 1km of river (although it can extend over 3-5km depending on food availability), it has been submitted that the separation distance of c. 9km between the application site and the SPA, along with the availability of ample and more suitable habitats for the species in closer proximity to the SPA, there is no likelihood of any ornithological connection between the respective sites. Moreover, given the lack of any known hydrological, ecological or ornithological connectivity, there is no route for the proposed development to have any potential negative impact on the qualifying species of the River Boyne and River Blackwater Special Protection Area (Site Code: 004232),
- 7.10.7. The Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957) is a coastal site which includes most of the tidal sections of the River Boyne, intertidal sand and mudflats, saltmarshes, marginal grassland, and the stretch of coast from Bettystown to Termonfeckin that includes the Mornington and Baltray sand dune systems. It has been designated for a range of habitats, none of which occur within the application site. Having regard to the separation distances involved, there is no ecological or hydrological connectivity between this SAC and the application site.
- 7.10.8. (The Board is advised that the North-West Irish Sea Special Protection Area (Site Code: 004236) is not referenced in the NIS (or the supporting Ecological Appraisal) despite its location c. 13km east-northeast of the application site. The explanation for

this omission is that the aforementioned documents pre-date the designation of the SPA in 2023. The matter is considered further elsewhere in this assessment).

7.10.9. Having reviewed the documentation submitted with the application, and the submissions received, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

7.10.10. Screening for Appropriate Assessment - Test of likely significant effects:

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 a European site(s).

7.10.11. The proposed development is examined in relation to any possible interaction with European sites, i.e. designated Special Conservation Areas (SAC) and Special Protection Areas (SPA), to assess whether it may give rise to significant effects on any European Site.

7.10.12. Brief description of the development:

The applicant provides a description of the project in Para Nos. 1.9 – 1.10 of the NIS and elsewhere, with particular reference to Section 4 of the Planning & Environmental Report. In summary, the proposed development consists of the construction of a solar PV development (with an expected output of up to 85MW Maximum Export Capacity) within a total site area of circa 124.07 No. hectares. It includes for the erection of ground-mounted solar photovoltaic panels set in metal framework racks and assembled in south-facing rows east to west in addition 37 No. inverter / transformer stations, associated cabling and ducting, access / maintenance tracks, security fencing, and CCTV cameras. An integral part of the design of the proposed development from a flood risk management perspective is the surface water drainage strategy which provides for the implementation of a Sustainable Drainage System, the design of which will limit the rate of surface water discharge to that of the pre-development site.

7.10.13. The application has been accompanied by a Planning & Environmental Statement, Ecological Appraisal (including a Biodiversity Management Plan), Landscape Visual Appraisal (with an accompanying Landscape and Ecology Management Plan), Flood Risk & Drainage Impact Assessment, Construction Traffic Management Plan, Outline Construction Environmental Management Plan, Noise Impact Assessment, Glint and Glare Assessment, and an Archaeology & Architectural Heritage Impact Assessment. Additional details (including an updated Landscape and Visual Impact Appraisal, Noise Impact Assessment, Glint and Glare Assessment, and Biodiversity Management Plan) were received by the Planning Authority in response to a request for further information.

- 7.10.14. The proposed development site is located in a predominantly rural area characterised by an undulating drumlin landscape where the primary land use is agriculture as typified by a well-managed patchwork of pastoral fields interspersed with intermittent instances of individual farmsteads and rural housing. It extends across a series of 26 No. agricultural fields, the majority of which are set as pasture and bounded by a combination of mature hedgerow, tree lines, ditches, field drains, and post & wire fencing. The western extent of the site area is bisected east to west by Local Road No. L5009 which extends between two junctions with the R152 Regional Road. A larger proportion of the site is bisected north to south by an unnamed minor roadway which extends eastwards from its junction with Local Road No. L5009 with the remainder of the development site located to the north of this same roadway. The site topography varies between c. 45-98m AOD and is dominated by a shallow valley centred approximate midways within the site with the lands rising to the east and west of same. The Athcarne Stream flows northwards through this valley lands before converging with the Coolfore Stream (which passes alongside part of the northern site boundary) and continuing onwards to the River Hurley to the northwest. Access to the site will be obtained via 4 No. access points along the local road network (comprising 3 No. new accesses and 1 No. existing access arrangement).
- 7.10.15. Within the supporting Ecological Appraisal, the habitats survey (Fossitt) conducted on 1st, 6th, 8th & 9th July and the 19th, 20th, 23rd & 24th August, 2021 identified the following 14 No. habitat types within the survey boundary:
 - Arable Crops (BC1)
 - Buildings and Artificial Surfaces (BL3)
 - Improved Agricultural Grassland (GA1)
 - (Mixed) Broadleaved Woodland (WD1)

- (Mixed) Broadleaved / Conifer Woodland (WD2)
- Tilled Land (BC3)
- Wet Grassland (GS4)
- Scrub (WS1)
- Immature Woodland (WS2)
- Watercourses (FW2)
- Drainage Ditches (FW4)
- Hedgerows (WL1)
- Treelines (WL2)
- Stone Walls & Other Stone Work (BL1)
- 7.10.16. The application site is predominantly composed of 'Improved Agricultural Grassland' which is of low ecological value, although it has some potential for foraging birds, badger and Irish hare. A lesser extent of the site area comprises 'Tilled Land' and 'Arable Crops' which is similarly of low ecological value, although the latter could provide some potential for foraging birds, badger and Irish hare. The minor area of 'Wet Grassland' on site is also of a lower ecological value yet offers some foraging potential. Those areas of '(Mixed) Broadleaved Woodland', '(Mixed) Broadleaved / Conifer Woodland' and 'Immature Woodland' potentially provide bat roosting and bird nesting opportunities as well as foraging opportunities for many species. The 'Treelines' also offer bat roosting, bird nesting, and foraging opportunities while providing good connectivity to the wider environs, which is of particular importance for bats, to the effect that they are of a moderate / high ecological value locally. The 'Hedgerows' provide nesting and foraging opportunities for birds and bats and also provide shelter to mammals while simultaneously acting as a wildlife corridor for many species. While 'Scrub' areas are of a lower ecological value they nevertheless afford some nesting and foraging opportunities and shelter to mammals. The 'Watercourses' (i.e. the Coolfore and Athcarne Streams) and the 'Drainage Ditches' act as a wildlife corridor for many species and while the former habitat is wide enough to support commuting / foraging otter, the drainage ditches would only support commuting otters. The remaining 'Buildings and Artificial Surfaces' and 'Stone Walls & Other Stone Work' are of a low ecological value.

- 7.10.17. Although the Ecological Appraisal has acknowledged the potential suitability of the site for certain protected or notable species (please refer to Table 2-9: 'Summary of Biological Records'), none were observed during the field surveys, although badger setts are known to have been present in the immediate vicinity. In specific reference to the possible presence of bats on site, while support is lent to the broader suitability of the area for certain species by reference to the results of a search using the National Biodiversity Data Centre's 'Bat Suitability Index' (Table 2-10) as well as known records of bat species in the area, and although existing treelines, hedgerows, drainage ditches and watercourses offer commuting pathways to the wider landscape, there is limited foraging potential for bats within the site area. Furthermore, no direct evidence of bats was identified on site during the habitats survey.
- 7.10.18. No formal bird surveys were carried out as part of the Ecological Appraisal, however, incidental observations of bird species during a walkover survey of the site noted the presence of common farmland bird species as well as buzzards flying overhead. Nevertheless, the application site provides suitable foraging and nesting habitat that could support a large array of bird species, including those protected / notable bird species recorded in Table 2-9 (all of which feature in the 'red' or 'amber' lists of the Birds of Conservation Concern in Ireland, 2020-2026).
- 7.10.19. No reptiles or amphibians were identified during the survey work, although it is acknowledged that the site offers potential habitat for Common Frog. Similarly, no notable invertebrate species were identified on site.
- 7.10.20. No rare or protected flora species are present on site nor were any instances of invasive plant species (as listed in Part (1) of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011, as amended) recorded. The habitats on site are generally of an agricultural nature as characterised by pasture and cropping activities.
- 7.10.21. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:
 - Surface water related pollution during the construction phase as a result of sediment-laden run-off and pollutants (hydrocarbons and other contaminants)

entering the Coolfore and Athcarne Streams which drain to the Hurley River before feeding into the River Nanny and subsequently flowing into the River Nanny Estuary and Shore Special Protection Area and the North-West Irish Sea Special Protection Area.

 The disturbance of habitats and / or species within the River Boyne and River Blackwater Special Area of Conservation, the River Nanny Estuary and Shore Special Protection Area and / or the Boyne Estuary Special Protection Area during the construction and / or operational phases of the development.

7.10.22. Submissions and Observations:

All submissions and observations received from interested parties are set out in Sections 3.0 & 6.3 of this report.

7.10.23. European Sites:

The development site is not located in or immediately adjacent to a European site. The closest European sites are the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299) and the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), approximately 9.3km north-northwest of the site. The River Nanny and Estuary Special Protection Area (Site Code: 004158) is located approximately c. 11.8km northeast of the site. Table 1-1 of the applicant's screening exercise (as per the NIS) considers the potential interactions of the proposed development with Natura 2000 sites. 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.

Qualifying Interest /	Distance from	Connections	Considered
Special Conservation	the proposed	(source-	Further in
Interest	development	pathway-	Screening
		receptor)	
Kingfisher (Alcedo	c. 9.3km north-	None - There is	No.
atthis) [A229]	northwest of the	no hydrological,	
	site.	ornithological or	
		ecological	
		connectivity	
	Qualifying Interest / Special Conservation Interest Kingfisher (Alcedo atthis) [A229]	Qualifying Interest / Special Conservation InterestDistance fromMarcellowthe proposed developmentKingfisher (Alcedoc. 9.3km north- northwest of the site.	Qualifying Interest / Special ConservationDistance from the proposed development receptor)ConnectionsInterestdevelopment receptor)pathway- receptor)Kingfisher (Alcedoc. 9.3km north- northwest of the site.None - There is no hydrological, ecological or iconnectivity

Area (Site Code:			between the	
004232)			sites.	
River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299)	Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraximus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91EO] Lamperta fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter)	c. 9.3km north- northwest of the site.	Ecological Connectivity	Yes.
	[1355]			
River Nanny Estuary and Shore Special Protection Area (Site Code: 004158)	Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]	c. 11.8km northeast of the site.	Ornithological connectivity. Hydrological connectivity, c. 19km downstream from the application site.	Yes.

Boyne Estuary	Shelduck (Tadorna	c. 13.4km	Ornithological	Yes.
Special Protection	tadorna) [A048]	northeast of the	connectivity.	
Area (Site Code: 004080)	Oystercatcher (Haematopus ostralegus) [A130]	site.		
	Golden Plover (Pluvialis apricaria) [A140]			
	Grey Plover (Pluvialis squatarola) [A141]			
	Lapwing (Vanellus vanellus) [A142]			
	Knot (Calidris canutus) [A143]			
	Sanderling (Calidris alba) [A144]			
	Black-tailed Godwit (Limosa limosa) [A156]			
	Redshank (Tringa totanus) [A162]			
	Turnstone (Arenaria interpres) [A169]			
	Little Tern (Sterna albifrons) [A195]			
	Wetland and Waterbirds [A999]			
Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957)	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140]	c. 14.3km northeast of the site	None.	No.
	Annual vegetation of drift lines [1210]			

North-West Irish	annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco- Puccinellietalia maritimae) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Red-throated Diver	c. 13km east-	Hydrological	Yes.
Sea Special Protection Area (Site Code: 004236)	(Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Common Scoter (Melanitta nigra) [A065]	northeast of the site.	connectivity.	

Little Gull (Larus		
minutus) [A177]		
Black-headed Gull		
(Chroicocephalus		
ridibundus) [A179]		
Common Gull (Larus		
canus) [A162]		
Lesser Black-backed		
[A183]		
Herring Gull (Larus		
argentatus) [A184]		
Great Black-backed		
Gull (Larus marinus)		
[A187]		
Kittiwake (Rissa		
tridactyla) [A188]		
Roseate Tern (Sterna		
Common Torn (Storna		
hirundo) A193]		
Arctic Tern (Sterna		
paradisaea) [A194]		
Little Tern (Sterna		
albifrons) [A195]		
Guillemot (Uria aalge)		
[A199]		
Razorbill (Alca torda)		
[A200]		
Puffin (Fratercula		
arctica) [A204]		

7.10.24. By way of further explanation, while the River Boyne and River Blackwater Special Protection Area (Site Code: 004232) is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive, the likelihood for the proposed development to have any significant effect upon its qualifying interest can be discounted on the basis that Kingfisher territories typically cover at least 1km of river (although they can extend over 3-5km depending on food availability) whereas there is a separation distance of over 9km between the application site and the SPA. There is also ample suitable habitat for the species in much closer proximity to the SPA. Furthermore, the development site is located within a different river catchment (the Nanny-Delvin WFD catchment) than the European Site (the Boyne WFD catchment). Accordingly, there is no hydrological, ornithological or ecological connectivity between the respective sites.

- 7.10.25. Similarly, given the location of the Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957) within a different river catchment than the development site, the physical separation distance involved, and the dilution offered by the downstream distance and the Irish Sea, there are no pathways between the project and the qualifying interests of that European site. Moreover, the Boyne Coast and Estuary Special Area of Conservation is a coastal complex that supports eight habitats listed on Annex I of the E.U. Habitats Directive, none of which occur within the application site boundary. Therefore, it can be concluded that there are no hydrological or ecological connectivity pathways between the respective sites.
- 7.10.26. With respect to the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), while there is no hydrological connectivity between it and the application site due to their respective locations in different river catchments (thereby negating the likelihood of any impacts on the following qualifying interests: Alkaline fens; Alluvial forests with Alnus glutinosa and Fraximus excelsior; River Lamprey and Salmon), given the commuting and foraging capabilities of otter (the remaining species for which the SAC has been designated) and the existing drainage ditches and stream habitats within and / or bounding the application site, the potential for the presence of this species on site cannot be dismissed to the extent i.e. there is a possible ecological connection between the application site and the River Boyne and River Blackwater Special Area of Conservation.
- 7.10.27. In relation to the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158), there is potential hydrological connectivity with the application site given

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that the Coolfore and Athcarne Streams drain to the Hurley River before feeding into the River Nanny and subsequently flowing into the SPA. In addition, there is the potential for an ornithological connection to the application site given that the SPA has been designated for certain bird species (Oystercatcher and Golden Plover) which are known to breed in open farmland and thus could potentially utilise habitats available within the site boundary.

- 7.10.28. Of the species for which the Boyne Estuary Special Protection Area (Site Code: 004080) has been designated, the Oystercatcher, Golden Plover and Lapwing also have the potential to utilise habitats available within the site boundary with the result that there is the potential for an ornithological connection between the SPA and the application site.
- 7.10.29. In reference to the North-West Irish Sea Special Protection Area (Site Code: 004236), potential hydrological connectivity occurs with the application site as the Coolfore and Athcarne Streams ultimately drain to the Irish Sea via the Hurley River and the River Nanny.
- 7.10.30. Conservation objectives have been included for the SACs and the SPAs to maintain or restore the various qualifying interests by reference to a list of specified attributes and targets.
- 7.10.31. For the purposes of completeness, I would advise the Board that I have also given consideration to Natura 2000 sites located outside of the 15km radius, however, in light of the separation distances involved and as no potential pathways for any significant impacts can be established, it can be reasonably concluded that there is no potential for those Natura 2000 sites to be impacted by the subject development.

7.10.32. Identification of Likely Effects:

The construction phase of the proposed development will involve earthworks and the disturbance of soil etc. which gives rise to the possibility of indirect negative impacts on downstream water quality through the accidental release of suspended solids / sediment etc. or the discharge of hydrocarbons and / or other pollutants by way of contaminated surface water runoff. In this regard, drains or watercourses can act as a hydrological conduit for contaminated surface waters between development sites and any downstream Natura 2000 sites with any associated deterioration in water quality having a potentially negative impact on downstream aquatic habitats and / or

species identified as qualifying interests / special conservation interests. Given that the proposed development site is hydrologically linked to the River Nanny Estuary and Shore Special Protection Area and the North-West Irish Sea Special Protection Area via the Coolfore and Athcarne Streams (which drain to the Hurley River before flowing into the River Nanny and onwards to the SPAs), the potential arises for any contaminated surface waters released during the construction phase to enter the aquatic environment thereby resulting in a deterioration in downstream water quality. Consequential negative effects are set out in Table 1-2 of the Natura Impact Statement and include a degradation of the aquatic environment (including the 'Wetlands' habitat which is a qualifying interest of the River Nanny Estuary and Shore SPA) and a reduction in water quality which could detrimentally impact on prey species for those birds designated as qualifying interests of the River Nanny Estuary and Shore Special Protection Area and the North-West Irish Sea Special Protection Area.

- 7.10.33. In light of the potential ecological connectivity between the application site and the River Boyne and River Blackwater Special Area of Conservation due to the possibility that otter (a species for which the SAC has been designated) may utilise the drainage ditches and streams within and / or bounding the application site for commuting and foraging purposes, the proposed construction works could potentially result in the loss of supporting habitat or the disturbance of this species.
- 7.10.34. Several of the qualifying bird species for which the River Nanny Estuary & Shore SPA and the Boyne Estuary SPA have been designated (i.e. Oystercatcher, Golden Plover and Lapwing) have been known to utilise farmland and grassland habitats such as those presently available on site. The loss of such habitats consequent on the proposed development could therefore potentially have an adverse impact on those bird species.

7.10.35. Cumulative / In-combination Effects:

It is not envisaged that the proposed development will give rise to any in-combination / cumulative effects.

7.10.36. Mitigation Measures:

No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

7.10.37. Screening Determination:

The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act, 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) could have a significant effect on European Site Nos. 002299, 004158, 004080 & 004236 in view of the sites' Conservation Objectives and Appropriate Assessment (and submission of a NIS) is therefore required.

7.10.38. Stage 2: Appropriate Assessment:

The subject application has been accompanied by a 'Natura Impact Statement: Hawkinstown Solar Farm' (dated 27th April, 2022 and prepared by Neo Environmental Ltd.) which examines and assesses potential adverse effects of the proposed development on the River Boyne and River Blackwater Special Area of Conservation; the River Nanny Estuary and Shore Special Protection Area; and the Boyne Estuary Special Protection Area.

- 7.10.39. (For the purposes of clarity, it should be noted that the following assessment takes account of the North-West Irish Sea Special Protection Area which has not been considered in the submitted NIS or the supporting Ecological Appraisal due to those documents pre-dating its designation in 2023).
- 7.10.40. The NIS has been informed by a desk-top analysis of various source material as well as a series of field surveys, including the following:
 - 'Technical Appendix 2: Ecological Appraisal: Hawkinstown Solar Farm' prepared by Neo Environmental Ltd. which includes an on-site habitat survey that details the results of walkover studies of the site undertaken on the 1st, 6th, 8th & 9th July and the 19th, 20th, 23rd & 24th August, 2021 with a view to assessing its ecological conditions and identifying the habitats / floral assemblages present.
- 7.10.41. The NIS includes a description of the project and the receiving environment and is stated to be based on standard methods and current best practice guidance, including 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' (DoEHLG, 2009) and EC (2018) 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC'. It outlines the

characteristics of the relevant designated sites before subsequently setting out the potential impacts arising from the construction and operation of the development on those European Sites. Details are also provided of those mitigation measures necessary to ensure that any direct or indirect impacts on the Natura 2000 sites are abated. No likely significant cumulative or in-combination impacts are anticipated.

7.10.42. The NIS thus concludes as follows:

'It is concluded that the proposed development will not adversely affect the integrity of any Natura 2000 designated site due [to] measures inaugurated during the design phase, following relevant guidance to prevent pollution during the construction and operation phases and its distance from the designated sites. Pollution prevention measures, proposed drainage management and waste management measures have been outlined in Section 7 of this report.

As a precaution, mitigation measures have been outlined within this report due to connectivity present between the application site and some Natura 2000 sites. With the implementation of these mitigation measures, any potential impacts / effects from the proposed development will be further reduced.

With the implementation of these measures, along with ongoing monitoring to ensure compliance, it is considered that the proposed development will not have a significant effect upon any qualifying features, and therefore the integrity, of the Natura 2000 sites connected with the application site.

It is therefore considered that the next stage (Stage 3: Assessment of Alternatives) of the Appropriate Assessment is not required'.

7.10.43. Having reviewed the documentation available to me, I am satisfied that the information allows for a complete assessment of any adverse effects of the development on the conservation objectives of the European sites listed above, alone, or in combination with other plans and projects.

7.10.44. Appropriate Assessment of Implications of Proposed Development:

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

- 7.10.45. I have relied on the following guidance as part of this assessment:
 - Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service (2009).
 - EC (2002) Assessment of plans and projects significantly affecting Natura
 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4)
 of the Habitats Directive 92/43/EC.
 - Managing Natura 2000 sites, The provisions of Article 6 of the Habitats Directive 92/43/EEC, EC (2018).

7.10.46. European Sites:

The relevant European sites subject to Stage 2 Appropriate Assessment are as follows:

- The River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299)
- The River Nanny Estuary and Shore Special Protection Area (Site Code: 004158)
- The Boyne Estuary Special Protection Area (Site Code: 004080)
- The North-West Irish Sea Special Protection Area (Site Code: 004236)
- 7.10.47. A description of the sites and their Conservation and Qualifying Interests/Special Conservation Interests is set out in the 'Impact Assessment' of the NIS as well as the screening assessment set out above. I have also examined the Natura 2000 data forms where relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website (www.npws.ie).

- 7.10.48. The main aspects of the proposed development that could adversely affect the conservation objectives of European sites include:
 - Surface water related pollution during the construction phase as a result of sediment-laden run-off and pollutants (hydrocarbons and other contaminants) entering the Coolfore and Athcarne Streams which drain to the Hurley River before feeding into the River Nanny and subsequently flowing into the River Nanny Estuary and Shore Special Protection Area and the North-West Irish Sea Special Protection Area.
 - Habitat disturbance / species disturbance arising from the potential for mobile species of the River Boyne and River Blackwater Special Area of Conservation, to utilise habitats within the development site. Additionally, qualifying bird species from the River Nanny Estuary and Shore Special Protection Area and / or the Boyne Estuary Special Protection Area could potentially utilise habitats within the development site.

7.10.49. Evaluation of Likely Effects:

The River Boyne and River Blackwater Special Area of Conservation:

- 7.10.50. Details of this site and its qualifying interests are set out in Table 1-1 (and Para Nos.
 1.63 1.69) of the NIS with the pertinent conservation objectives aiming to maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or Annex II species for which the site has been selected.
- 7.10.51. Given the location of the application site outside of the SAC, the proposed development will not directly impact on the Natura 2000 site through the loss or fragmentation of those habitats listed as qualifying interests. Furthermore, although *'Alkaline fens'* and *'Alluvial forests with Alnus glutinosa and Fraximus excelsior'* are stated to be sensitive to degradation due to development, neither of these habitats occur proximate to the application site. The lack of any hydrological connectivity between the application site and the SAC also excludes the possibility that any surface water related pollution attributable to the proposed development could adversely impact on those habitats. By extension, in the absence of any hydrological pathway, no impacts arise as regards those qualifying interests which are confined to the aquatic environment i.e. River Lamprey and Salmon.

- 7.10.52. With respect to otter as the remaining qualifying feature of the SAC, this is a highly mobile species capable of commuting large distances over land and holding territories of up to 40km². Therefore, whilst there is no hydrological connectivity between the application site and the SAC, and although no evidence of otter activity was recorded during the walkover surveys, as the existing drainage ditches and streams within and / or bounding the site offer suitable habitat for commuting or foraging otter, the potential presence of the species on site cannot be dismissed.
- 7.10.53. The construction phase of the proposed development will include some tree felling, earthworks and the disturbance of soil etc. which gives rise to the possibility of negative impacts on water quality within aquatic habitats on or bounding the site through the accidental release of suspended solids / sediment etc. or the discharge of hydrocarbons and / or other pollutants by way of contaminated surface water runoff. Any such reduction in water quality could also potentially result in the loss of habitat for otters.
- 7.10.54. Table 1-2 of the NIS details common water pollutants and their effect on the aquatic environment with activities such as landworks involving topsoil removal and excavation (including tree felling) generating silt and bentonite (very fine silt) which can adversely affect the aquatic environment such as through a reduction in water quality, the clogging of fish gills, the covering of aquatic plants, and detrimental impacts on aquatic invertebrates which in turn can lead to a reduction in prey for species (including otter) and a degradation of habitat. In addition, the release of cementitious materials or concrete wash water from construction activities (such as the piling for the solar panels) can give rise to changes in water chemistry that are toxic to fish and other wildlife thereby impacting directly on aquatic species (including otter) or indirectly through loss of prey resources. Similarly, the discharge of hydrocarbons and / or other pollutants can adversely affect the aquatic environment through its toxicity level, the consequential reduction in water quality, the removal of dissolved oxygen, and the suffocation of aquatic life.
- 7.10.55. Further construction impacts that could potentially adversely affect otter include the direct loss of habitat, the fragmentation of habitats and the broader disturbance arising during construction activities.

- 7.10.56. Paras. 1.78 1.81 of the NIS summarise the mitigation measures to be employed as part of the proposed development in order to ensure that any direct or indirect impacts on the River Boyne and River Blackwater Special Area of Conservation SAC are abated. These are elaborated further in Table 1-10 and Para Nos. 1.121 1.166 of the document.
- 7.10.57. At the outset, the case has been put forward that the proposed development incorporates several integral design measures that are intended to mitigate the potential for any deterioration of water quality in local watercourses attributable to construction related pollution. In this respect, it has been submitted that no works will occur within or directly adjacent to any waterways with a 5m protection buffer to be provided from field drains and a 10m buffer from the Coolfore and Athcarne Streams.
- 7.10.58. The proposed development also incorporates a Sustainable Drainage System (SuDS) in order to minimise the effects from pollution. In this regard, the 'Flood Risk and Drainage Impact Assessment' (Technical Appendix 4) included with the application details the surface water drainage strategy for the proposed development which seeks to provide a sustainable and integrated surface water management scheme for the entire site that will ensure there is no increase in downstream flood risk by managing discharges from the development to the local water environment in a controlled manner. Additional drainage measures include the retention & reinstatement of the grass cover adjacent to and under the solar panels in order to maximise bio-retention, the use of swales (with check dams as required) or similar to collect runoff from the access tracks with discharge to ground through percolation, and the provision of percolation areas / soakaways to accommodate runoff from the transformer stations. The SuDS features are to be implemented during the construction phase of the project (with swales to be planted with vegetation to protect against soil erosion) and maintained throughout the lifespan of the development.
- 7.10.59. Further mitigation measures for the protection of watercourses are to be implemented during the construction phase, the majority of which are considered to represent best practice. These are set out in the NIS, the accompanying 'Ecological Appraisal', and the 'Outline Construction Environmental Management Plan', and will include, inter alia, the following:

- Best practice pollution prevention measures to ensure that cementitious material / concrete wash water does not enter the aquatic environment.
- The storage of plant and equipment on dedicated hardstanding within the construction compound to minimise the risk of pollution caused by any leakages. Drip trays will also be used where appropriate.
- Plant and equipment to be regularly checked to ensure their correct operation and to verify no leakages.
- All plant and equipment to utilise biodegradable hydraulic oil.
- The provision of appropriate spill kits.
- Refuelling and maintenance of vehicles and plant to occur in designated areas of hardstanding.
- Diesel fuel to be stored in a bunded diesel bowser within a fenced-off area of the construction compound.
- All fuels, oils and hydrocarbons to be suitably stored
- Wastewater from the welfare facilities for construction staff to be discharged to a sealed containment system and disposed of by a licensed waste contractor.
- All excavation and earthworks to be carried out in accordance with 'BS6031:2009 Code of Practice for Earthworks'. Soil handling extraction and management to be undertaken with regard to best practice guidelines such as the 'Guidance on Waste Management (Management of Waste from the Extractive Industries) Regulations, 2012'.
- 7.10.60. Operations and activities that have the potential to impact on the water environment are also to be subject to regular monitoring throughout the construction phase to ensure compliance with planning conditions and environmental regulations. Such monitoring would normally be included as best practice and does not imply any uncertainty regarding adverse effects or the effectiveness of any mitigation measure.
- 7.10.61. With respect to the potential loss or fragmentation of habitat suitable for otter, there will be no significant loss of core otter habitat as the proposed design includes for a 5m buffer from all field drains and 10m buffers from streams within the site boundary.

Moreover, the loss of habitats under the development footprint will be relatively low and primarily consist of agricultural grassland which is of low value to otter. The implementation of the accompanying Biodiversity Management Plan will also serve to enhance the habitats on site post-construction.

- 7.10.62. Although no evidence of otter was recorded during the habitat survey, it is accepted that the drainage ditches and streams on site offer potential commuting and foraging habitat for this species. Therefore, while the survey findings would support the conclusion that the proposed development will not lead to the disturbance of otter, given that the species is present in the wider area and is also highly mobile, the mitigation measures proposed are intended to ensure that if the baseline were to differ at the time of construction, no significant effect to otter would occur. Accordingly, it is proposed to undertake a pre-commencement survey of the site for otter prior to construction in order to confirm the presence / absence of otter holts and / or resting places within close proximity of the application site. If holts / resting places are found to be present, additional measures will be required to prevent significant impacts for otter.
- 7.10.63. Other good practice measures include the securing / covering of excavations to avoid any accidental trapping and the provision of escape routes as required.
 Mammal gates within the perimeter security fencing will also accommodate the movement of otters through the site.
- 7.10.64. With the implementation of the integral design measures, best practice pollution prevention measures, and the remainder of the proposed mitigation measures, it has been submitted that the proposed development will not result in any significant adverse effects for any of the qualifying interests of the SAC.
- 7.10.65. The River Nanny Estuary and Shore Special Protection Area:

Details of this site and its qualifying interests are set out in Table 1-1 of the NIS with the pertinent conservation objectives aiming to maintain or restore the favourable conservation condition of the habitats and the bird species for which the site has been selected.

7.10.66. Given the location of the application site outside of the SPA, the proposed development will not directly impact on any Natura 2000 site through the loss or fragmentation of habitats listed as qualifying interests. However, by applying the source-pathway-receptor model of risk assessment, there is potential hydrological connectivity with the application site given that the Coolfore and Athcarne Streams drain to the Hurley River before feeding into the River Nanny and subsequently flowing into the SPA. There is also a potential ornithological connection to the application site given that the SPA has been designated for certain bird species (Oystercatcher and Golden Plover) which are known to breed in open farmland and thus could potentially utilise habitats available within the site boundary.

- 7.10.67. At this point, it should be reiterated that the construction phase of the proposed development will include earthworks and the disturbance of soil etc. thereby giving rise to the possibility of indirect negative impacts on downstream water quality within the SPA through the accidental release of suspended solids / sediment etc. or the discharge of hydrocarbons and / or other pollutants by way of contaminated surface water runoff. Moreover, the preceding paragraphs have already set out how water pollutants can affect the aquatic environment, including through a reduction in prey species for qualifying interests and / or a degradation of habitat. In this regard, the implementation of the integral design measures, best practice pollution prevention measures, and the proposed mitigation measures will ensure that the impact of any contamination of waters will be negligible and that the proposed development will not result in any significant adverse effects. In addition, the hydrological separation distance between the development site and the uppermost limit of SPA along with the likely dilution factors involved, will avoid any significant adverse effects on qualifying species and habitats within the SPA.
- 7.10.68. With respect to the development site itself, this is stated to be sub-optimal for the majority of the qualifying species associated with the SPA as the lands are predominantly composed of agricultural grassland. However, Oystercatcher and Golden Plover (qualifying interests of the SPA) have been known to utilise farmland and grassland habitats.
- 7.10.69. In relation to the Oystercatcher, it is considered unlikely that this species would avail of the grassland habitats within the application site as its core foraging range is less than 5km whereas the SPA is located in excess of 11km from the development site (with the coastal habitats at an even greater distance). Moreover, the availability of more suitable habitat closer to the SPA would obviate the need to commute to the development site. Accordingly, it is considered unlikely that Oystercatcher would

utilise habitats on site and thus the loss of same as a result of the proposed development would have a negligible effect on that species.

- 7.10.70. Although Golden Plover has been known to winter on inland farmland habitats, no sightings or field signs of this species were recorded during the walkover surveys. Similarly, the NBDC has no record of this species occurring within 2km of the application site. Therefore, given the availability of habitats more suited to the species closer to the SPA, and as its core foraging distance is less than 5km, it is considered unlikely that Golden Plover would travel in excess of 11km to utilise habitats on the application site.
- 7.10.71. In addition to the foregoing, given the availability of other suitable habitat in the wider landscape, it has been submitted that the potential for noise disturbance of qualifying species associated with the SPA during the construction and post-construction phases will not be significant.
- 7.10.72. The Boyne Estuary Special Protection Area:

Details of this site and its qualifying interests are set out in Table 1-1 of the NIS with the pertinent conservation objectives aiming to maintain or restore the favourable conservation condition of the habitats and the bird species for which the site has been selected.

- 7.10.73. In the interests of avoiding unnecessary repetition, cognisance should be taken of the similarities shared with the preceding analysis as regards the River Nanny Estuary and Shore Special Protection Area in that the proposed development will not directly impact on any Natura 2000 site through the loss or fragmentation of habitats listed as qualifying interests, although concerns arise as regards potential hydrological connectivity and a possible ornithological connection given that the SPA has been designated for certain bird species (Oystercatcher, Golden Plover & Lapwing) which are known to utilise open farmland habitats such as those available within the site boundary.
- 7.10.74. It has already been indicated in the preceding paragraphs how water pollutants can affect the aquatic environment and downstream qualifying interests and that the implementation of the integral design measures, best practice pollution prevention measures, and further mitigation measures will ensure that any contamination of waters will be negligible thereby avoiding any significant adverse effects. Similarly,

the hydrological separation distance between the development site and the uppermost limit of SPA along with the likely dilution factors involved, will avoid any significant adverse effects on qualifying interests within the SPA.

- 7.10.75. With respect to those species with a potential ornithological connection to the application site, for the purposes of conciseness, the Board is reviewed to the preceding assessment carried out for the River Nanny Estuary and Shore Special Protection Area as regards Oystercatcher and Golden Plover, the conclusions of which can also be applied this instance.
- 7.10.76. In relation to Lapwing, although this species can utilise farmland habitats, no sightings or field signs of it were recorded during the ecological surveys while the NBDC has no record of Lapwing occurring within 2km of the application site. It is further considered that given the availability of habitats more suited to the species closer to the SPA, and as its core foraging range is c. 5km, it is unlikely that Lapwing species would travel in excess of 13km to utilise habitats on the application site.
- 7.10.77. Furthermore, in light of the level of other suitable habitat in the wider landscape, the potential for noise disturbance of qualifying species associated with the SPA during the construction and post-construction phases is not expected to be significant.
- 7.10.78. The North-West Irish Sea Special Protection Area:

This SPA constitutes an important resource for marine birds and has been designated for the protection of specified species of marine birds of special conservation interest. Details of the site and its qualifying interests are set out in the previous screening exercise with the pertinent conservation objectives aiming to maintain or restore the favourable conservation condition of the bird species for which the site has been selected.

7.10.79. The proposed development site is hydrologically linked to the North-West Irish Sea Special Protection Area via the Coolfore and Athcarne Streams (which drain to the Hurley River before flowing into the River Nanny and onwards to the SPA) and thus the potential again arises for any contaminated surface waters released during the construction phase to result in a deterioration in downstream water quality. Consequential negative effects include a degradation of the aquatic environment and a reduction in water quality which could adversely impact on prey species for those marine birds designated as qualifying interests of the SPA. However, the

implementation of the integral design measures, best practice pollution prevention measures, and further mitigation measures will ensure that any contamination of waters will be negligible thereby avoiding any significant adverse effects.

7.10.80. Furthermore, having regard to the nature, scale and design of the proposed development, the separation distances involved, the dilution offered by the downstream distances and the Irish Sea, the lack of suitable habitat within the development site, and the availability of suitable habitat elsewhere between the project and the protected sites, it is considered that the proposed development will not result in any significant adverse effects for any of the qualifying interests of the SPA.

7.10.81. Proposed Mitigation Measures:

On balance, I would accept that the implementation of best practice and adherence to the mitigation measures set out in the NIS will serve to avoid any impacts on down-gradient water quality as well as the disturbance of habitats and / or species of qualifying interest thereby ensuring that there are no significant adverse effects on protected sites or species within Natura 2000 sites.

7.10.82. Cumulative and In-Combination Effects:

Cumulative / in-combination effects have been considered in the submitted NIS with regard to the National Planning Framework, the Regional Spatial and Economic Strategy for the Eastern and Midland Region, the Meath County Development Plan, and surrounding developments. No likely significant cumulative effects on any Natura 2000 sites are expected as a result of the proposed development.

7.10.83. In this regard, having considered the planning history of the surrounding area, I am satisfied that the proposed development, subject to suitable mitigation, would not be likely to give rise to any in-combination / cumulative impacts with other plans or projects which would adversely affect the integrity of any Natura 2000 site and would not undermine or conflict with the Conservation Objectives applicable to same.

7.10.84. Integrity Test:

Following the Appropriate Assessment and the consideration of mitigation measures, I can ascertain with confidence that the project would not adversely affect the integrity of the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158), the Boyne Estuary Special Protection Area (Site Code: 004080) and the North-West Irish Sea Special Protection Area (Site Code: 004236) in view of the Conservation Objectives of these sites. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

7.10.85. Appropriate Assessment Conclusion:

The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act, 2000, as amended.

- 7.10.86. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on four European Sites, the River Boyne and River Blackwater Special Area of Conservation, the River Nanny Estuary and Shore Special Protection Area, the Boyne Estuary Special Protection Area and the North-West Irish Sea Special Protection Area. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of these European sites in light of their conservation objectives.
- 7.10.87. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of the River Boyne and River Blackwater SAC, the River Nanny Estuary and Shore SPA, the Boyne Estuary SPA or the North-West Irish Sea SPA, or any other European site, in view of the sites' Conservation Objectives.
- 7.10.88. This conclusion is based on:
 - A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the aforementioned designated sites.
 - Detailed assessment of in-combination effects with other plans and projects including historical projects, current proposals, and future plans.
 - No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Boyne and River Blackwater SAC.

- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Nanny Estuary and Shore SPA.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Boyne Estuary SPA.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the North-West Irish Sea SPA.

8.0 **Recommendation**

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

9.0 **Reasons and Considerations**

- 9.1. Having regard to:
 - the national and regional policy objectives in relation to renewable energy,
 - the provisions of the Meath County Development Plan 2021 2027,
 - the nature, scale, extent and layout of the proposed development,
 - the documentation submitted with the application and appeal, including the Natura Impact Statement, Planning and Environmental Statement, Ecological Appraisal, Construction Traffic Management Plan, Outline Construction Environmental Management Plan, Glint and Glare Assessment, Landscape Visual Appraisal, Flood Risk and Drainage Impact Assessment, Noise Impact Assessment, and Archaeology & Architectural Heritage Impact Assessment,
 - the mitigation measures proposed for the construction and operation of the proposed development,
 - the topography of the area,
 - the existing hedging and screening on the site, and
 - the pattern of development in the area,

it is considered that, subject to compliance with the conditions set out below, the proposed development would support national and regional renewable energy policy objectives, would not conflict with the provisions of the operative Meath County Development Plan 2021 – 2027, would not seriously injure the visual amenities of the area or the residential amenities of property in the vicinity, would not be likely to have significant effects on the environment or the ecology of the area, would be acceptable in terms of traffic safety and convenience, and would make a positive contribution to Ireland's renewable energy requirements. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars received by the planning authority on the 8th day of December, 2022 and the 21st day of December, 2022, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of the development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

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

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

3.

a) The permission shall be for a period of 35 years from the date of the commissioning to final decommissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the

end of the period, planning permission shall have been granted for their retention for a further period.

- b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.
- c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

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

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

Reason: In the interest of clarity.

5. All of the environmental, construction and ecological mitigation measures, as set out in the Planning and Environmental Statement, Natura Impact Statement, Ecological Appraisal, Construction Traffic Management Plan, Outline Construction Environmental Management Plan, Flood Risk and Drainage Impact Assessment, Noise Impact Assessment, Glint and Glare Assessment, Landscape Visual Appraisal, Archaeology & Architectural Heritage Impact Assessment, and other plans and particulars submitted with the application, as amended by the further plans and particulars received by the planning authority on the 8th day of December, 2022 and the 21st day of December, 2022, shall be implemented by the developer in conjunction with

the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order.

Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.

6.

- a) Existing field boundaries shall be retained (other than those specified for removal in the application documentation), notwithstanding any exemptions available and new planting shall be undertaken in accordance with the Landscape & Ecology Management Plan received by the Planning Authority on the 8th day of December, 2022.
- b) Details for the provision of additional screen planting in the locations identified in the 'Glint and Glare Assessment' received by the Planning Authority on the 8th day of December, 2022 shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.
- c) All landscaping shall be completed in accordance with the details received to the written satisfaction of the planning authority. Any trees or hedgerow that are removed, die or become seriously damaged or diseased during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.
- d) The Biodiversity Management Plan shall be implemented in accordance with the details received to the written satisfaction of the planning authority.

Reason: In the interests of biodiversity, the visual amenities of the area and the residential amenities of property in the vicinity.

7.

- a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
- b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.

- c) Cables within the site shall be located underground.
- d) The inverter/transformer stations shall be dark green in colour.

Reason: In the interests of clarity and of visual and residential amenity

8. Within 12 months of the commencement operations at the development, an operational glint and glare assessment shall be carried out and submitted for the written agreement of the planning authority to confirm compliance with the conclusions of the 'Glint and Glare Assessment' received by the Planning Authority on the 8th day of December, 2022. Where necessary, additional mitigation measures shall be undertaken to achieve compliance in this regard, details of which are to be agreed in writing with the planning authority.

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

 Prior to the commencement of construction on site, details of the structures of the security fence showing provision for the movement of mammals at regular intervals along the perimeter of the site shall be submitted for prior approval to the planning authority.

Reason: To allow wildlife to continue to have access across the site, in the interest of biodiversity protection.

- 10. Pre-development testing shall be carried out as follows:
 - a) The applicant is required to engage the services of a suitably qualified archaeologist to co-ordinate the mitigation proposals contained in the report for test excavations and archaeological monitoring of groundworks resulting from construction methods (Technical Appendix 3: Archaeology & Architectural Heritage Impact Assessment). Geophysical survey will take place in advance of testing where appropriate. No sub-surface works shall be undertaken in the absence of the archaeologist without his / her express consent.
 - b) The archaeologist is required to notify the National Monuments Service of the Department of Housing, Local Government and Heritage in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work.

- c) The archaeologist shall carry out any relevant documentary research and will excavate test trenches at locations chosen by the archaeologist, having consulted the proposed development plans.
- d) The archaeological method statement for the mitigation will be agreed with the National Monuments Service of the Department of Housing, Local Government and Heritage in advance of the commencement of construction. The method statement will include a schedule of the details of the nature, location and extent of all groundworks and topsoil stripping that may be approved.
- e) Having completed the work, the archaeologist shall submit a written report to the Planning Authority and to the National Monuments Service of the Department of Housing, Local Government and Heritage for consideration.
- f) Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and / or monitoring may be required and the National Monuments Service of the Department of Housing, Local Government and Heritage will advise the Applicant / Developer with regard to these matters.
- g) No site preparation or construction work shall be carried out until after the archaeologist's test excavation report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the National Monuments Service of the Department of Housing, Local Government and Heritage.

Reason: To ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.

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

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

12. Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services and shall otherwise comply with Technical Appendix 4: Flood Risk and Drainage Impact Assessment submitted to the planning authority on 27th day of April, 2022.

Reason: In the interest of environmental protection and flood prevention.

13. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

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

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the

Development Contribution Scheme made under section 48 of the Act be applied to the permission.

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.

Robert Speer Senior Planning Inspector

21st August, 2024
Appendix 1 - Form 1 EIA Pre-Screening [EIAR not submitted]

An Bord Pleanála			ABP-316078-23			
Case Reference						
Proposed Development Summary		pment	Permission for a period of 10 years to construct and complete a Solar PV Energy Development with a total site area of 124.07 hectares, to include: Inverter / Transformer Substations, modules, solar PV ground mounted on support structures, temporary construction compounds, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works relating to the access of the site. The solar farm will be operational for 35-years.			
Developn	nent Ado	dress	Hawkinstown, Riverstown (EI Meath.	awkinstown, Riverstown (ED Ardcath), Scatternagh, Balgeeth, Ardcath, Co. 1eath.		
1. Does 'proj	s the pi ect' foi	roposed dev r the purpos	velopment come within t ses of EIA?	the definition of a	Yes	✓
(that is involving construction wo surroundings)			orks, demolition, or interventions in the natural		No	No further action required
2. Is the Plan exce	e prope ning ai ed any	osed develo nd Developi v relevant qu	opment of a class specif ment Regulations 2001 (Jantity, area or limit whe	ied in Part 1 or Part as amended) and d ere specified for tha	t 2, Sc loes it it clas	hedule 5, equal or s?
Yes		Class	EIA Mandatory EIAR required		andatory equired	
No	~		Proceed to Q.3		ed 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		Conclusion
				(if relevant)		
No			N/A		No El <i>A</i> Exami	AR or Preliminary nation required
Yes	✓	Class 1 of Par (a) Proje rural land ho	t 2 of Schedule 5: ects for the restructuring of Idings, where the length of		Proce	ed to Q.4

	field boundary to be removed is above 4km, 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.	
	Class 10 of Part 2 of Schedule 5: Infrastructure Projects: (dd) All private roads which would exceed 2000m in length.	

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

Inspector: _____ Date: _____

Appendix 2 - Form 2

EIA Preliminary Examination

An Bord Pleanála Case Reference	ABP-316078-23
Proposed Development Summary	Permission for a period of 10 years to construct and complete a Solar PV Energy Development with a total site area of 124.07 hectares, to include: Inverter / Transformer Substations, modules, solar PV ground mounted on support structures, temporary construction compounds, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works relating to the access of the site. The solar farm will be operational for 35-years.
Development Address	Hawkinstown, Riverstown (ED Ardcath), Scatternagh, Balgeeth, Ardcath, Co. Meath.

The Board carries out a preliminary examination [Ref. Art. 109(2)(a), Planning and Development Regulations 2001 (as amended)] of, at least, the nature, size or location of the proposed development having regard to the criteria set out in Schedule 7 of the Regulations.

In addition, the Planning and Development Regulations (Amendment) (No. 2) Regulations, 2023 (S.I. 383 of 2023) require from 1st August, 2023 that projects for the restructuring of rural land holdings are screened for the purposes of Environmental Impact Assessment as follows:

Amendment of Schedule 5, Part 2, Class 1 of the Principal Regulations is amended:

- (a) By the insertion of the following before paragraph (c):
- (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.

Also relevant to this application is Schedule 5, Part 2, Class 10. Infrastructure Projects

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

	Examination	Yes/No/
		Uncertain
Nature of the Development Is the nature of the proposed development exceptional in the context of the existing environment?	The proposed solar farm has a stated site area of c.124.07 Ha. While the area involved is comparatively large, the provision of solar farm developments in rural landscapes is well established and increasingly commonplace in terms of rural diversification as evidenced by nearby examples. There are several examples of existing and permitted solar farms along with associated electrical infrastructure (such as substations) in the wider rural area.	No.
	The site comprises a series of agricultural field enclosed by hedgerows and used for pasture or arable cropping. The surrounding area is primarily agricultural and dominated by an undulating rural landscape with the site being characteristic of the broader 'Central Lowlands' Landscape Character Area which is deemed to be of 'High Value', 'Moderate Sensitivity' & 'Regional Importance' in the Development Plan. Many of the fields in the area are enclosed by mature hedgerow and tree lines. Although the proposed solar development will extend across much of the site area, the extent of hedgerow boundary removal is minimal and not exceptional in the context of this rural area. The development will also be screened in part through the retention and reinforcement of existing boundary hedgerows with further mitigation provided by additional landscaping.	
Will the development result in the production of any significant waste, emissions or pollutants?	The solar photovoltaic panels will be set within galvanised metal framework racks anchored to ground by shallow piles avoiding the need for concrete works. The cells will be in an elevated position to allow for airflow around the modules to avoid overheating; to provide safe clearance for sheep to graze beneath the panels; and to encourage vegetation growth below the panels. While some comparatively minor excavations will	No.

	 be required for the construction of associated electrical infrastructure, including the inverter / transformer stations, this will be limited in extent with the majority of the site remaining available for vegetative growth and agricultural or biodiversity applications. The Outline Construction Environmental Management Plan states that ground disturbance will be limited to c. 46,000m² or c. 3.7% of the site area. Excavated material will be used to backfill trenches and to reinstate the construction compound with the remainder used in the regrading of the site, particularly along access tracks and to level off uneven area and in the creation of the landscaped berms. Any excess soil is expected to be minimal and will be recycled off-site at a licensed facility. There will be limited waste generated during the construction and decommissioning phases and this will be segregated, stored and disposed of appropriately. Best practice measures will be put in place during the construction and decommissioning phases. The drainage strategy set out in the Drainage Impact Assessment details the SuDS measures to be implemented on site, the design of which will limit surface water discharge from the proposed development to that of the predevelopment greenfield site. Construction, operation and decommissioning of the development will not result in any significant emissions to the environment. 	
Size of the Development Is the size of the proposed development exceptional in the context of the existing environment?	The scale of the proposed development is exceptional in the broader context of surrounding development but is not exceptional when compared to other solar energy developments, including those permitted in the wider area.	No.

Are there significant cumulative considerations having regard to other existing and/or permitted projects?	It is not considered that there is any likelihood of significant cumulative effects with other existing or permitted developments in the area.	No.
Location of the Development Is the proposed development located on, in, adjoining or does it have the potential to significantly impact on an ecologically sensitive site or location, or protected species?	The proposed development is not located on, in or adjoining any ecologically sensitive site or location. Adherence to best practice construction and pollution prevention measures will avoid any wider impacts. There are indirect hydrological connections to the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158) and the North-West Irish Sea Special Protection Area (Site Code: 004236). There is also ornithological connectivity with the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158) and the Boyne Estuary Special Protection Area (Site Code: 004080). In addition, ecological connectivity arises with the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299). Following an Appropriate Assessment, it has been concluded that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of any of these European sites, in view of their Conservation Objectives.	No.
Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area, including any protected structure?	 The Ecological Impact Assessment has determined that the short-term disturbance attributable to the proposed development will not be significant on ecological features if best practice and recommended mitigation are implemented. There are no adjoining protected structures. An Archaeology and Architectural Heritage Impact Assessment adequately addresses issues in this 	No.

		regard. Boundary removal will not significantly	
		impact on cultural heritage.	
		The proposed development does not have the potential to significantly affect other significant	
		environmental sensitivities in the area.	
Part 2, C	lass 1.		
Agricultu and Aqua	ure, Silviculture aculture:	The extent of hedgerow removal is not significant and generally amounts to that required for the	No.
(a) Restr rural lan	ucturing of d holdings:	proposed access arrangements onto the public rod and the internal access tracks. The extent of	
i)	is the amount of field boundary to	hedgerows removal is minor (with a net loss of 102.5m) and is significantly below the threshold	
	be removed greater than 4km,	of 4km for EIA reinserted by the 2023 amending regulations and is also 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. Significant effects on biodiversity are not likely as a result of such works.	
ii)	the amount of re-contouring to take place above 5 hectares,	The development does not involve any significant excavation or the recontouring of the lands by, for example, the levelling off of hills or by the infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. Although the proposed the inverter & transformer cabinets etc. will be sited on areas of hardstanding which will require some localised levelling and foundation works, such works are not significant in nature and would not constitute recontouring of the lands.	
iii)	is the area of lands to be restructured by removal of field boundaries above 50 hectares.	The development does not involve any restructuring through the removal of field boundaries above 50 hectares. Although the site area extends to 124.07 Ha, the development itself only involves the removal of a minor amount of boundary hedging and does not involve any notable restructuring.	

Part 2, Class 10. Infrastructure Projects (dd) All private roads which would exceed 2000 metres in length.	The proposed development includes for the construction of approximately 5.6km of access tracks. Notably, these are referred to as 'internal access tracks' in the statutory notices whereas the submitted drawings and the Planning & Environmental Report use the terms 'roads' and 'tracks' interchangeably. Given that the purpose of these tracks is not for the conveyance of people and vehicles, per se, except as necessary in connection with the construction, maintenance and decommissioning of the development, and in keeping with previous Board decisions I am satisfied that the proposed access tracks are materially different from a 'road' as defined under the Roads Act, 1993. Therefore, the proposed access tracks do not fall to be considered under Class 10(dd) of the Regulations and thus do not require EIA	No.		
Conclusion				
There is no real likelihood of significant effects on the environment. EIA not required.				
EIA not required.				