

Inspector's Report ABP-318091-23

Development Solar farm and associated site development

works.

Location Brownstown, Kilkenny, Co. Kilkenny

Applicant(s) Elgin Energy Services Limited

Planning Authority Kilkenny County Council

Planning Authority Ref. 22/644

Type of Application Permission

Planning Authority Decision Grant Permission with Conditions

Type of Appeal Third Party

Appellant(s) Sustainability 2050 c/o John Callaghan

Observer(s) N/A

Date of Site Inspection 7th June 2024

Inspector Tomás Bradley

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1.0 Introduction

Under the provisions of Section 37 of the Planning and Development Act 2000, as amended (PDA), Sustainability 2050 c/o John Callaghan (the appellant) have appealed the decision of Kilkenny County Council (KCC) to grant planning permission subject to no. 24 conditions for a solar farm and. associated site development works in the townland of Brownstown, Co. Kilkenny. The applicant is Elgin Energy Services Limited ('the applicant').

For information, a timeline of the planning application is set out below.

Table 1: Timeline of the Planning Application		
Planning Application lodged to KCC	29/09/2022	
Further Information Request by KCC	22/11/2022	
Further Information Response to KCC	06/07/2023	
Decision of KCC	29/08/2023	
Appeal Received	28/09/2023	
Response to Appeal by Planning Authority	23/10/2023	
Response to Appeal by Applicant	20/10/2023	

The Board should note that the planning application the subject of this appeal included significant further information and revised plans. The Board should ensure it is reading the most recent plans submitted to KCC in the response to further information dated the 6th of July 2023.

2.0 Site Location and Description

The site, based on the revised plan, is approximately 89.5 hectares (ha) is located in the townland of Brownstown, Co. Kilkenny which is approximately 3 kilometres (km) north-east of the Kilkenny City Centre.

This solar farm site is accessed by the L2613 Local Road which is links to the N77 National Road at the New Orchard Road Roundabout. The L2613 is generally bounded by hedgerows and a grass margin.

The solar farm site is made up of agricultural lands (of four landowners) predominantly in grass and arable crops with hedgerows and some mature trees at field boundaries. There are existing agricultural tracks throughout the solar farm site as well as a high voltage electricity circuit. The solar farm site is generally flat and undulating.

There are several agricultural complexes located close the solar farm site, as well as single dwellings on local roads in proximity to the site. There are no protected structures (RPS) or National Inventory of Architectural Heritage (NIAH) records within the site. There are nine Sites and Monuments Records (SMR) throughout the site including five fulachta fia, one enclosure, one ringfort, one structure and associated cultivation ridges.

The site is not contained within or adjacent to any National or European protected sites. The River Barrow and River Nore Special Area of Conservation (SAC) is located approximately 1.3 km south-west from the proposed development site. The River Nore Special Protection Area (SPA) is located approximately 2.7 km west from the proposed development at the closest points.

There are several watercourses running through the proposed development site, namely the Brownstown River (Pocoke) and Sandfordscourt River. Parts of the site has a medium and low probability of fluvial flooding in the present day. The site is outside the extent of the Catchment Flood Risk Assessment and Management (CFRAM) Programme.

3.0 Proposed Development

3.1. Development Description

The proposed development is a solar farm and associated site development works consisting of:

- for a solar farm and storage park consisting of linear arrays of solar photovoltaic (PV) panels mounted on steel supported structures with associated cabling and ducting (including underground cable connection to the proposed on-site 110kV substation);
- 50 no. inverter substations, a storage park (including 55 no. containers with cells and 15 no. containers with PCS and inverters);
- perimeter fencing;
- 6 no. palisade double security gates;
- 3 no. temporary construction compound/material storage area;
- 2 no. steel storage containers;
- 25 no. turning bays, on-site pole mounted CCTV cameras (at 60 locations);
- and 2 no. temporary construction stage Moby Dick type wheel wash systems (with over ground settlement tank); and
- all associated ancillary development services and works.

Please note that this description was revised following a Response to Further Information. This included a reduction in the application boundary to 89.5 ha, reduction in the no. of palisade double security gates (2 no. required), reduction in the no. of CCTV cameras (54 no. required), the removal of 1 no. proposed site entrance, the relocation of the Horizontal Directional Drilling (HDD) point, the inclusion of archaeological exclusion zones and buffer zones, the relocation of inverters, access tracks, compounds, turning bays and perimeter fencing.

The revised design has resulted in a revised layout for the overall development including a revised relocation for associated transmission infrastructure.

The appropriate period sought for the proposed development is 10 years and it is requested that the operational period be 40 years. Once commenced, it is expected that the overall construction phase will take approximately 14 months.

It is noted that an application to obtain permission for the development of associated transmission infrastructure will form a separate future consents process.

3.2. Documents supporting the Proposed Development

The following documents were submitted to KCC in the first instance in support of the proposed development:

- Statutory Particulars (Application Form, Public Notices (Newspaper & Site),
 Letters of Consent)
- Drawing Pack including Schedule of Drawings
- Planning & Environment Considerations Report (PECR) including inter alia
 - Potential Grid Connection Options
 - Construction & Environmental Management Plan (CEMP)
 - Decommissioning Report
 - Invasive Species Management Plan
 - Cultural Heritage Impact Assessment
 - Glint and Glare Report
 - Landscape and Visual Assessment including Landscape Mitigation Plan and Photomontages
- Natura Impact Statement (NIS) (September 2022)

It is noted that following a further information request of 22nd of November 2022, a response was received on the 6th of July 2023. This included the following information:

- Revised Drawings
- Revised NIS (July 2023)
- Watercourse Crossings Method Statement
- HDD Method Statement
- Waste Management Plan
- Sanitary Waste Plan
- Revised CEMP
- Archaeological Impact Assessment (AIA)

4.0 Planning Authority Decision

A notification of the decision to grant planning permission was issued by KCC on the 29th of August 2023 with no. 24 conditions attached.

4.1. Planning Authority Reports

The <u>Planning Report dated 21st of November 2022</u> sets out the site description, planning history, pre-planning meeting, the various internal and external referrals in respect of the planning application. It lists the names and dates of the submissions made by third parties and summarises their grounds. It goes on to carry out an assessment including a substantive discussion the development plan policy, planning guidelines and international and national policy. Several topics assessed including landscape and visual, glint and glare, residential amenity, traffic and access, water, natural and built heritage.

The report concludes with a Request for Further Information in respect of three items on issues relating to: appropriate assessment, archaeology, design specification, flood risk, environmental protection and access.

A <u>second Planning Report dated 28th of August 2023</u> details the response of various internal and external reports to the response to further information. No internal departments had any objections subject to a range of conditions. On the basis of this assessment the report concludes that the proposed development is acceptable subject to no. 24 conditions. This report, prepared by the Executive Planner, was countersigned by the Acting Senior Planner.

4.2. Prescribed Bodies

4.2.1. Inland Fisheries Ireland

The Inland Fisheries Ireland (IFI) note that the proposed development is on Brownstown River. Measures must be taken to protect surface water systems and fisheries during construction. Mitigation measures and adherence to guidelines are required. Only clean water can be discharged. Measures must be taken to minimise environmental impact, including drainage design and sediment control. Removal of invasive species must be managed. Water monitoring and mitigation records must be kept and made available upon request. In case of spills, Inland Fisheries must be notified immediately.

The applicant has consulted with IFI in preparing method statements, IFI is satisfied that the method statements for the proposed water crossings provided meet its requirements for the protection of water quality and aquatic habitats and has been consulted on the location of works on site and the delineation of buffer zones.

In particular, IFI emphasises the importance of profiling bridge surfaces and bridge drainage to ensure surface waters drain away from the watercourse. Raised edging on crossing structures should also prevent the discharge of material from the bridge deck into watercourses.

4.2.2. Department of Housing, Local Government and Heritage (Archaeology)

Following a request for Further Information, an additional geophysical survey (Phase 3) was carried out under Licence No. 22R0159 in areas of the proposed development site that were not previously accessible. This was followed by archaeological testing, under Licence No. 23E0081, of the anomalies identified during all phases of geophysical survey. According to the Archaeological Impact Assessment Report by Liam Coen, 41 archaeological sites or features were identified during archaeological testing.

Therefore, this Department recommends the implementation of the recommendations the establishment of exclusion zones of 10m around areas of known archaeological features, the establishment of buffer zones of an additional 10m within which no penetrative groundworks can take place and that archaeological monitoring of all groundworks outside of the exclusion and buffer zones be carried out under licence to this Department as a Condition. A report containing the results of the archaeological monitoring should be submitted to this Department and the Planning Authority.

It is strongly recommended that the wording of the Archaeological Condition set out in the submission be retained in the grant of permission to ensure that the archaeological requirements are understood and carried out by the relevant professional

4.3. Third Party Observations

There were four observations from third parties in respect of the planning application to KCC. All these submissions are noted.

5.0 Planning History

A review of the KCC Planning Portal and the Board's case files was carried out the on the 5th of June 2024 to collate any relevant, recent (within 10 years) planning history for the site. At the site there was no recent relevant planning history for the subject site, save for the planning application the subject of this appeal.

5.1. Grid Infrastructure

It is noted that in the October 2022 the applicant engaged the Board (Ref: ABP-314909-22) under Section 182A of the PDA to seek a determination for Strategic Infrastructure Development for a 110 kV electrical substation and its grid connection options to the existing transmissions network. At the time of concluding this report the consultation has yet to be concluded.

5.2. Other Developments

There are numerous planning applications around the site in respect of residential, agricultural and commercial developments which is to be expected in a location in close proximity to the Kilkenny urban area. This is noted and considered in the assessment below.

6.0 Policy Context

At a high level, the Board should note several national and regional level policies which are relied on in the assessment below. These include:

- Department of the Environment, Climate and Communications (2024) Climate
 Action Plan (CAP) 2024.
- Southern Regional Assembly (2020) Regional Spatial & Economic Strategy
- for the Southern Region (RSES).
- Government of Ireland (2019) Project Ireland 2040: National Planning Framework (NPF).
- Department for Communications, Energy and Natural Resources (2015)
 Ireland's Transition to a Low Carbon Energy Future 2015-2030

These are all directly and indirectly supportive of renewable energy projects which extends to solar energy.

The Kilkenny City and County Development Plan 2021-2027 (KCCDP) is the relevant plan for the subject site. Its policies are detailed below.

6.1. Zoning Objective

There is no specific zoning objective for the site.

6.2. Specific Objectives in respect of Solar Farms

Chapter 11 Renewable Energy of the KCCDP has the following overarching strategic aim:

To generate 100% of electricity demand for the County through renewables by 2030 by promoting and facilitating all forms of renewable energies and energy efficiency improvements in a sustainable manner as a response to climate change in suitable locations having due regard to natural and built heritage, biodiversity and residential amenities.

It is further stated in Section 11.6.5 *Solar Energy Development Management Guidance* that the "best locations for Utility Scale Solar PV (USSPV) are: *Agricultural Lands*" and the Planning Authority will:

....support and facilitate the generation of renewable energy from Utility Scale Solar Photo- Voltaic (USSPV) where solar arrays can be so positioned that, when considering Development Management Guidance, they will not have an excessively adverse impact on the landscape, either individually or in combination.

In the Section 11.6.5.1 *Utility Scale Solar PV (USSPV)* it is stated that the impact of solar farms on the landscape be considered with due cognisance of the following matters set out in the table below.

Table 2: Relevant Considerations of the KCCDP

Detail

- Individual and cumulative 'zones of visual influence' identifying where the solar arrays will
 be visible from. Sequential effects on visibility need to be considered where an observer
 moves through a landscape and sees two or more schemes. Common routes through a
 landscape (e.g. major roads; long distance paths or cycle routes) can be identified as
 'journey scenarios' and the proposals impact on them can be assessed;
- In addition to the proposal under consideration, consider photomontages to show all
 existing and consented solar farms, including those for which planning applications have
 been submitted,
- If necessary to undertake a glint and glare assessment, including cumulative effectives of all existing and consented solar farms. Glint and Glare is linked to the characteristics of some solar energy technologies such as older solar PV panels or concentrated solar power (CSP) where energy is focussed on a central boiler which drives a steam turbine.
- At the most detailed level, description and assessment of cumulative impacts may include the following landscape issues:
 - o scale of development in relation to landscape character or designations,
 - o sense of distance.
 - existing focal points in the landscape,
 - o and sense of remoteness or wildness.
- Proximity of areas of archaeological potential. Any application for a USSPV scheme should at least submit an archaeological assessment predicated on a site walk over and desk research of possible archaeological potential.
- Proximity to sensitive visual receptors, such as those found in heritage landscapes or areas with scenic landscape qualities, including protected views.

A decommissioning statement should be included as a standard component of a planning application for utility scale solar PV. The Council will require a commitment to decommissioning at application stage. A condition to agree decommissioning details will be a consideration during the decision making process.

It should be noted that over time, higher efficiency panels (repowering) during the lifetime of a grant of planning permission may need to be installed. This should be considered in all applications and as long as the physical characteristics or the planning impacts of the development are not materially different from the original (i.e. reflectivity, sun path tracking etc), such replacements can be conditioned subject to consideration by the Planning Authority.

6.3. Specific Objectives in respect of Rural Diversification

Chapter 7 Rural Development of the KCCDP notes that "in transitioning to a low carbon economy in line with Government policy, future diversification and adaptation to new energy technologies is seen as an important mechanism to achieve diversification".

It is an objective of the Council to enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT based industries and those addressing climate change and sustainability in line the NPF.

6.4. Other relevant Policies

The KCCDP contains a range of policy objectives across a number of topics. This includes protection for designated as well as non-designated sites and environmental receptors. These are all noted.

7.0 The Appeal

7.1. Grounds of Appeal

There is one third party appeal in respect of this file from Sustainability 2050 c/o John Callaghan. The appellant has not requested an oral hearing. It requests the planning application be refused. The detailed grounds are set out in Table 3.

Enclosed in the appeal was copies of:

- Teagasc (undated) Strategic Plan to Support Native Protein Production;
- European Parliamentary Research Service (2023) EU Protein Strategy
 Briefing;
- European Commission (2022) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - EU Solar Energy Strategy.

The appellant provided a volume of information setting out statements on European and domestic policy in respect of climate and energy, and agriculture. This includes *inter alia* details on climate and energy targets, details of solar rooftop initiatives, energy storage.

7.2. Planning Authority Response

The planning authority is satisfied that the matter raised were considering during its assessment of the planning application. Clarification is provided on design/capacity/decommissioning, land use and EU and national targets.

7.3. Observations

An observation was received from the Department of Housing, Local Government and Heritage (Archaeology) on the 28th of November 2023 requesting that Condition 5 of the KCC permission be retain in full to ensure to requirements are understood by relevant professionals

7.4. Applicant's Response

The submission is prepared by Tobin Consulting Engineers on behalf of the applicant. The applicant does not request an oral hearing. It requests the planning application be granted. The response to the appeal is summarised in Table 3.

Table 3: Grounds of Appeal			
Ground	Appellant Submission	Applicant Response	Reference to Inspector Assessment
Compliance with Legal Provisions	The planning authority must assess the application in accordance with the PDA, PDR and relevant European Directives (EIA, Habitats). The appellant raises EIA and the legal case in respect of EIA including Sweetman -v- An Bord Pleanála & Ors [2020] and issues therein.	It is considered that the information in its response (in conjunction with the submitted Planning Application and PECR documents) provides a full, justified and evidence-based rebuttal to the issues raised in the third-party appeal. We believe the information presented in this written response together with the original planning application will provide the Board with all necessary information to determine this appeal.	Section 8.2.2 Compliance with Legal Provisions Section 8.2 Likely Effects on the Environment
Description and Clarification of the Development	The public notices should describe and planning applications should clarify: 1. What range of power outputs expected from the solar panels 2. where the proposed infrastructure would be manufactured. 3. Why solar panels are not being located on roofs of buildings. 4. How output is maximised in winter 5. What is the capacity, technology and efficiency of the battery storage facility. The appellant seeks clarity on: 1. The type of solar technology proposed 2. The separations distances of the panels 3. The total number of panels The appellant is of the view it cannot be specific about total output without this definition and does not understand how the 50MW figure was derived. The submission seeks more clarity and certainty in respect of the proposed development in the context of the Derryadd legal judgement (Sweetman v An Bord Pleanála ([2021] IEHC 390).	The solar cells used will be silicon. This site is approximately 221 acres. 1 MW requires approximately 4 acres per MW. Therefore, 50MW is achievable at current PV technology. The surface area of the solar panels will be 52 ha. The distance between panels will be 2-6m determined by land topography at the time of final design for construction. As noted in the submitted PECR, the storage park will have an ability to store and export 50 MW of power. The storage technology will be lithium ion batteries similar to mobile phones. The chemicals used depends on the type of lithium ion chosen but the chemicals that would always be in any design include lithium. The grounds of appeal regarding Battery Storage (BESS) are unclear. As noted by the appeal BESS of PV power is an essential pillar for maximising PV power penetration. The proposed Brownstown Solar Farm and Storage Park planning application includes for battery storage on site. As noted in the KCCDP the council supports new technologies such as battery storage. Battery storage strengthens energy security by enhancing flexibility and providing contingency in the event of supply disruption. It also facilitates the integration of greater levels of variable renewable energy generation by storing excess output when the renewable resource is plentiful and releasing it for use when required. A storage park (including 55 no. containers with cells and 15 no. containers with PCS and inverters) is needed on site to store the	Section 8.1.3 Description and Clarification of the Development

parporpriate Periods and Decommissioning Period and Periods and Decommissioning Period Periods P	ABP-318091-23	Inspe	ctor's Report	Page 16 of 59
operational lifetime for the development in order to provide low-cost green energy to homes, businesses, and farms in the region. This longer operational lifetime for the development in order to provide low-cost green energy to homes, businesses, and farms in the region. This longer operational lifetime for the development in order to provide to make the project more competitive in the Renewable Energy Support Scheme, which aims to provide price certainty for projects and lower electricity costs for consumers in Ireland. The technology used in solar PV panels has proved significantly, allowing them to remain useful for 40 years or more. Seeking to remove functioning panels predicted by operaturely is not sustainable and adds unnecessary costs to the development. In jurisdictions similar to Ireland, a 40-year operational life of 40 years is beyond the working life of the panels. The appellant useries why the applicant is setting out a decommissioning plan now in advance of its 40 year lifetime. Where will the panels go? What will happen to the transmission infrastructure. What will happen to the transmission infrastructure. What will happen to the transmission infrastructure. The appellant is also of the view that the operational life of the panels. The appellant will be operatively in a panels to be delivered. The appellant is also of the view that the operational life of the panels. The appellant will be operatively in a panels to be delivered. The appellant is also of the view that the operational life of the electricity costs for consumers in Ireland. The technology used in solar PV. The appropriate Periods and lower electricity costs for consumers in Ireland. The technology used in solar PV panels has down and to repeat of the projects construction in the development. In jurisdictions similar to Ireland. The technology used in solar PV panels has proved significantly for projects and the site will be restored to the projects of the projects of the projects construction, and arraying out all activities		For example, 1MW = 2.24 ha in this instance, however in a Co. Meath Solar Farm 1MW = 1.20 ha.	with plans for decommissioning in place. It is acknowledged that during the operational lifetime of the solar farm the proposed	Quarries, Railways and Rooftops
operational lifetime for the development in order to provide low-cost green energy to homes, businesses, and farms in the region. This longer operational life is necessary in order to make the project more competitive in the Renewable Energy Support Scheme, which aims to provide prince certainty for projects and lower electricity costs for consumers in Ireland. The technology used in solar PV panels has improved significantly, allowing them to remain useful for 40 years or more. Seeking to remove functioning panels and Pv panels has improved significantly, allowing them to remain useful for 40 years or more. Seeking to remove functioning panels and electrical adds unnecessary costs to the development. In jurisdictions similar to Ireland, a 40-year operational life of 40 years is beyond the working life of the panels. The appellant salso of the view that the operational life of solar farms is now common practice. The appellant is also of the view that the operational life of 40 years is beyond the working life of the panels. The applicant is setting out a decommissioning plan now in advance of its 40 year lifetime. Where will the panels go? What will happen to the transmission infrastructure. The appleant queries why the applicant is setting out a decommissioning plan now in advance of its 40 year lifetime. Where will the panels go? What will happen to the transmission infrastructure. The appleant is also of the view that the operational life of solar farms is now common practice. The appleant appleant queries why the applicant is setting out a decommissioning plan now in advance of its 40 year lifetime. Where will the panels go? What will happen to the transmission infrastructure. The appleant is also of the view that the operational life of the projects constitution state. They are committed to improving the global environment and have established policies and procedures to maximise recycling and minimise waste during the solar projects constitution, and eventual decommissioning panels will be completely		instance is not using the land efficiently when		
operational lifetime for the development in order to provide low-cost green energy to homes, businesses, and farms in the region. This longer operational life is necessary in order to make the project more competitive in the Renewable Energy Support Scheme, which aims to provide price certainty for projects and lower electricity costs for consumers in Ireland. The technology used in solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved significantly, allowing them to remain solar PV panels has improved		permits for 635 MW of solar PV.	during the further information request stage of the planning process	Section 8.1.1.1 Use of
Appropriate Periods and Decommissioning The appellant is also of the view that the EU cannot wait until 2032 for the solar panels to be delivered. The appellant is also of the view that the EU cannot wait until 2032 for the solar panels. The appellant is setting out a decommissioning of its 40 years if the panels ago? What will happen to the transmission infrastructure. The appropriate Periods and Decommissioning and I is setting out a decommission in frastructure. Appropriate Periods and Decommissioning and I is setting out a decommission in frastructure. Appropriate Periods and Decommissioning plan now in advance of its 40 years if the transmission infrastructure. Appropriate Periods and Decommissioning plan now in advance of its 40 year ilfetime. Where will the panels ago? What will happen to the transmission infrastructure. Appropriate Periods and Decommissioning plan now in advance of its 40 years infetime, the solar panels will be completely dismantled and the site will be restored to its procedures to maximise recycling and minimise waste during the projects construction, operation, and eventual decommissioning. The decommissioning phase will involve disconnecting the PV facility from the power grid, recycling individual PV modules, removing electrical interconnection and distribution cables, recycling support steel and electrical devices, dismantling shelters and concrete bases, and levelling the ground to original contours. Other activities include removing clear spanibidges, security systems, CCTV, fencing, and carrying out all activities in accordance with the planning permission. A Decommissioning PV systems was submitted with the application.				Section 8.1.1 Principle
national grid. The 10-year planning permission is dependent on a grid connection from EirGrid, with the timeframe for this connection	Periods and	development is 10 years The appellants is of the view that the EU cannot wait until 2032 for the solar panels to be delivered. The appellant is also of the view that the operational life of 40 years is beyond the working life of the panels. The appellant queries why the applicant is setting out a decommissioning plan now in advance of its 40 year lifetime. Where will the panels go?	The 10-year planning permission is dependent on a grid connection from EirGrid, with the timeframe for this connection being currently unspecified. The applicant is seeking a 40-year operational lifetime for the development in order to provide low-cost green energy to homes, businesses, and farms in the region. This longer operational life is necessary in order to make the project more competitive in the Renewable Energy Support Scheme, which aims to provide price certainty for projects and lower electricity costs for consumers in Ireland. The technology used in solar PV panels has improved significantly, allowing them to remain useful for 40 years or more. Seeking to remove functioning panels prematurely is not sustainable and adds unnecessary costs to the development. In jurisdictions similar to Ireland, a 40-year operational life for solar farms is now common practice. The applicant has confirmed that at the end of the project lifetime, the solar panels will be completely dismantled and the site will be restored to its preconstruction state. They are committed to improving the global environment and have established policies and procedures to maximise recycling and minimise waste during the project's construction, operation, and eventual decommissioning. The decommissioning phase will involve disconnecting the PV facility from the power grid, recycling individual PV modules, removing electrical interconnection and distribution cables, recycling support steel and electrical devices, dismantling shelters and concrete bases, and levelling the ground to original contours. Other activities include removing clear span bridges, security systems, CCTV, fencing, and carrying out all activities in accordance with the planning permission. A Decommissioning Report detailing the life cycle management and	Appropriate Periods and Decommissioning Section 8.1.4.1 Construction Period Section 8.1.4.2 Operational Period Section 8.1.4.3

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	It is queried whether the proposed development would be more compact on an alternative site. Should the proposed development be co-located near demand and avoid the need for transmission infrastructure. The proposed development should use quarries, railways etc rather than prime agricultural lands. The proposed development is contrary to Irish agricultural policy as it converts lands from protein production to sheep production. Why are 'no-go' areas not identified in Ireland as required by EU strategy.	development will have an impact on agricultural productivity specific to arable crop growing. The location was chosen based on feasibility factors like solar resource assessment and grid connection opportunities. The project aims to reduce reliance on fossil fuels, with an estimated CO2 saving of 13,950 tonnes per year. National planning policies do not specifically exclude solar development on agricultural land, emphasizing the importance of sustainable energy generation networks. Various policies support the development proposal at all levels.	
Reasonable Alternative in Rooftop Solar	The priority of the EU is rooftop solar on dwellings and commercial buildings. EU policy does not favour prioritising large scale solar PV over 'prosuming'.	The submission notes that national policy does not prioritise roof top solar energy over other renewable energy sources, but rather aims to promote a complementary system of renewable energy developments to transition to a low carbon economy. This includes ground mounted utility scale solar PV farms, storage sites, and solar panels on rooftops, along with offshore wind, onshore wind, and bioenergy. The NPF and KCCDP both emphasize the importance of promoting renewable energy use to meet national objectives for a low carbon economy. The KCCDP supports the development of renewable solar photovoltaic energy at appropriate locations. Feasibility restrictions for solar panels on roofs include considerations for building character, location, overshadowing, and potential impact on neighbouring structures. Maintenance and grid connection opportunities must also be considered. With regards to solar farms, the KCCDP states that applications will be assessed on a site-specific basis and in accordance with sustainable development principles. Factors such as proximity to electrical lines and substations, topographical assimilation, and agricultural land use are considered ideal for Utility Scale Solar PV.	Section 8.1.1 Principle of the Development Section 8.1.1.2 Use of Quarries, Railways and Rooftops

8.0 Assessment

Having examined the application and appeal documentation on file and having regard to relevant policy and guidance, it is considered that the key issues in this appeal are those raised in the grounds of appeal namely:

- Principle of the Development
 - Use of Agricultural Lands
 - o Use of Quarries, Railways and Rooftops
- Compliance with Legal Provisions
- Description and Clarification of the Development
 - o Appropriate Periods and Decommissioning
 - Construction Period
 - Operational Period
 - Decommissioning

While not expressly raised as grounds of appeal by the appellant, the following matters are also considered for completeness:

- Landscape and Visual
- Glint and Glare
- Archaeology
- Soils, Water and Flooding
- Flooding
- Biodiversity
- Traffic, Transport & Road Safety
- Residential Amenity

Technical matters relating to EIA and AA will also be addressed:

- Likely Effects on the Environment
- Likely Significant Effects upon a European Site

8.1. Grounds of Appeal

8.1.1. Principle of the Development

The site is located outside zoned lands as such. Such lands have no zoning objective and are not considered in any zoning matrix. In the absence of any specific

zoning objective for the site, the proposed development will be considered on a case-by-case basis having regard to the proper planning and sustainable development of the area and compliance with the relevant policies and objectives, standards and requirements as set out in this KCCDP, guidelines issued in accordance with Section 28 of the PDA and guidance issued by other government bodies. In considering the acceptability of the proposed development, it is also necessary to assess the development in the context of national, regional and local planning policy. It is accepted that there is no national guidance specifically in place for solar farms, however, this does not mean the proposed development cannot be considered further.

Both national (*NPF* National Policy Objective 55) and regional level policy (*RSES* Policy Objective 87, 95, 96, 219), along with local policy in the KCCDP (Chapter 11 Renewable Energy) as set out in Section 6.0 of this report are clear in their support for renewable energy generation, which includes solar energy. The appellant queries whether CAP targets are already met based on CRU figures, however, increasing renewable generation to supply 80% of demand by 2030 requires the continued expansion of solar energy generation as stated in the CAP24 (which has come into effect since the lodgement of this appeal).

Guidance can, therefore, be derived from the prevailing development plan for the area which provides sufficient basis for an assessment. On this basis, continued assessment of the proposed development in subsequent sections is considered appropriate. Within the plan, there is no prescriptive policy prohibiting and/or directing solar farms to certain locations, therefore, the principle of a solar farm on agricultural lands is acceptable subject to compliance with the proper planning and sustainable development of the area and compliance with the plan.

In respect of the relevant issues that require addressing in order to demonstrate compliance with the relevant development plan the Board should be satisfied that the following factors set out under Section 11.6.5.1 *Utility Scale Solar PV (USSPV)* of the KCCDP and replicated in table below are assessed.

Table 4: Range of Issues to consider for Solar Farms		
Provisions Relevant		
	Assessment Section	
Individual and cumulative 'zones of visual influence' identifying where the solar arrays will be visible from. Sequential effects on visibility need to be considered where an observer moves through a landscape and sees two	Section 8.1.5	

or more schemes. Common routes through a landscape (e.g. major roads; long distance paths or cycle routes) can be identified as 'journey	
scenarios' and the proposals impact on them can be assessed;	
In addition to the proposal under consideration, consider photomontages	
to show all existing and consented solar farms, including those for which	Section 8.1.5
planning applications have been submitted, If necessary to undertake a glint and glare assessment, including	
cumulative effectives of all existing and consented solar farms. Glint and	
Glare is linked to the characteristics of some solar energy technologies	Section 8.1.6
such as older solar PV panels or concentrated solar power (CSP) where	
energy is focussed on a central boiler which drives a steam turbine	
At the most detailed level, description and assessment of cumulative	
 impacts may include the following landscape issues: scale of development in relation to landscape character or 	
designations,	Section 8.1.5
sense of distance,	000000110.1.0
 existing focal points in the landscape, 	
and sense of remoteness or wildness.	
Proximity of areas of archaeological potential. Any application for a	
USSPV scheme should at least submit an archaeological assessment	Section 8.1.7
predicated on a site walk over and desk research of possible archaeological potential.	
Proximity to sensitive visual receptors, such as those found in heritage	
landscapes or areas with scenic landscape qualities, including protected	Section 8.1.5
views.	Section 8.1.7
A decommissioning statement should be included as a standard	
component of a planning application for utility scale solar PV. The Council	Section 8.1.4.3
will require a commitment to decommissioning at application stage. A condition to agree decommissioning details will be a consideration during	Section 6.1.4.3
the decision making process.	
It should be noted that over time, higher efficiency panels (repowering)	
during the lifetime of a grant of planning permission may need to be	
installed. This should be considered in all applications and as long as the	Niet velevent
physical characteristics or the planning impacts of the development are not materially different from the original (i.e. reflectivity, sun path tracking	Not relevant
etc), such replacements can be conditioned subject to consideration by	
the Planning Authority.	
·	

I am satisfied that the proposed development is in compliance with Section 11.6.5.1 *Utility Scale Solar PV (USSPV)* of the KCCDP.

The appellant's grounds in respect of agricultural lands and rooftops are addressed below and relate directly to principle of the development.

8.1.1.1. Use of Agricultural Lands

The appellant is of the view that the development of a solar farm on arable lands is inefficient use of resource and inhibits food production, namely proteins. The appellant provides several documents indicating the importance of same, including a document from Teagasc (undated) and the European Parliamentary Research Service (2023). While these documents are noted, neither are guidelines issued in

accordance with Section 28 of the PDA or government policy. Neither provide prescriptive policy on the location of solar farms (or proteins for that matter).

One could provide a myriad of different documents from research groups, state agencies and indeed government that are in favour one type of farming practice or another, but none are prescriptive on location or compel individual landowners to implement it. It is also noted that the EU (2023) document is a 'briefing'. It is clearly stated within in that the document is "prepared for, and addressed to, the Members and staff of the European Parliament as background material to assist them in their parliamentary work". It should not be taken to represent an official position of the European Parliament'.

Regardless, the displacement of the current agricultural practices on lands that make up the site is accepted. The production of tillage will cease as it currently cannot be farmed concurrently with the solar farm. It is also accepted that were the production of proteins viable in this location it would not be workable with the solar farm. However, other livestock such as sheep can be farmed alongside the solar farm.

While not the current (or familiar) agriculture practice, utilising lands for solar farms is an increasingly common agricultural practice as farmers and landowners diversify their business. This diversification in agriculture into renewable energy is supported in development plan policy (Chapter 7 Rural Development of the KCCDP). It is also noted that the solar farm is in effect temporary and the lands could revert to others farming uses if desired. It is therefore the considered that solar farms are an appropriate agricultural land use.

There is no prescription in policy, at any level, on what type of rural practices is required to provide for the diversification or whether lands should be kept in tillage, provide for protein production or be used for solar energy. However, the KCCDP is clear that the "adaptation to new energy technologies is seen as an important mechanism to achieve diversification". It is considered that a solar farm can provide this diversification along with sheep farming and a range of biodiversity measures.

The landowners are entitled to diversify their incomes and work the land in the most resourceful way possible to them subject to relevant consents and licences. The displacement of food production, namely tillage and proteins were it viable, will be negligible in the national context.

It is considered unlikely, that significant impacts would arise on agricultural uses

8.1.1.2. Use of Quarries, Railways and Rooftops

It may be preferable to direct these solar farms to brownfield and industrial land and indeed domestic and agricultural rooftops, to avoid the potential displacement of food production, however, there is similar contest for land use on this type of site. It should also be assumed that promoters of solar energy may be examining this type of site concurrently with agricultural lands – it is not simply one or the other, both are likely required to meet the energy and climate targets set out in CAP24. In any case, there no is prescription in policy to direct solar farms to any location.

The communication from the European Commission (2022) and the emphasis on promoting "quick and massive PV deployment via the European Solar Rooftops Initiative" is noted. However, again this document lacks the legal impetus and is not guidance issued in accordance with Section 28 of the PDA, government policy or other guidance or policy issued by government bodies to guide the location of solar farms. It must be noted that communication from the European Commission is not its policy and any interpretation in a communication is non-binding. In any case, while the communication does place emphasis on rooftop solar, it does not prohibit or inhibit to promotion of 'utility-scale' solar either. Both are required.

The applicant points to an absence of policy to identify 'no-go' areas for solar farms as require by the EU Solar Energy Strategy. The appellant is right to bring this to the attention of the Board. But as the Board will be aware that there are several court cases recently which have provided the basis for considering a proposed development in the absence of national and regional level guidance.

The appellant also raises whether the design of the proposed development is efficient and has carried out a comparison in terms of megawatt output with another solar farm. I am satisfied that the applicant has optimised the design of the proposed development, in the context of the constraints of the site (mainly archaeology, flood risk in particular). There are also a range of other infrastructure to be installed including access tracks and electrical infrastructure. The comparison with the other named solar farm in Co. Meath is immaterial, and each site is designed in the context of its environment.

8.1.2. Compliance with Legal Provisions

The appeal seeks compliance with domestic and European legislation. I am satisfied from the Board's perspective it has adequate information before it in order to comply with the relevant legislative provisions and discharge its statutory function as competent authority.

The submitted documentation as amended by the Response to Further Information are complete and robust and include adequate information. This is particularly the case in respect of EU Directive 2011/92/EU, as amended by Directive 2014/52/EU (EIA Directive) and the EU Birds Directive (79/409/EEC) and EU Habitats Directive (92/43/EEC), as transposed into Irish law.

The documentation prepared by Tobin Consulting Engineers is in line with current best practice guidance and allows for a complete examination and identification of any potential significant effects of the development, alone, or in cumulation with other plans and projects. I am satisfied that authors of each report or chapter therein have suitable professional competencies, qualifications and experience to prepare such documentation in their respective fields.

The appellant specifically raises EIA and Sweetman -v- An Bord Pleanála & Ors [2020] and issues therein. This is addressed in Section 8.2 below. I am satisfied that the proposed development does not require EIA.

8.1.3. Description and Clarification of the Development

The appellant raises a number of issues on the description of the development and seeks clarity on technical nature of the development. Having regard to the relevant legislation, the response by the applicant and my own review of relevant legislation. I am satisfied that the notices appear to be correct and within the prescription required.

While some queries stray beyond what are required to determine such a planning application in accordance with the proper planning and sustainable development of the area. The applicant provided a response, in so far as possible, to the queries in its response to the appeal and further information, which I consider satisfactory.

I do not intend repeating these questions and answers in this report, in the interest of brevity. It is considered the answers are in keeping with reasonable expectations for a solar farm and what a solar farm entails. The overall pattern and scale of

development relative to its environment is an acceptable approach and, again, not atypical of solar farm development

Notwithstanding this, and the ultimate reason for the appellant's questions appears to be that the lack of clarity does not meet the requirement of the Derryadd legal judgement (Sweetman v An Bord Pleanála ([2021] IEHC 390). The appellant is of the view that if the planning application is not specific about total output, the application cannot be specific about the final solar specification and this approach is contrary to the requirement under the Planning and Development Regulations 2001, as amended (PDR) to provide "plans and particulars". However, I am satisfied that the applicant has provided sufficient and detailed drawings which are within the requirement of the PDR. In addition, the PECR has assessed numerous topics in the context of the proposed design. The appellant has not qualified in any detail to the Board how Derryadd judgement is relevant in this context given the applicant is not seeking a design envelope which may be more relevant in the context of a wind farms. The output or export capacity is a largely moot point in this context and is simply a yield as a result of the other details of the design which the applicant has defined.

8.1.4. Appropriate Periods and Decommissioning

8.1.4.1. Construction Period

The applicant has applied for planning permission for an appropriate construction period of 10 years. The applicant has stated that there is uncertainty in respect of the grid connection for the proposed development which is dependent on other external parties, EirGrid and the Electricity Supply Board (ESB). Once commenced, it is expected that the construction phase will take approximately 14 months.

The concern of the appellants relates to the view that the EU cannot wait until 2032 (or 2034 as the case is now) for the solar panels to be delivered. This is a moot point. Whether the appropriate construction period given is 1, 5, 10 or any number of years, it does not compel the applicant to build anything if it so wishes. The granting of a planning permission of any nominal duration would not deliver on EU targets in of itself.

In addition, the fact that the permission is for ten years will not mean, in practice, that the proposed development would only be delivered in year ten. Once a firm grid connection is received it would be in the applicants interest to complete the proposed development as expeditiously as possible to ensure its economic viability. The applicant has stated that the construction phase should only take a year to complete once other licences and agreements are confirmed. This is reasonable.

An appropriate period of ten years is considered appropriate.

8.1.4.2. Operational Period

The applicant has applied for a planning permission for an operational period of forty years. The applicant has stated that such an operational period will increase the economic viability of the proposed development both for the project promoter and the government who may be providing certain supports to the proposed development under the Renewable Energy Support Scheme (RESS).

The appellant is also of the view that the operational life of 40 years is beyond the working life of the panels. The applicant, who is experienced in delivering such developments, is satisfied solar PV panels have improved significantly, allowing them to remain useful for 40 years or more. They are of the view that removing functioning panels prematurely is not sustainable and adds unnecessary costs to the development and indeed the state's in terms of RESS.

On this basis I am satisfised that a 40 year operational period is reasonably required and is the common for solar farms in Ireland. An operational period of forty years is considered appropriate.

8.1.4.3. Decommissioning

The appellant queries why the applicant is setting out a decommissioning plan now in advance of its 40 year lifetime and what happens the generation and transmission infrastructure at this time.

A decommissioning plan is common features in renewable energy projects and is in fact a requirement of the KCCDP which requires such a plan to be 'included as a standard component of a planning application'. KCC require a commitment to decommissioning at application stage and typically attach a condition requirement same.

The applicant has confirmed that at the end of the project lifetime, the solar panels will be completely dismantled and the site will be restored to its preconstruction

state. They are committed to improving the global environment and have established policies and procedures to maximise recycling and minimise waste during the project's construction, operation, and eventual decommissioning. The decommissioning phase will involve disconnecting the PV facility from the power grid, recycling individual PV modules, removing electrical interconnection and distribution cables, recycling support steel and electrical devices, dismantling shelters and concrete bases, and leveling the ground to original contours. Other activities include removing clear span bridges, security systems, CCTV, fencing, and carrying out all activities in accordance with the planning permission. A Decommissioning Report detailing the life cycle management and recycling of PV systems was submitted with the application. It is also noted that the applicant will be legally obliged to dispose of panels using suitably licenced operators and facilities.

A condition for bond to secure satisfactory reinstatement of the site on cessation of the project is recommended. This ensures the financial incentive to ensure the full reinstatement of the site should KCC ever be called on to do so. It should also be noted that the terms of this permission are subject to enforcement under Part VIII of the PDA and KCC may take such further action necessary, through its own enforcement powers and that of the judicial system as required to ensure the permission is complied with including its decommissioning phase.

I note the transmission infrastructure is not included in this planning application and its decommissioning is not under consideration and can be dealt with under that application should it arise.

The response by the applicant is considered satisfactory and clearly answers the questions posed by the appellant.

8.1.5. Landscape and Visual

The solar farm site is located in a landscape type defined as a "transitional zone and landscape area called 'B1 Castlecomer Southern Transition Zone' in the Landscape Character Assessment of the KCCDP. The site is not located in a visually sensitive area, within a protected view or highly scenic/visually pleasing area as set out in Figure 9.2 of the KDCP.

It is accepted that the proposed development will be a novel intervention in the landscape and there are potential for landscape or visual impact impacts. However,

it is considered the solar farm will not become a prominent feature on the skyline and will be visually contained between existing field boundaries. It is reasonably setback from public roadways and screened with existing treelines and hedgerows as well as supplemental planting – such planting will provide screening which may not have been available previously. The impacts will not be significant owing to this landscape mitigation proposed.

There is no specific landscape designation in the area of the solar farm, and, therefore, it is considered the landscape at the location has the capacity to absorb the proposed development in the context of the wider rural area which is already intensively used for agriculture. Solar farms are likely to become increasingly read as part of the rural and urban fabric and diverse agricultural sector, which is well supported by policy. It is also noted that the solar farm is in effect temporary and the lands could revert to current farming practices or be incorporated into the urban area in future, if desired. Overall, it is considered the visibility of the proposed development is unlikely to draw attention to itself and even if noticed, is unlikely to detract from the visual character of the area. The scale of the proposed development is proportionate to the landscape character and designations.

While the proposed development will result in an intensification of a single type of development, this is not necessarily negative. I am of the view that the proposed development, in this instance and at this location, does not markedly affect the prevailing landscape pattern or rural character of the area. In addition, there is already energy infrastructure within the general area. Thus, while it is acknowledged that the proposed development is a change, it is not wholly at odds with the surrounding landscape and uses and will be largely contained within existing landscape pattern.

There is no other significant development in the area of the solar farm that would give rise to a cumulative visual effect. Any sequential effects (where an observer moves through a landscape) can be successfully mitigated. This is the only solar scheme in the area, there is no potential to see two or more schemes. There are no major roads; long distance paths or cycle routes that will be affected by the proposed development. There are no focal points or sense of remoteness/wildness to the site and landscape character at this location. The planned grid infrastructure has been

factored into the assessment and will not give rise to any significant landscape and visual impact either.

As part of the planning application process, careful consideration was given by the applicant to technical, engineering, environmental, health and safety and land use planning viability in the siting and design of the solar farm, and mitigation measures were included where required. It is generally considered that the site is suitable having regard to the environmental and biodiversity value of it. The panel height, landscaping, road access, fencing lighting, security measures, storage and maintained facilities and design in respect of noise receptors is generally acceptable and in keeping with reasonable expectations for a solar farm. The overall pattern and scale of development relative to the landscape is an acceptable approach and, again, not atypical of solar farm development.

On this basis and having visited the site and its surrounding area, the conclusion of the LVIA which is considered reasonable and qualified with both computer-generated ZTV mapping and an assessment of viewshed reference points with photomontages from certain locations. It concluded that the proposed development will not give rise to any significant landscape and visual impacts.

It is noted that there was a reduction in the number solar arrays as a result of the Further Information Response. It is not considered that this materially affects the conclusion of the LVIA.

Overall, it is considered unlikely, that significant impacts would arise in respect of landscape and visual.

8.1.6. Glint and Glare

A Glint and Glare Assessment accompanies the planning application. It concluded that there will not be any significant nuisance effects from glint and glare at dwellings within the study area. There is unlikely to be any hazardous glint and glare effects upon either road or aviation receptors resulting from the proposed development.

However, it is noted that there is currently no regulation or guidance as to acceptable levels of glint and glare effects at receptors in Ireland. The applicant's consultant has established categories of effect to assist in the determination of the impact. I have considered the related documents submitted by the applicant and the methodology they applied and consider it a reasonable approach

The assessment sets out the times of day and months of the year that glint and glare effects could theoretically be experienced at residential and road receptors within the study area. Receptors (houses, urban areas points, aviation and road points) situated to the west of the solar array can only be affected by morning reflectance when the sun is rising in the east. Receptors situated to the east of the site can only be affected by evening reflectance when the sun is setting in the west. In cases where the calculated total minutes per day for a dwelling receptor is less than 15 minutes and for a small number of days, less than 36 days, the magnitude of impact is deemed to be Very Low and has been assigned accordingly

The assessment considered that 67 dwellings were within the study area and following an initial analysis considering the terrain only, it was considered that glint and glare is geometrically possible at 55 dwellings. When factoring in the existing vegetation at the site 1 dwelling (House 51) is likely to have the potential to be materially affected by glint and glare.

The assessment considers this dwelling individually and concludes that the impact will generally be 'low' or 'very-low'. Post mitigation House 51 will have no impact at ground floor level and low impact at first floor, which is acceptable.

In terms of road receptors, route points have been positioned along all the potentially affected roads within the study area. A total of 128 receptor points were examined. The analysis identifies that glint and glare is theoretically possible along 7 route points post mitigation which have been examined further. An assessment of each of the 7 route points was undertaken with consideration of the screening provided by existing and proposed vegetation. The analysis indicates that there is potential for glare for certain timeframes but that the glare is unlikely to present as anything more than fleeting glints to a passing motorist and that any glare will be oblique to the driving direction. A driver travelling along the roads in the study area may glance towards/at the reflecting panel, but their main focus is likely to be on the road ahead.

In terms of aviation receptors, it was determined that there is no potential for hazard glare effects at the aviation receptors.

No cumulative impact arises.

It is noted that there was a reduction in the number solar arrays as a result of the Further Information Response. It is not considered that this materially affects the conclusion of the Glint and Glare Assessment.

Overall, it is considered unlikely, that significant impacts would arise from glint and glare. I am satisfied that any effects can be eliminated once proposed mitigation planting becomes established.

8.1.7. Archaeology

The applicant has submitted archaeological assessment as required by the KCCDP. This assessment was carried out in consultation with the Department of Housing, Local Government and Heritage (Archaeology).

It is noted that following a request for Further Information, an additional geophysical survey was carried out under licence. This was followed by archaeological testing, under licence. According to the Archaeological Impact Assessment Report, 41 archaeological sites or features were identified during archaeological testing. The Department recommends the implementation of the measures outlined in said report. This is considered reasonable.

As well as steering the application through the local authority phase, the Department has written an observation directly to the Board requesting that Condition 5 of the KCC permission be retain in full to ensure to requirements are understood by relevant professionals during the construction phase. This is considered reasonable and it is noted that the applicant is willing to accept such a condition. The Board should note that the condition is bespoke and has been directly copied into the recommendations below and it is advised to maintain it should the Board be minded to grant planning permission.

It is considered unlikely, subject to mitigation measures and conditions, that significant impacts would arise on built heritage and in particular archaeology.

8.1.8. Soil and Water

There are three watercourses located within the subject site. The Sandfortscourt River has two channels that flow in a westerly direction into the subject site through the eastern boundary of the subject site. The two channels merge into one before flowing a short distance and entering the Brownstown River. The Brownstown River

flows in a southerly direction through the subject site. The Brownstown River continues to flow in a southerly direction for approximately 7 km before out falling to the River Nore.

There are potential impacts through disturbance of the site and an increased risk of pollution events to soil and water during construction. While watercourses are present, there is limited instream works proposed. The proposed use of clear span bridges and HDD is noted. The construction phase of the site will involve management of discharges and emissions to ensure they do not cause pollution or deterioration in the status of surface water or groundwater bodies. These impacts will be temporary and short-term and would be controlled as part of best practice construction measures outlined in the CEMP which are undertaken by the applicant which will be in agreement with KCC. There is no likelihood of impacts to geological heritage sites. The construction of the clear span bridges and HDD has the potential for significant impacts. However, this does not involve instream construction works and there will be no direct impacts to the watercourses subject to standard and best practice construction measures. The potential for indirect impacts from runoff of pollutants and sediment is comprehensively mitigated.

It can generally be accepted that the solar farm can provide a number of longer-term benefits to the stream quality as the after use of the site is low-intensity agricultural with reduced nutrient inputs and increased setback form watercourses. In addition, the absence of more intensive farming activity will reduce soil compaction.

It is considered unlikely, subject to mitigation measures, that significant impacts would arise on soils and water.

8.1.9. Flooding

A Flood Risk Assessment (FRA), which included a site-specific hydraulic assessment, is set out in Section 8 of the PECR which concluded that the risk of flooding to the proposed development is minimal, and that the development will not increase the risk of flooding elsewhere. The assessment focused particularly on the watercourses at the site and mapping which shows the subject site is liable to fluvial flooding during the 1 in 100 year flood event. It should be noted, however, that there are no known flood events at the site.

Notwithstanding the hydraulic assessment, the flood risk to the actual development has been largely mitigated by avoidance with the solar panels enjoying a reasonable set back from the banks of the watercourses and flood zones in. Additionally, the applicant is satisfied that the solar panels are flood resilient given they are mounted and raised above the ground. As such the applicant consider them 'water compatible'. The inverters are not located in proximity to the high risk areas. The tracks and clear span bridge crossing the streams on site, may find themselves in flooded in an extreme flooding event, but it is considered that these are not highly vulnerable infrastructure and can be managed in such an event. Any residual risk has been factored into the design.

As the Planning System and Flood Risk Management Guidelines consider water compatible developments appropriate in any flood zone (Flood Zone A, B, C), and the 'highly vulnerable' infrastructure' such as inverter stations are located in Flood Zone C, the Justification Test does not need to be applied.

On the basis of the information provided by the applicant, relevant mapping and data from the OPW and the nature, characteristics of the site and design of the proposed development— this conclusion of the FRA is considered reasonable

It is considered unlikely, that significant impacts would arise from flood risk.

8.1.10. Biodiversity

This section concerns general biodiversity and in particular the potential for impacts on habitats and species which are not qualifying interests of European sites. Matters relating to European Sites will be considered below in Section 8.3. Similarly, issues related to soil and water will be addressed in the subsequent Section 8.1.8 to avoid repetition and duplication. However, it is acknowledged that these topics interact.

The site itself does not have any specific natural heritage designations. There is no Natural Heritage Area of relevance in this instance due to lack of any source-pathway-receptor.

The use of the site by any species is limited given the existing use for agriculture. As a result of the agricultural use the majority of the site is tilled land, arable corps and improved agricultural grassland. Overall, the site is not considered to be environmentally sensitive and has capacity to absorb the proposed development subject to standard and best practice construction and operation measures.

The proposed development will result in the direct loss and potential disturbance to a certain number of trees and hedgerows as well as the impact to certain areas of locally important landscape of high value. The environment of wider areas of improved agricultural grassland will be changed as a result of the installation of the solar panels. However, the site will be enhanced through a range of measures to manage biodiversity.

Temporary construction phase impacts including noise, dust and traffic impacts may also arise and disturb streams, hedgerows, trees. The proposed development will result in some disruption of existing habitats on site and disturbance/displacement of species using the site. There were no rare or notable plant or faunal species recorded on the site during survey. Mitigation measures are considered sufficient in this respect. It is noted by the applicant that invasive species were identified on site which again can be suitably mitigated and managed.

The majority of the key ecological receptor habitats, treelines, hedgerows, woodland, and watercourses will be avoided by the footprint of the proposed development and will be maintained in-situ. A protective buffer zone of 5 m between the centre of each treeline/hedgerow and the footprint of the development will be established. No development works will occur within these areas.

From the survey work undertaken it was identified that certain trees were recorded as having bat roost potential. The hedgerows and treelines offer suitable foraging and commuting habitat for bats. In total in the region of 65 m hedgerow are to be removed. In addition, existing hedgerow and treelines are to be augmented and to the preponderance of comparable habitat in the vicinity, the development will not result in an adverse impact on bats.

While conscious that some sections of hedgerow will be removed, primarily to provide access, it is not considered to be significant and on the basis of the mitigation measures the proposed development will not have an adverse impact on any species.

The construction in proximity to watercourses has the potential for significant impacts. But does not, in any case, involve instream construction works and there will be no direct impacts to the watercourses subject to standard and best practice

construction measures. The potential for indirect impacts from runoff of pollutants and sediment is comprehensively mitigated.

On balance I consider that adequate detail has been provided on the biodiversity of the site and it has been prepared in accordance with the methodology as set out in relevant guidelines. I am satisfied that it is of sufficient scope and detail to assess the overall ecological impact of the proposal. Given the location of the site in an area characterised by largely by agricultural lands and the detailed mitigation measures to be incorporated including ecological enhancement measures. I consider that the impacts on the ecology of the site and the wider area would be acceptable.

It is considered unlikely, subject to mitigation measures, that significant impacts would arise on biodiversity.

8.1.11. Traffic, Transport & Road Safety

The proposed development does not generate significant traffic volumes and access during the operational phase will be negligible. Any construction measures required are addressed in the CEMP, which includes a framework for a Traffic Management Plan (TMP), which should be implemented in full. It is considered that the cumulative impacts arising from other any other developments in the area, should they arise, can be reasonably mitigated through good practice. The road network, while classified as local, has the capacity to accommodate the traffic volumes during construction. The CEMP and TMP should be finalised prior to the commencement of the proposed development. Regardless, these impacts will be temporary and short-term and would be controlled as part of standard and best practice construction measures included in the CEMP. The CEMP should be finalised prior to the commencement of the proposed development. A condition ensuring same is attached, should the Board be minded to grant planning permission.

The proposed access will be located onto the local road network. Having reviewed the relevant drawings, it is considered the access designs can achieve the sight line visibility requirements in accordance with development plan. To achieve this a small amount hedgerow removal is required. There is very limited operational access required for maintenance only. A condition is attached to agree the final access details, prior to commencement of development. The access and sight lines are considered acceptable.

It is considered unlikely, subject to mitigation measures, that significant impacts would arise on the traffic, transport and road safety.

8.1.12. Residential Amenity

There are several properties which adjoin or are adjacent to the proposed development. It is accepted that there is no guidance in respect of setback distances but in the absence of same direction can be derived from the prevailing development plan for the area which provides sufficient basis for an assessment. In this instance there is sufficient potential to mitigate landscape and visual impacts through appropriate siting, design and screening with hedges in spite of the proximity to residential dwellings. It is also noted that the inverter stations, which are noise generating, will be located at a sufficient distance from the nearest residential dwelling. This is considered reasonable and the solar farm generally does not give rise to significant pollution during the operation phase. A condition to manage operational noise at appropriate levels is recommended below.

During the construction phase there will be routine construction related pollution and nuisance generated including noise (pile driving), light, dust and traffic related impacts with the potential to cause nuisance and impact on the amenities of adjoining dwellings. These impacts will be temporary and short-term and would be controlled as part of the standard and best practice construction measures as well as specific mitigation measures set out in the PECR.

During the operational phase there will be some pollution and nuisance associated with the maintenance of the solar farm owing mainly to noise (inverter stations), light, traffic. The operational phase may see small numbers of people using the site as well as remote operation of CCTV and lighting for security purposes. These impacts will be controlled as part of the standard and best practice operation measures. In addition, a condition limiting noise output is recommended to ensure compliance with established standards for rural areas.

8.2. Likely Effects on the Environment

8.2.1. EIA Screening

In the PECR Section 3.0, the proposed development was screened for EIA, where it was concluded that the proposed development is not of a type included in Schedule 5 of the PDR and an EIA is not required.

The following matters are considered relevant in the assessment of whether the submission of an EIA Report is required:

- Assessment of project type/class of development under Schedule 5 of the PDR, relevant to the proposed development.
- Assessment of relevant thresholds under Part 2 of Schedule 5 of the PDR.
- Assessment of proposed development including its likely effects on the environment as set out above in Section 8.1.

8.2.2. Project Types / Class of Development

The Board should note a 2020 High Court judgment in Sweetman -V- An Bord Pleanála and others [2019 No. 33 J.R.] where it was concluded that solar farm infrastructure is not an EIA Project type identified in Schedule 5 of the Planning and Development Regulations 2001, as amended (PDR) and as such, does not require EIA.

This judgement concerns itself largely with the following provisions:

- Schedule 5, Part 2, Class 3 (a) Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.
- Schedule 5, Part 2, Class 10 (b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.
- Schedule 5, Part 2, Class 10 (d) (d) All private roads which would exceed
 2000 metres in length.

The PECR is dated September 2022 and since then, S.I. 383 of 2023 *Planning and Development (Amendment) (No. 2) Regulations 2023* has been introduced which, amends Part 2 of Schedule 5 of the PDR, by inserting 'Projects for the restructuring of rural landholdings'. This now requires consideration.

8.2.2.1. Schedule 5, Part 2, Class 3 (a) Industrial installations

It is not considered that this class of development is applicable. While the proposed development of a solar farm does generate electricity, there is no concomitant generation of heat and steam.

8.2.2.2. Schedule 5, Part 2, Class 10 (b) (vi) Urban Development

It is not considered that this class of development is applicable. The proposed development is not on zoned lands, as such, in the KCCDP. It is located on agricultural lands, outside of the designated settlements. The site is not located in an urban environment.

8.2.2.3. Schedule 5, Part 2, Class 10 (dd) All private roads

It is not considered that this class of development is applicable. There is no private road described as part of the proposed development. It is not considered the tracks proposed constitute a private road. It is noted that the Board has previously determined that such access tracks in respect of solar developments do not fall under Class 10 (ABP-301028-18, ABP-302681-18, PL17.248146).

8.2.2.4. Projects for the Restructuring of Rural Landholdings

It is considered that this class of development may be applicable. This is a rural landholding and it is proposed to remove field boundaries removal. The threshold for this class is considered below.

8.2.3. Project Thresholds

As set out above, it is considered that the proposed development may be a class for the purposes of EIA, under S.I. 383 of 2023 Projects for the Restructuring of Rural Landholdings which includes:

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

The proposed development will include the removal of 65 m of field boundary, well below the 4 km threshold. Such removal is associated with access and cable laying

requirements and does not result in the amalgamation or enlargement of existing fields. It is also considered that significant effects on biodiversity are not likely as a result of such works.

There is no 'recontouring' included as part of the proposed development. While there may be localised earthworks or drainage works, it is not considered that this would amount to 'recontouring'. In practice the ground levels across this this area do not vary significantly and no significant excavation will be required. Overall, the topography of the lands will not be impacted as the panels can be installed to existing topography, without excavation or alteration of levels. Access tracks, inverter and transformer stations will require some localised levelling and foundation works; however, such works are not significant in nature and would not constitute 'recontouring' of the lands.

In respect of the last clause, it is not considered that the proposed development is a project for the restructuring of rural land holdings, undertaken as part of a wider proposed development, where the area of lands to be restructured by removal of field boundaries is above 50 hectares. The overall site is 89.5 ha in total, there is no restructuring occurring – any removal does not result in the amalgamation or enlargement of existing fields.

On the basis of the field boundary removal, the proposed development is 'subthreshold'.

In conclusion, a mandatory EIA is not required. Where the development is 'subthreshold', and also considering Schedule 5, Part 2, Class 15 'Sub-Threshold' Projects, an assessment should be made against the criteria for determining whether development listed in Part 2 of Schedule 5 which are set out in Schedule 7 of the PDR.

8.2.4. Schedule 7 Assessment of the Characteristics, Location and Potential Impacts

The applicant has included a significant volume of information, in its PECR and supporting reports, and NIS as amended by the Response to Further Information, in relation to the proposed development and the likely significant effects on the environment. This is coupled with the assessment carried out in Section 8.1 above and 8.3 below in this report as well as the various technical experts (both internal and external to KCC) who made submissions to the KCC planning file and who have

considered the impacts of the proposed development acceptable subject to a range of conditions.

While the proposed development will be a significant intervention in a rural area, and there will be certain impacts, it is considered that the environment has the capacity to absorb the proposed development in the context of that existing. The extent of field boundary removal is minimal and not significant in the context of this rural area, and the development will not result in significant emissions to the environment. The development is not associated with any significant loss of habitat or pollution which could act in a cumulative manner to result in significant negative effects to any ecological site.

The are no other solar farms in the area, Should the construction of the proposed development occur in tandem with other development, it is considered unlikely that cumulative impacts with other existing and/or approved projects.

Having regard to the nature and scale of the proposed development, the environmental impacts are not complex or intense. Furthermore, the implementation of standard best practice methodologies during the construction, operation and decommissioning phase of the proposed development will result in a reasonable possibility of effectively reducing potential impacts.

Having regard to the nature and scale of the proposed development, it is expected that the impacts will be on-going, long term and will generally only be reversible if the constructed elements of the scheme are removed. Such removal or at least reassessment of the solar farm's continuance will be part of the terms of permission. The construction phase impacts, will be of relative short duration and limited frequency.

On this basis and when considering:

- 1. Characteristics of proposed development.
- 2. Location of proposed development.
- 3. Types and characteristics of potential impacts.

it is considered unlikely that there would be significant effects on the environment arising from the proposed development.

8.3. Likely Significant Effects upon a European Site

The NIS (which including an AA screening), as revised in the documentation submitted under the Response to Further Information on the July 2023, concluded that, following the application of the detailed mitigation measures, the proposed development would not either alone or in combination with other plans or projects, adversely affect any European Site.

The application documentation includes information required in respect of the methodology applied, a description of the existing sites and 'Stage 1' and 'Stage 2' assessments. The areas addressed in this assessment includes the following:

- Screening for AA
- Natura Impact Statement
- AA of implications of the proposed development on the integrity each European site

The documentation submitted with the application is in line with current best practice guidance and 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. The documentation was prepared by Tobin Consulting Engineers and the qualifications and experience of the main authors of the report are suitable and relevant.

This assessment has had regard to relevant guidance including:

- Department of the Environment Heritage and Local Government (DEHLG)
 (2009), AA of Plans and Projects in Ireland: Guidance for Planning

 Authorities.
- European Commission (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.

There are no European sites located within or adjacent to the proposed development site. The closest European site is the River Barrow and River Nore SAC (002162) which is located approximately 1.2km south-west of the proposed development. The proposed development site is hydrologically connected to the River Barrow and

River Nore SAC (002162) and the River Nore SPA (004233), via the Brownstown River (approximately 1.2 km and 3.9km downstream).

8.3.1. Screening for Appropriate Assessment

The AA Screening Report (included as an appendix to the NIS) describes the proposed development, its receiving environment and relevant European Sites in the zone of influence of the development.

The proposed development is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on any European sites.

The AA Screening Report considers European sites within a 15 km range and with a hydrological connection. This Zone of Influence was established based on the extent at which potential impacts may be carried via identified pathways (i.e., watercourses). Having regard to the nature of the proposed development, the nature of the receiving environment and the source-pathway-receptor model. It is considered that this is a reasonable Zone of Influence.

Having regard to:

- the information and submissions available,
- the nature, size and location of the proposed development,
- its likely direct, indirect and in-combination effects,
- the source-pathway-receptor model; and
- the sensitivities of the ecological receptors.

It is considered that:

- River Barrow and River Nore SAC [002162]
- River Nore SPA [004233]

are relevant to include for the purposes of initial screening for the requirement for Stage 2 AA on the basis of likely significant effects.

Table 5 below lists the qualifying interests of these sites, their conservation objectives, and possible connections between the proposed development (source) and the sites (receptors).

Table 5: European Sites con European Site (Code)	Distance	Conservation	Source-Pathway-Receptor and	Qualifying Interest(s)	Potential for
	210141100	Objectives	Potential for Likely Significant Effects		Adverse Effects
				Estuaries [1130]	Water Quality
River Barrow and River Nore SAC (002162)	1.2km southwest	To maintain or restore the favourable conservation condition of the Annex I habitats for which the SAC has been selected	The site is hydrologically connected and could be potentially affected from water pollution from the construction and/or decommissioning phase of the proposed development.	Mudflats and sandflats not covered by seawater at low tide [1140]	No
				Reefs [1170]	No
				Salicornia and other annuals colonising mud and sand [1310]	No
				Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No
				Mediterranean salt meadows (Juncetalia maritimi) [1410]	No
				Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho- Batrachion vegetation [3260]	No
				European dry heaths [4030]	No
				Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	Water Quality
				Petrifying springs with tufa formation (Cratoneurion) [7220]	Water Quality
				Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	No
				Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Water Quality
				Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	No
				Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Water Quality
				Austropotamobius pallipes (White-clawed Crayfish) [1092]	Water Quality
				Petromyzon marinus (Sea Lamprey) [1095]	Water Quality
				Lampetra planeri (Brook Lamprey) [1096]	Water Quality
				Lampetra fluviatilis (River Lamprey) [1099]	Water Quality
				Alosa fallax fallax (Twaite Shad) [1103]	No
				Salmo salar (Salmon) [1106]	Water Quality
				Lutra lutra (Otter) [1355]	Water Quality
				Trichomanes speciosum (Killarney Fern) [1421]	No
				Margaritifera durrovensis (Nore Pearl Mussel) [1990]	Direct mortality, disturbance loss and contamination of habitat, water quality

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River Nore SPA (004233)	1.2 km and 3.9km downstream	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:	Given this is a mobile species, it may occur within the site. The site is also hydrologically connected with the SPA and could potentially affect water quality.	Kingfisher (Alcedo atthis) [A229]	Direct mortality, disturbance, loss and contamination of habitat, water quality
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8.3.2. Appropriate Assessment ('Stage 2')

8.3.2.1. Potential Adverse Effects

The proposed development is not directly connected with or necessary to the management of the European sites. However, as the proposed development is located upstream of and hydrologically connected to the European sites, this raises the potential for indirect effects on it and its qualifying interests during the construction and operation phase.

The potential impacts could arise in particular from any deterioration in water quality as a result of the uncontrolled or unmitigated release of pollutants, including sediments, invasive species to the drains and streams that are hydrologically connect the site to the River Nore. This in turn could have adverse impacts on qualifying interests. The potential for adverse impacts is identified in the table above.

The potential likely significant impacts that could arise during the construction and operational and decommissioning phases of the proposed development on the European site's qualifying interests habitats and species are:

- the release of pollutants, including siltation/sediments to surface water with resultant impacts to water quality.
- the loss of or damage to habitats, including breeding resting, foraging places, used by qualifying interest species (this also considers loss through noise, dust and light impacts)
- the dispersal of invasive species with resultant impacts on qualifying interest habitats and species in particular downstream bank destabilisation.

8.3.2.2. Potential In-Combination Effects

In combination effects are examined within Section 9.0 of the NIS submitted. The proposed development was considered in combination with other developments collated in the KCC planning portal. This assessment also considers the Board's planning portal and planning histories considered in Section 5.0 of this report

Based on scientific analyses of best available scientific information, no other European sites in the area are relevant to the screening assessment and NIS.

The conclusion that with the implementation of mitigation measures, the in-Combination effect of the proposed development will not be significant is considered reasonable. It can therefore be concluded that there would be no in-combination effects on the European sites or their qualifying interests.

8.3.2.3. Mitigation Measures

Mitigation Measures identified in the NIS

The mitigation measures that are proposed in the NIS to address the potential adverse effects of the construction and operation are primarily for

- Appointment of Ecological Clerk of Works
- Construction Environmental Management Plan
- Surface Water Quality
 - Sediment Control
 - Pollution control
- Invasive Species and Pathogens during construction
 - o Pre- treatment Survey
 - Invasive Species Management Plan
 - Invasive Species Site Management During Treatment
- Invasive Species Site Management During Treatment
 - Establishing Good Site Hygiene and a Bio-secure Zone
 - Decontamination of Vehicles
 - Transporting Contaminated Material
 - Prevent Further Spread and Introduction of Invasive Specie
- Decommissioning Phase Mitigation Measures
 - Application of mitigation measures proposed for the construction

Subject to the implementation of the mitigation measures, there would be no resultant adverse effects on qualifying interest species and habitats respect to its attributes and targets. The mitigation set out will effectively reduce the significance of impacts arising.

Additional Mitigation Measures

No required.

8.3.2.4. Residual Effects

None anticipated post mitigation.

8.3.2.5. Conclusion

Having regard to the foregoing and taking account of the scale and nature of the proposed development and on the basis of the information on the file, it can be reasonably concluded on the basis of best scientific knowledge, therefore, that the proposed development, individually or in combination with other plans and projects, will not adversely affect the integrity of the River Barrow and River Nore SAC (002162) and River Nore SPA (004233) in view of the sites' Conservation Objectives, subject to the implementation of the mitigation measures and any recommended conditions.

9.0 Recommendation

It is recommended that the Board grant planning permission for the proposed development for the following reasons and considerations and subject to the conditions set out.

10.0 Reasons and Considerations

Having regard to the following:

- the nature and scale of the proposed development,
- the consideration of main grounds of appeal in relation to the proposed development set out in Section 7.0 of this report,
- the likely significant effects on the environment arising from the proposed development set out in Section 8.2 of this report,
- the likely significant effects on European sites arising from the proposed development set out in Section 8.3 of this report, including the location of the proposed development and the separation distance from the Natura 2000 sites.
- the likely consequences for the proper planning and sustainable development in the area arising from the proposed development and the relevant provisions of the Kilkenny City and County Development Plan 2021-2027 and objectives and the results of the Strategic Environmental Assessment and Appropriate Assessment of this plan undertaken in accordance with the SEA Directive (2001/42/EC),
- the planning application particulars submitted by the applicant including the response to submissions on the appeal,
- the submissions made by prescribed bodies and reports of the local authority in respect of the proposed development,
- the report and recommendation of the Inspector.

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with the provisions of the Kilkenny City and County Development Plan 2021-2027. The proposed development would not seriously injure the visual amenities of the area or have an unacceptable impact on the character of the landscape or archaeological heritage, would not have a significant adverse impact on ecology, would be acceptable in terms of traffic safety and would make a positive contribution to Ireland's renewable energy and security of energy supply requirements. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment

Stage 1

The Board considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of River Barrow and River Nore SAC [002162] and River Nore SPA [004233] and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector.

The Board agreed with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Board concluded that, having regard to the qualifying interests for which the site was designated and in the connections to and distance between the application site, River Barrow and River Nore SAC [002162] and River Nore SPA [004233] required further investigation.

Stage 2

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the of River Barrow and River Nore SAC [002162] and River Nore SPA [004233]. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment as well as the report of the Inspector.

In completing the assessment, the Board considered the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the Conservation Objectives for these European Sites. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites' Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the River Barrow and River Nore SAC [002162] and River Nore SPA [004233] or any other European Site in view of the sites' Conservation Objectives.

Conditions

Plans and Particulars

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 6th day of July 2024, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity

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

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

- 3. a) The permission shall be for a period of 40 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.
 - b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, 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.

Grid Connection

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.

Environmental

5. All of the environmental, construction, operation and decommissioning phase mitigation measures set out in the particulars submitted with the application 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. Where such measures require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development.

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

6. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. The developer shall agree such details in writing with the planning authority prior to commencement of development.

Reason: In the interest of environmental protection.

7. Prior to the commencement of development pre-commencement surveys for protected plant, animal species and invasive species shall be undertaken at the site and where required the appropriate licence to disturb or interfere with same shall be obtained from the National Parks and Wildlife Service.

Reason: In the interest of wildlife protection.

8. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals at regular intervals along the perimeter of the site shall be submitted for prior approval to the Planning Authority. This shall be facilitated through the provision of mammal access gates designed generally in accordance with standard guidelines for provision of mammal access (NRA 2008).

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

9. A Landscape Mitigation Plan and Biodiversity Management Plan for the proposed development, in accordance with that submitted, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. The site shall be managed in accordance with the agreed plans. These plans shall cover a period of at least five years and shall include details of the arrangements for its implementation.

Reason: To ensure the preservation and protection of flora and fauna within the site. and provide for the satisfactory future maintenance of this development in the interest of visual amenity.

Residential Amenity, Public Health & Safety

- 10.a) No additional 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 stations shall be dark green in colour. The external walls of the storage containers shall be finished in a neutral colour such as light grey or off-white unless otherwise agreed in writing with the planning authority.

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

11. Site development and building works shall be carried out only between the hours of 0800 to 1800 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

- 12. The construction of the development shall be managed in accordance with a Construction Management Plan, to include a Construction Traffic 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:
 - a) Details of the site and materials compound(s) including area(s) identified for the storage of construction refuse;
 - b) Details of areas for construction site offices and staff facilities;
 - c) Details of site security fencing and hoardings;
 - d) Details of on-site car parking facilities for site workers during the course of construction:
 - e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;
 - Measures to obviate queuing of construction traffic on the adjoining road network;
 - g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;
 - Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
 - Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater;
 - j) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; and

k) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of amenities, public health and safety

13. The final details of the operational access arrangements shall be submitted to and agreed in writing with the planning authority, prior to commencement of development. Any gates shall open inwards only.

Reason: In the interests of traffic safety.

14. All road surfaces, culverts, watercourses, verges and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority. Prior to commencement of development, a road condition survey shall be taken to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In order to ensure a satisfactory standard of development.

- 15.a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:
 - (i) An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]
 - (ii) An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.

At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.

b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community

Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

Reason: To protect the amenities of property in the vicinity of the site.

Archaeology

- 16.a) All mitigation measures in relation to archaeology and cultural heritage set out in the report titled 'Archaeological Impact Assessment Report Brownstown, Co. Kilkenny Excavation Licence No. 23E0081 Detection Device Licence No. 23R0091', by Courtney Deery Heritage Consultancy, shall be implemented, except as may otherwise be required in order to comply with the following conditions.
 - b) The applicant shall retain the services of a suitably qualified archaeologist to advise on and establish 20 metres radius concentric buffer zones-comprising an inner Exclusion Buffer Zone measuring 10 metres and an outer No-Dig Buffer Zone measuring 10 metres-around the external-most elements of the archaeological sites identified under Licence Nos. 23E0081 and 23E0081.
 - c) No groundworks of any kind (including but not limited to advance geotechnical site investigations) shall be permitted in buffer zones of either type.
 - d) Exclusion Buffer Zones shall be fenced off for the duration of construction works in the vicinity of the monuments. No machinery, storage of materials or any other activity related to construction shall be permitted within Exclusion Buffer Zones.
 - e) Only non-invasive above ground solar panel supports shall be used within No-Dig Buffer Zones and all cable connections or other necessary service conduits will be placed in above-ground housings. Protective matting shall be put in place during installation to prevent machine rutting. Machine access and transits shall be limited to essential works for installation only. No other activity related to construction will be permitted within No-Dig Buffer Zones.
 - f) The applicant shall employ a suitably qualified, archaeologist to monitor all ground disturbance required for this development. No groundworks of any type (including any enabling works or advance site investigations) are to take place in the absence of the archaeologist without his/her express consent.

- g) The archaeological monitoring programme shall be carried out under licence from the Department of Housing, Local Government and Heritage and the Local Authority in accordance with an agreed method statement; note a period of 5-6 weeks should be allowed to facilitate processing and approval of the licence application and method statement.
- h) Should archaeological material be found during the course of the archaeological monitoring, the archaeologist shall stop work on the site pending a decision as to how best to deal with the archaeology. The applicant shall be prepared to be advised by the Department of Housing, Local Government and Heritage and the Local Authority with regard to any necessary mitigating action, for example; preservation in situ, and/or excavation. The applicant shall facilitate the archaeologist in recording any material found.
- The Department of Housing, Local Government and Heritage and the Local Authority shall be furnished with a report describing the results of the monitoring.
- j) The Construction Environment Management Plan (CEMP) shall incorporate all significant findings from the report titled 'Archaeological Impact Assessment Report Brownstown, Co. Kilkenny Excavation Licence No. 23E0081 Detection Device Licence No. 23R0091', by Courtney Deery Heritage Consultancy including (but not limited to) the location of any archaeological or cultural heritage constraints relevant to the proposed development. The CEMP shall clearly describe all identified likely impacts-both direct and indirect-and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of construction activity. It shall have particular regard to the requirements as set out at part 2 of this Condition above in relation to establishment and characteristics of the protective buffer zones that will implement to ensure preservation in situ of archaeological sites and monuments.
- k) The applicant shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the development, to include mitigation measures for the removal of the solar panels and the protection of the archaeological sites and monuments that are in situ at the site. The Decommissioning Statement for the Proposed Solar PV

Array shall be updated to include the location of any archaeological or cultural heritage constraints. It shall clearly describe all identified likely impacts from decommissioning-both direct and indirect-and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during decommissioning works.

Reason: To ensure the continued preservation of places, caves, sites, features or other objects of archaeological interest.

Financial

17. 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

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

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



Professional Declaration

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.

Tomás Bradley, Senior Planning Inspector 17th June 2024