



An
Bord
Pleanála

Inspector's Report

ABP-320298-24

Development	10 year planning permission for solar farm and underground grid connection and 40 year operation. A Natura Impact Statement (NIS) was submitted to the planning authority with this application.
Location	Fiddane, Cooliney, Coolcaum, Ballynoran, Ballynadridden, Ardnageehy, Charleville, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	236099
Applicant	Soleire Renewables SPV Limited
Type of Application	Permission
Planning Authority Decision	Grant Permission with Conditions
Type of Appeal	Third Party
Appellants	Jess and Maurice Foley and others
Observer(s)	None
Date of Site Inspection	25 th October 2024
Inspector	Máire Daly

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1.0 Site Location and Description

- 1.1. The appeal site, stated to measure 92.75 ha, is located in the townlands of Fiddane, Cooliney, Coolcaum, Ballynoran, Ballynadrideen, Ardnageehy, Charleville, and is c. 3.4km southwest of the nearest urban settlement, the north Cork town of Charleville. The site is also located approximately 3km southwest of the Limerick County boundary. The N20 National Road, which connects Cork City to Limerick City via north Cork and south Limerick Counties is located c.1km east of the proposed site and the eastern portion of the proposed site at Ardnageehy fall within the M/N20 Study Corridor.
- 1.2. The proposed solar farm comprises 4 separate land parcels which are divided by local roads. The proposed site is comprised mainly of pasture and arable agricultural land and has an elevation ranging from approx. 92mOD in the southwest to approx. 119mOD in the northeast and northwest corner on the site, with the central area of the site being approx. 104mOD. The site has a relatively flat nature sloping gently from north to south at an average gradient of about 1%.
- 1.3. The proposed site is comprised of a number of agricultural fields with existing hedgerows and tree networks, which are proposed to be retained where possible ensuring the site is well enclosed, with only minor gaps at entrances and where dwelling houses occur. The existing hedgerows are predominantly broadleaf with a high proportion of Hawthorn and Blackthorn. There are c. 22 dwelling houses located within a 1km radius of the proposed site with the majority of these located to the south. A number of drainage ditches intersect the lands, with drains/streams running through the southern end of the site which ultimately drain to the Oakfront Stream or the Rathnacally Stream (Shruhaneballiv Stream), which are tributaries of the Awbeg River and Blackwater River.
- 1.4. The proposed site contains 3 no. recorded Archaeological Monuments: a redundant record RMP CO00-041, a ring barrow RMP CO007-052 and a Ringfort RMP CO007-053. The redundant record was formerly classified as an enclosure (currently no surface trace).
- 1.5. The proposed cable route by way of the 33 KV cable is planned to end at the southernmost transformer on site. The underground grid connection route is to be approx. 3500m in length the majority of which is proposed to run underneath private

lands and the L5519, L5527, L5528 and L5529 local roads for approximately 1m where it will connect the proposed development to the previously consented electricity grid interconnector (Cork County Council Pl. Ref. 22/05933 – See Section 4.0 for more details).

2.0 Proposed Development

2.1. The proposed development consists of the construction of a solar PV development over a total site area of c. 92.75 hectares consisting of solar arrays on ground mounted steel frames. Planning permission is sought for a period of 10 years with an operational life of 40 years from date of commissioning and also subsequent decommissioning. The proposed solar farm includes:

- a series of ground mounted solar photovoltaic (PV) panels c. 2280mm in length, with width of c. 1135mm and depth of 30mm, mounted on steel support structures and in some areas concrete shoes to protect possible underground archaeological features. Panels to be mounted at max height of approx. 2 metres above ground level. Mounting columns to be driven approx. 2 metres into the ground without the need for concrete.
- 34 no. transformers - the transformation enclosures dimensions (excluding the proposed 0.8m high foundations) proposed at 5.4m L x 2.24m W x 2.885m H. - with a 5 m. buffer surrounding each.
- Underground 33kV electricity grid connection 3.5km in length which will run underneath private lands and L5527, L5528 and L5529 public roads for 1km where it will connect the proposed development to the previously consented electricity grid interconnector (Cork County Council Pl. Ref 22/5933).
- Temporary construction compounds,
- Use of existing farm access tracks, existing site entrances,
- Widening of 1 No. existing site entrance,
- Inverters,
- CCTV poles and cameras,

- Deer type security/boundary fencing with some areas of boundary development on concrete shoes to further protect possible underground archaeological features,
- Landscaping and biodiversity measures and all associated ancillary development works.

Note: The proposed Solar Farm would be connected to a new transformer at the nearby consented Ballyroe Solar Farm electricity grid connector Planning Ref 22/05933 (See Section 4.0 below).

2.2. The application is accompanied by the following documents and information:

- Planning Statement incorporating Environmental Considerations
- Archaeology, Architecture & Cultural Heritage report (Parts 1 to 4)
- Natura Impact Statement (NIS Parts 1 and 2)
- Construction Environmental Management Plan
- Ecological impact Statement (Part 1 and 2)
- Biodiversity Management Plan (Part 1 and 2)
- Landscape Management and Maintenance Plan
- Landscape and Visual Impact Assessment (LVIA)
- Environmental Noise Assessment
- Solar Photovoltaic Glint and Glare Study
- Traffic Management Plan
- Site Specific Flood Risk Assessment
- Environmental Impact Assessment Screening
- Public Consultation Event Details
- Statement of Community Consultation
- Solar Development Photomontage Report
- Outline Construction Methodology
- Associated Drawings and Plans

2.3. It is noted that following Cork County Council's further information request of 11th December 2023, a response was received on the 08th of May 2024. This included the following information:

- Updated NIS,
- Updated Biodiversity Management Plan (BMP)
- Updated EclA and Whooper Swan & Winter Birds Survey Report (including Whooper Swan Coordinated Management Programme)
- Arboriculture Method Statement (AMS) and Tree Protection Plan
- Silt Fence System Construction Method Statement
- Standalone Mammal Survey (Additional mitigation measures incorporated into Section 6.3.2 of updated NIS)
- Revised and updated mapping – Section 2.5 (Figure 6.11 – 6.12 of BMP)
- Updated Landscape Management Plan
- Updated EIA Screening Report – hedgerow distance details
- 'Masterplan Lands' map which supplements the LVIA
- Updated Noise Impact Assessment with distances identified to closest sensitive dwellings
- High Level Electromagnetic Field Assessment
- Updated Planning Drawings – showing removal of solar panels and associated infrastructure from lands in the furthest western portion of site to help protect residential amenity and removal of solar panels and infrastructure from lands in the furthest eastern part of site to facilitate proposed M/N20.

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. A notification of the decision to grant planning permission was issued by Cork County Council by Order dated 01st July 2024 with no. 63 conditions attached. Most conditions are standard, however the following should be noted:

2. Prior to the commencement of the development as permitted and within 3 months of the date of this grant of permission, the applicant and landowner or any person with an interest in the land shall enter into a legal agreement with the Planning Authority, pursuant to Section 47 of the Planning and Development Act 2000, as amended. The details of this agreement shall also be agreed with Limerick City and County Council who are the lead authority of N/M20 Project. This agreement shall specify that the proposed buffer zone between the proposed development and N/M20 study route (as per revised site layout drawings and Landscape Layout Plan (Dwg. 2316_LA003_rev. 04) submitted to the Planning Authority on 08/05/2024) and any other additional lands identified by the Planning Authority and Limerick City and County Council, shall be treated as agricultural lands for the purposes of valuation in respect of the N/M20 Cork to Limerick Project.

Reason: In the interest of traffic safety and in the interest of orderly development.

6. (i) The Glint and Glare Report received by the Planning Authority by way of further information on 08/05/2024, shall be amended to omit inconsistencies and state the mitigations proposed by way of proposed planting at the N/M20 corridor, and shall be submitted to the Planning Authority for prior written agreement.

Reason: To reduce the potential for glint and glare on road users and traffic safety.

38. A pre-construction survey for breeding sites and resting places of protected terrestrial species, in particular Bats (all roost types), Otter and Badger, will be carried out by a suitably qualified ecologist prior to construction works commencing.....

Reason: In the interest of wildlife protection.

46. Prior to the commencement of development, the developers shall submit to the Planning Authority for agreement a post construction Ecological Mitigation and Monitoring Plan. The programme shall be prepared by a suitably experienced and qualified ecologist.....

Reason: To minimise impacts of the development on biodiversity

47. Within six months of the date of site decommissioning the applicant shall submit a revised Site Restoration Plan which shall be informed by an up-to-date Ecological Impact Assessment (EclA).....

Reason: To protect biodiversity.

59. After commissioning of development site, Applicant shall employ the services of an experienced Road Surfacing Contractor, approved by the Area Engineer, to strengthen the road surface in the vicinity of the entrance, for a distance of 40m to the east and west of the entrance....

Reason: In the interest of orderly development.

3.2. Planning Authority Reports

3.2.1. Planning Reports

There are four Planner's reports on file, these include two Senior Planner's reports.

1. 1st Planner's Report dated 07/12/2023

The main points from this report can be summarised as follows:

- Unsolicited further information was submitted which included the following changes - Solar panels removed from five fields in Fiddane, Boundary fencing amended to reflect the above change and new landscaping proposed as shown in attached layout. The Planner stated that they had to disregard same un-solicited information given the ambiguity and in-completeness of same. They stated however that should the file be deferred, there will be an opportunity for the Applicant to clarify proposals relating to the latter.
- The Planner noted that applicant also had 3 no. planning applications also under consideration with Cork County Council at the time.
- Key consideration of this large-scale development is the impact of cumulative development, and particularly from an AA / Ecological perspective - of both consented and proposed development in the area.
- N/M20 Study Corridor – that has been recently amended during the time of this Planning assessment, and its impacts on the Eastern end of this rural land parcel is also a key issue. Further information requested to address these issues.
- Having regard to the Circular Letter EUIPR 01/2023 regarding the Planning and Development (Amendment) (No.2) Regulations 2023 (S.I. 383 of 2023) –

and as also highlighted in the internal Ecology Report dated 6/12/2023 on file - the proposed development needs to be considered for screening for EIA. S.I. 383 of 2023, amends Part 2 of Schedule 5 of the Regulations, by inserting 'Projects for the restructuring of rural landholdings'. Having regard to the above and following a preliminary examination of the nature and size of the rural land parcel (93 ha), it is considered that further information is required regarding cumulative impacts – Updated EIA Screening sought. Further information required.

- Ecology - Primary issue relating to application - whether the development as proposed poses any risk of impact to nearby sites designated for nature conservation and/or habitats and species considered key ecological receptors. Further information required to include updated NIS with an assessment of the potential direct, indirect and cumulative / in-combination impacts the proposed development would have on the environment.
- Noise – further information required in relation to impact on closest noise sensitive dwellings and cumulative noise results at sensitive receptors require clarification.
- Landscape and Visual impacts – no significant landscape impacts, no visual impact expected on any RPS in particular Cooliney House (County House). However clarification through further information with regard 'Masterplan' Lands (as referred to in LVIA) is required.

2. Senior Planner's 1st Report dated 11/12/2023

The Senior Planner endorsed the report and made minor amendments to the proposed further information request points.

The report concludes with a Request for Further Information in respect of 6 no. items including:

1. Ecological matters – Whooper Swan, Loss of habitats evaluated as moderate to high ecological importance, impact on Root Protection Zones (RPZ), CEMP detailing installation and management of silt fences, Drainage details, Otter and Badger surveys, Site Lighting, Details of artificial / man-made species

breeding / resting locations to be provided as referenced within the Biodiversity Management Plan and Planting Schedule.

2. EIA Screening Report – cumulative assessment of field boundary removal - update accordingly, and the overall length of field boundary proposed for removal included therein.
3. Engineering Matters and N/M20 Study Area for proposed Cork-Limerick Motorway – further details required
4. Glint and Glare Assessment - impacts on N/M20 Study Area given ongoing amendments to same and need for clarity - consult with the N/M20 project team.
5. Landscape & Visual Impact Assessment (LVIA) - cumulative assessment to include updated LVIA with reference to 'Masterplan lands'.
6. Environment – Noise respective distances of the identified closest noise sensitive dwellings to be clarified and cumulative noise results at sensitive receptors should be clarified.

A Note in relation to Unsolicited Further Information was also included – address proposed modification to development and removal of solar panels from five fields in Fiddane. Details to be presented in full.

3. Planner's 2nd Report – Further Information Assessment dated 28/06/2024

The following is a summary of the main points noted in response to each point of further information:

1. Ecological matters:
 - i) Additional surveys have been carried out in response to this further information request between 16th of October 2023 and the 7th of April 2024, which include for information obtained from 3rd parties. No signs of Whooper Swan were recorded within or adjoining the site on any site visits. Mitigation measures to be included: white borders and anti-reflective coatings to solar panels. No adverse effects on the integrity of the Kilcolman Bog SPA will arise.

- ii) Whooper Swan Coordinated Management Programme submitted. Standard of Management Programme considered poor. Future monitoring of the area of semi-improved grassland to be provided on site is required.
- iii) Table has been provided within the revised ecological reports which indicates that the only loss of habitats evaluated as either moderate or high local value is to hedgerow habitat where c.6m is to be removed to facilitate the widening of an existing site entrance. However it is noted as per the Arboriculture Report c.3m of hedgerow will also be removed to facilitate the a proposed cable trench. Nonetheless response considered satisfactory. Recommended condition be included re: submission of a biodiversity compliance report to ensure that all biodiversity enhancement measures specified in the further information documentation are carried out in full.
- iv) Arboriculture Report (includes Arboriculture Method Statement (AMS) and a Tree Protection Plan (TPP) has been submitted – considered satisfactory and recommended condition in compliance with details submitted should be attached to any grant.
- v) A silt fence system construction method statement has been submitted. Considered sufficient, condition to be attached.
- vi) Permanent watercourse silt traps are not proposed during the operational phase, as same are not considered to be required having regard to the nature of the proposed development. Measures to be implemented are detailed and considered satisfactory.
- vii) Terrestrial Mammal Survey report has been submitted. Two active badger setts were found within the survey area. Pre-construction mammal survey including a badger survey will be undertaken and in the event that a badger sett is encountered the NPWS will be informed and NRA Guidelines followed. No evidence of breeding or resting sites for otter were recorded within study area, pre-construction surveys are proposed. Mitigation measures should be adhered to by way of condition.
- viii) No broadcast lighting of the proposed development site during the project construction or operation phases. Motion sensor security lighting at

construction compound. Measures around lighting have been provided within the submitted NIS and EclA. Response considered satisfactory.

- ix) New ecological reports provided including the Biodiversity Management Plan. Considered satisfactory.
- x) Updated Landscape Management Plan and landscape drawings provided. Note incorporation of Beech and Sycamore in the site planting, this can however be dealt with by condition.

2. Environmental Impact Assessment (EIA) Screening Report:

Updated EIA Screening Report submitted. Following assessment, including an examination in relation to Class 1(a) of Schedule 5, Part 2 of the P&D Act 2000 (as amended) it was considered that the proposed development is not required to be subject to an Environmental Impact Assessment.

3. Engineering Matters and N/M20 Study Area for proposed Cork-Limerick Motorway:

Proposed Solar Panel development has been set-back by 10 m. from earlier proposal from the revised 200 m. Study Area, with no panels to be erected within the 10 m. buffer. A tree belt is proposed to screen the panels from the proposed highway and updated Landscape Management Plan has been submitted. Response considered adequate subject to compliance condition.

Strengthening of the the road surface in the vicinity of the entrance, for a distance of 40m to the east and west of the entrance is required.

4. Glint and Glare assessment:

The updated Landscape Management Plan and new set back of proposed solar panels at an additional distance of 10m. The response is considered satisfactory. While the concerns raised by the N/M20 Project Office are noted (i.e. conclusion of G&G Report stating that no mitigation measures are required when in fact mitigation in the form of planting is required) the planner was satisfied that this issue could be dealt with by way of compliance condition in terms of monitoring / re-planting any failed species for the duration of the Permission.

5. Landscape & Visual Assessment (LVIA):

Masterplan lands map now submitted. Planner refers to updated assessment carried out by Conservation Officer.

6. Environment:

An updated Noise Assessment has been submitted, as well as a 'High Level Electromagnetic Field Assessment' in the response. Planner notes recommended condition in relation to noise.

Unsolicited further information

- Updated planning drawings were submitted as part of the FI response (Enclosure 9). Which depict the removal of solar panels and infrastructure in lands to the farthest western part of the site. The planner states that this can now be dealt with by way of condition.

Other points

- Having regard to information received as part of further information no cumulative assessment anticipated in combination with the permitted and proposed development within the immediate North Cork area.

4. Senior Planner's 2nd Report dated 01/07/2024

- Senior Planner endorses Area Planner's report.
- Revised Screening Determination has been completed following receipt of Further Information - proposed development would not be likely to have significant effects on the environment. No EIAR required.
- Considered that the concern regarding the N/M20 schemes can be overcome by way of condition.
- Issues in relation to Ecology, Engineering Matters, Glint and Glare assessment, LVIA and Environment all considered sufficiently addressed through further information received.
- Development Contributions in relation to Transformers and Special Contributions in relation to roads outlined.

3.2.2. Other Technical Reports – Cork County Council Internal Departments

- **Area Engineer**

Report dated 6/12/2023

- Development considered to be appropriate from a flood risk perspective.
- In relation to the roads the applicant is requested to provide a report on the suitability of the local road network to cater for the vehicles that will be travelling to and from the site, it was noted in particular that the L5529 leg which is showing signs of deterioration along the road edge and any additional heavy use may result in the carriageway being further damaged and unsuitable for use.
- Applicant to address the impact the proposal will have on M/N20 scheme and also the impact the M/N20 route will have on any cable runs that may be proposed to be located within this corridor.
- Special roads contribution to be levied.
- Applicant to address how they will deal with existing road side drainage given the narrow nature of the roads and inevitable impact on drainage channels from large vehicles.

Further Information sought.

Report dated 28/06/2024 – on receipt of further information

- Grant subject to Conditions. Road Opening Licence will be required. Condition to be attached limiting the delivery of material to daytime hours only to minimise disruption.

- **Ecology**

Report dated 6/12/2023

- Whooper Swan - corridor of high activity along the Awbeg flood plain area south of the proposed development site, at a remove of >1km. The NPWS noted that this corridor is used for foraging and for night roosting by the Annagh/Churchtown Whooper Swans. Further information is required in respect of the management of areas for Whooper swan which is identified in the BMP.

- Clarification required with regard to proposed site lighting – BMP refers to this.
- Further dedicated surveys required in relation to Badger and Otter.
- Further information required in relation to construction method statement for approval in regard to the particular specification and methodology for installation and management of silt fences as mentioned within the CEMP....

Further Information sought.

Report dated 24/06/2024 – on receipt of further information

- Further information received has been summarised under Planner's 2nd report above. In conclusion there is no objection to permission being granted subject to 20 no. conditions.

- **Archaeology**

Report dated 21/11/2023

- No issue subject to a condition for exclusion and buffer zones as well as construction stage archaeological monitoring. It is not intended to call out each mitigation measure as a planning condition but rather refer to the table of mitigation measures and associated mapping within the Archaeological Impact Assessment Report submitted. Grant subject to Conditions.

Report dated 13/06/2024 - on receipt of further information

- No issues raised – Grant subject to Conditions.

- **Conservation**

Report dated 24/06/2024

- No issues raised – Grant subject to Conditions.

- **Environment Report 1 – General**

Report dated 1/12/2023.

- Grant subject to Conditions.

Report dated 24/05/2024 - on receipt of further information

- Grant subject to Conditions.

- **Environment Report 2: Noise**

Report dated 05/12/2023

Further Information sought

1.) The respective distances of the identified closest noise sensitive dwellings to the proposed development should be clarified.

2.) The overall final predicted cumulative noise results at sensitive receptors should be clarified.

Report dated 26/06/2024 - on receipt of further information

- Grant subject to Conditions.

- **Environment Report 3 - Waste Management**

Report dated 05/12/2023

- The risk of adverse impact of emissions on the environment will be greatly minimised if the proposed mitigation measures in the CEMP will be implemented, in a comprehensive and integrated approach to ensure protection of the environment during construction on site.

- Grant subject to Conditions.

3.3. Prescribed Bodies

- **N/M20 Project Office – Transport Infrastructure Ireland**

Report received 17/11/2023

- Proposal considered Premature - The proposed development falls within the Study Area of the project. Therefore, the application was deemed premature at this point.

Report received 10/06/2024 - on receipt of further information

- Conclusion of Glint and Glare Report incorrect as it states ‘therefore, no impact is predicted, and no mitigation is required’, whereas mitigation has

been identified in the form of proposed planting. Therefore, it is critical that the development is conditioned to ensure that appropriate all year round mitigation is included to avoid any glint or glare impact on road users of the proposed N/M20 road.

- Also given that the proposed solar farm site extends into the study corridor for the N/M20 project and future CPO of lands may be required it is requested that a condition is attached to ensure that the applicant and landowner enter into an agreement with Limerick City and County Council (lead authority) in respect of any future land acquisition.

- **Traffic Infrastructure Ireland (TII)**

Report received 27/11/2023

- The proposed development shall be undertaken strictly in accordance with the recommendations of the Transport (Traffic Impact) Assessment. Relevant conditions should be attached.
- The proposed development is located in proximity to a future national road scheme. The Authority recommends that the Planning Authority consult with the N/M20 project office in considering the application.

Report received 05/06/2024 - on receipt of further information

- Proposal considered premature pending the determination of N/M20 route. Grant would be considered at variance with provisions of the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities 2012.
- Insufficient data has been submitted with the application to demonstrate that the proposed development will not have a detrimental impact on the capacity, safety or operational efficiency of the national road network in the vicinity of the site.

- **National Parks & Wildlife Services - Development Application Unit, Dept. of Housing, Local Government & Heritage (NPWS)**

Report received 17/11/2023

- Observations made - the assessment does not seem to take account of potential hedgerow, drainage ditch, oak woodlands and other habitat loss. Also it appears that all survey work and assessments were confined to within the site boundary only rather than an appropriate hinterland. Language included in the assessment such as 'at the time of writing' seems to indicate there could be a change in this presumably either changes through proposals or extra issues identified. The Appropriate Assessment cannot have lacunae.

3.4. Third Party Observations

- 3.4.1. The planning authority received 3 no. third party submissions on the original application. The issues raised in these submissions are generally reflected in the issues raised in the third-party appeal received by the Board.
- 3.4.2. Note: Further Information received was deemed to not be significant by Planning Authority therefore no further third-party submissions were invited.

4.0 Planning History

4.1. Subject Site:

No relevant planning history on subject site apart from minor domestic developments Cork County Council Pl. Refs. 12/6385, 07/11538.

It is noted however that the nearby Annagh Windfarm (ABP Ref. 315652) to the south of the subject lands did propose to run its associated medium voltage (38kV) underground cabling (which would travelling between the proposed on-site substation and the existing Charleville Substation to the northeast within the townland of Rathnacally) through the western portion of the subject site, this development was however refused by the Board in June 2024 – details as follows:

- **ABP Ref. 315652 (CCC. Pl. Ref. 21/7246)** – Permission refused in June 2024 for 6 no. wind turbines, turbine foundations and crane pad hardstanding areas, new site tracks and associated drainage infrastructure and all associated infrastructure, services and site works.

Reason for refusal related to impacts on the Kilcolman SPA. This was on the basis of potential disturbance/dispersal and collision/migration effects from the operating turbines.

4.2. **Grid Connection and Infrastructure:**

- **CCC PI. Ref: 22/5933** – Permission granted in July 2023 for the installation of two 33kV electricity Grid Interconnectors, a temporary construction compound and 4 transformer stations, for the purpose of connecting the permitted but not built solar farm development at Fiddane (CCC PI. Ref: 17/05799 & ABP-308846-20) to the consented but not built Ballyroe solar farm (pl/ref. 20/04041), and the proposed solar farm development at Coolcaum to the consented but not built Ballyroe solar farm (CCC PI. Ref 20/04041). The cables will be under public road and private lands.

Note: The permitted development traverses the western boundaries of the subject site.

- **ABP-308846-20** (CCC PI. Ref. No. 17/05799) – Permissions granted in July 2021 for grid connection for solar farm - grid connection cable to be laid underground through the rural townlands of Ardglass, Fiddane, Cooliney, Rathnacally, Farranshonikeen, Ardnageehy and Clashganniv in County Cork.

4.3. **Other Relevant Developments within the vicinity**

To South of subject site:

- **ABP Ref. 317577** (CCC PI. Ref. 22/5681) – Permission granted in September 2024 to the same applicant (Soleire Renewables SPV Limited) for a 42.6 hectare solar farm at Coolcaum, Churchtown, Mallow, Co.Cork.
- **ABP Ref. 314431-22** – Permission granted in February 2024 to the same applicant (Soleire Renewables SPV Limited) for construction of a 110kV 'Single Bay Tail Fed' Substation and all associated works, in the townlands of Ballyroe, Ballynadrideen, Ardnageehy, Rathnacally and Clashganniv in Ballyhea, Charleville.

- **CCC PI. Ref. 22/6536** – Permission granted in July 2023 to the same applicant (Soleire Renewables SPV Limited) to amend the design of the previously approved development (planning reference: Cork County Council 17/5799 & an Bord Pleanála ABP-306915-20) which comprises consent for a 67.8 hectare Solar PV farm at Fiddane, Ballyhea Charleville, Co.Cork. The proposed amendments include; (1) increase in number of transformers, (2) reduction in the spacing of Solar PV rows (strings), (3) increase in size and configuration of solar panels, (4) overall increase in solar power generation, (5) change in solar panels tilt (degree), (6) minor reduction in the height of solar array, (7) operational period proposed to be extended from 30 to 40 years.
- **CCC PI. Ref. 22/6901** - Permission refused in June 2023 to the same applicant (Soleire Renewables SPV Limited) to amend the design of the previously approved development (pl. ref. no 20/4041 see below) including omission of development within the SAC and extension of operational period 25 to 40 years for the following reason:

The proposed development will result in a direct loss of an area of core foraging habitat Whooper Swan, a Species of Conservation Interest (SCI) of the Kilcolman Bog Special Protection Area (Site code 004095). Furthermore, based on the recent information provided to the Planning Authority in respect of Whooper Swan usage of the site and area, the Planning Authority is unable to form a full, precise and definitive conclusion capable of removing all reasonable scientific doubt as to the effects of the proposal will have on Whooper Swan and SCI of Kilcolman Bog SPA.....the granting of permission would materially contravene a development objective in the Development Plan, namely Objective BE 15-2, for the conservation and preservation of a European site , and contrary to the requirements of the Habitats Directive.

- **CCC PI. Ref. 20/4041** – Permission granted in March 2021 to the same applicant (Soleire Renewables SPV Limited) for a 102.76 hectare solar PV farm and 3.425 kilometre underground electricity grid connection (0.34 hectares) giving a total combined area for both the solar farm and underground grid connection of 103.1 hectares at in the townlands of Ballyroe and Dromin, Ballyhea, Charleville, County Cork.

Condition no. 4 required the omission of all development within the Blackwater River SAC.

5.0 Policy Context

5.1. National Policy and Legislation

Climate Action Plan (CAP) 2024

- 5.1.1. The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan. The purpose of the Climate Action Plan is to lay out a roadmap of actions which will ultimately lead to meeting our national climate objective of pursuing and achieving, by no later than the end of the year 2050 (as committed to in the Climate Action and Low Carbon Development (Amendment) Act 2021), the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. It aligns with the legally binding economy-wide carbon budgets and sectoral emissions ceilings that were agreed by Government in July 2022.
- 5.1.2. Central to achieving these goals is the strategic increase in the share of renewable electricity to 80% by 2030. To reach 80% of electricity demand from renewable sources by 2030:
- Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework;
 - Target 6 GW of onshore wind and up to 5 GW of solar by 2025;
 - Target 9 GW of onshore wind, 8 GW of solar, and at least 5 GW of offshore wind by 2030;
- 5.1.3. Deliver a streamlined electricity generation grid connection policy and process, and remove barriers, where possible, for the installation of renewables and flexible technologies reducing the need to build new grid, including hybrid (wind/solar/storage) connections.
- 5.1.4. CAP 2024 details the significant changes to enhance the electricity grid's capacity and flexibility. This will accommodate the significant upsurge in renewable energy while ensuring the system's reliability and efficiency. Additionally, managing

electricity demand through innovative policies and technologies is crucial for aligning energy consumption with cleaner production.

Climate Action and Low Carbon Development (Amendment) Act 2021

- 5.1.5. The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 amends the principle act such that Section 15(1) requires:

“(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

- a) the most recent approved climate action plan,*
- b) the most recent approved national long term climate action strategy,*
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,*
- d) the furtherance of the national climate objective, and*
- e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State”.*

“Relevant body” means a prescribed body or a public body.

National Planning Framework 2018-2040 (NPF)

- 5.1.6. National Strategic Outcome 8 seeks to transition Ireland to a low carbon and climate resilient society. Objective 54 seeks to reduce our carbon footprint by integrating climate action into the planning systems. National Policy Objective 55 promotes renewable energy use and generation at appropriate locations within the built and natural environment to meeting national objectives towards achieving a low carbon economy by 2050. Ireland’s national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% (compared to 1990 levels) by 2050, while ensuring security of supply of competitive energy sources. The transition to a low carbon energy future requires a shift to predominantly renewable energy.

- 5.1.7. The NPF states;

‘In meeting the challenge of transitioning to low-carbon economy, the location of future national energy generation, for the most part, needs to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas’.

National Development Plan 2021-2030 (NDP)

- 5.1.8. The NDP sets out investment priorities underpinning the implementation of the NPF. Chapter 13 deals with NSO 8 Transition to a Climate-Neutral and Climate Resilient Society. Public capital investment choices must contribute to a 51% reduction in greenhouse gas emissions by 2030 and lay the pathway to achieve net-zero greenhouse gas emissions by 2050. This will require grid-scale renewable electricity generation and storage.

National Biodiversity Action Plan 2023 – 2030 (NBAP)

- 5.1.9. Ireland’s 4th NBAP sets the biodiversity agenda for the period 2023 – 2030. The NBAP has a list of Objectives which promotes biodiversity as follows, Objective 1 Adopt a whole of government, whole of society approach to biodiversity; Objective 2 Meet urgent conservation and restoration needs; Objective 3 Secure nature’s contribution to people; Objective 4 Enhance the evidence base for action on biodiversity; Objective 5 Strengthen Ireland’s contribution to international biodiversity initiatives.

National Energy Security Framework (April 2022)

- 5.1.10. The Framework addresses Ireland’s energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions. Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

7.1 Reducing demand for fossil fuels.

7.2 Replacing fossil fuels with renewables, including solar energy.

7.3 Diversifying fossil fuel supplies.

- 5.1.11. Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

5.2. Regional Planning Policy

The Regional Spatial and Economic Strategy for the Southern Region

- 5.2.1. This document notes that the region is particularly rich in renewable energy resources. The RSES supports renewable industries and its associated requirements for transmission and distribution infrastructure.
- 5.2.2. RPO 100 states that it is an objective to support the integration of indigenous renewable energy production and grid injection. The RSES also supports the development of a regional renewable energy strategy (RPO 98), the implementation of the national renewable energy action Plan, as well as leveraging the region as a lead and innovator in sustainable energy generation (RPO 95). RPO 219 also states that it is an objective to support the provision of new energy infrastructure subject to suitable environmental assessments and the planning process to ensure the energy needs of the future population and economic expansion are met.

5.3. Local Planning Policy – Cork County Development Plan 2022-2028

- 5.3.1. The relevant development plan to this assessment is the Cork County Development Plan 2022 – 2028, which came into effect on Monday 6th June 2022.

The subject site is in open countryside with no specific zoning or other designations. The Development Plan sets out detailed policies relating to solar energy, renewable energy and related issues, all within the overall EU, national, regional and local context.

Chapter 13 Energy and Telecommunications

This chapter contains the following overarching objective for Renewable Energy (**ET 13-2 a**):

Support Ireland's renewable energy commitments as outlined in Government Energy

and Climate Change policies by facilitating the development of renewable energy sources such as wind, solar, geothermal, hydro and bio-energy and energy storage at suitable locations within the county where such development has satisfactorily demonstrated that it will not have adverse impacts on the surrounding environment (including water quality), landscape, biodiversity or amenities.

Section 13.8 of the CCDP sets out detail in respect of Solar Energy The following are considered relevant:

Objective ET 13-14: Solar Farm Development

- (a), support will be given to solar farm projects at appropriate locations, where such development does not have a negative impact on the surrounding environment, landscape, historic buildings, or local amenities..*
- (b) Promote the development of solar energy infrastructure in the county, in particular for on-site energy use, including solar PV... Such projects will be considered subject to environmental safeguards and the protection of natural or built heritage features, biodiversity, views and prospects.*
- (c) Require that new solar farm development proposals be assessed against the criteria listed in this Plan until such time as Section 28 Guidelines are published.*
- (d) All proposed solar developments locating in close proximity to any roads and airport infrastructure will undergo a full glint and glare assessment.*
- (e) Proposals for development of new solar developments and associated infrastructure including grid connections will be subject to ecological impact assessment and, where necessary Appropriate Assessment, with a view to ensuring the avoidance of negative impacts on designated sites, protected species and on sites or locations of significant ecological value.*
- (f) All proposed solar developments locating in close proximity to any roads and airport infrastructure will undergo a full glint and glare assessment.*
- (g) Proposals for development of new solar developments and associated infrastructure including grid connections will be subject to ecological impact assessment and, where necessary Appropriate Assessment, with a view to*

ensuring the avoidance of negative impacts on designated sites, protected species and on-sites or locations of significant ecological value.

Objective ET 13-21: Electricity Network

- (a) Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage, and distribution network infrastructure.*
- (b) Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards.*
- (c) Facilitate where practical and feasible, infrastructure connections to wind farms, solar farms, and other renewable energy sources subject to normal proper planning considerations.*
- (d) Proposals for development which would be likely to have a significant effect on nature conservation-sites and/or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.*

Paragraph 13.8.5 notes that in the absence of national planning guidelines for solar farm proposals, the Council will assess the appropriateness of individual applications having regard to other statutory requirements and guidelines, environmental sensitivity factors (if any) of the site, similar development guidance internationally, and the overall proper planning and sustainable development of the area. 15 issues to be considered in solar farms are listed as follows:

- Landscape character;
- Layout of the proposal including the scale of land cover, panel height, landscaping, road access, noise, etc;
- Site suitability – lands of high environmental / biodiversity value are not generally suitable for such development while brownfield land may be suitable;
- Drainage and flooding;

- Environment;
- Visual and landscape impact;
- The effects of glint and glare on neighbouring sites and transportation routes;
- Grid connections, in particular grid connections with the potential to impact on the strategic function of the national road network should be discussed and agreed with Transport Infrastructure Ireland and should use alternative available routes where feasible in the first instance;
- Fencing, lighting, and security;
- Storage and maintenance;
- Ecology and protection of habitats and species;
- Traffic and noise impacts;
- Ensuring Heritage assets are conserved appropriately and consider how or if any implications a large wind farm may have on these sites;
- Cumulative impacts;
- Decommissioning and how the land can be restored to its previous use.

Chapter 5 Rural

It is noted that **Objective EC: 8-15** Agriculture and Farm Diversification Part (c) has the stated objective of: *“encouraging farm diversification through the development of other sustainable business initiatives appropriate to the rural area”*.

Chapter 15 Biodiversity and Environment

Objective BE 15-6: Biodiversity and New Development - Provide for the protection and enhancement of biodiversity in the development management process and when licensing or permitting other activities...

Other relevant Objectives

A series of other policies as set out in the development plan area are also relevant, including Section 14.7 on Landscape, GI 14-3: Green Infrastructure and Development, GI 14-9 Landscape, GI 14-10 Draft Landscape Strategy, BE 15-13 –

Noise and light emissions, HE 16-9: Archaeology and infrastructure, and BE 15-2: Protected sites, habitats and species. These are all noted.

5.4. Natural Heritage Designations

- 5.4.1. The Shruhaneballiv Stream and Awbeg Rivers are designated as part of the Blackwater River SAC, site code 002170. The designated area includes the banks within the site area.
- 5.4.2. The Ballyhoura Mountains SAC, site code 002036, is c. 5.9km to the east. Kilcoleman Bog SPA, site code 004075 is c. 8.4km to the south-east.

5.5. EIA Screening

Solar Energy Development

- 5.5.1. Solar farms are a project for the purpose of the Environmental Impact Assessment Directive but solar farms do not fall within a class of development set out in Part 1 or Part 2 of Schedule 5 to the Planning and Development Regulations 2001, as amended and therefore no preliminary examination, screening for environmental Impact assessment or environmental impact assessment is required of the solar farm.
- 5.5.2. However, there are two classes of development within Part 2 of Schedule 5 to the Planning and Development Regulations 2001, as amended which may be relevant to the current proposal, and which should therefore be considered, these are as follows:

Restructuring of Rural Land Holdings

- 5.5.3. Rural restructuring is listed as development for the purposes of Part 10 under the heading of *Agriculture, Silviculture and Aquaculture*, Class 1 of Part 2 of the Fifth Schedule, with the following stated under subsection (a) '*Projects for the restructuring of rural land holdings, undertaken as part of a wider development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring*

is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.'

- 5.5.4. The proposed development involves the removal of a limited extent of hedgerow, primarily at entrances and to accommodate some cabling works, in total comprising c. 9m. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields. This proposed removal of hedgerow is significantly below the EIA threshold of 4km as outlined under Planning and Development Regulations 2001 (as amended). The development would, however, constitute sub-threshold development for rural restructuring (Class 1(a), Part 2 of Schedule 5). I refer to Appendix 1 of this report and completed Form 3 Screening Assessment which contains the final EIA Screening Determination on file.

Private Roads

- 5.5.5. In addition to the examination of thresholds in relation to rural restructuring, given the proposal for new access tracks on site, I have also examined the proposed project as it may relate to Class 10: *Infrastructure projects (dd) "all private roads which would exceed 2000 metres in length"*. The applicant proposes to use existing site access tracks and no private roads are proposed as part of the development, therefore this class has been screened out at preliminary stage from further consideration.

Conclusion

- 5.5.6. Having regard to the nature and scale of development and the absence of any significant environmental sensitivity in the vicinity of the site, as well as the criteria set out in Schedule 7 of the Planning & Development Regulations 2001 (as amended), and the Schedule 7A information submitted by the applicant, following a screening determination as detailed under Form 3 of Appendix 1 of this report, it can be concluded that there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded following this screening determination and an EIA is not required.

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. The grounds of appeal are submitted by Jess and Maurice Foley & Others of Ballynoran, Charleville. The main points made can be summarised as follows:

Issues with application form and administrative issues:

- The application was not processed in accordance with section 35 (1) of the Planning and Development Acts and Regulations 2000 and should have been invalidated. The further information received should have been deemed 'significant further information'. It would appear that the statutory bodies were notified but the observers were not.
- It is argued that other observers may have been denied the opportunity to appeal.
- The development should be refused, and a new application should be required which complies with legislation.
- The Board should assess if the legal issues over the processing of the application trigger a refusal to comply with fair procedure and public consultation obligations.
- The PA did not have the information before them to make an informed assessment on the public and environmental safety issues that the development will have on the local road network.

Environmental Issues

- No camera traps were placed on the two land parcels closest to the N20 which interact with the Rathnacally water body.
- Use of the lands by otter in particular along the Oakfront stream is confirmed. It may be appropriate to extend otter surveys beyond the length of the water courses and into forested, tree lined areas on the development site.
- As no bat surveys were carried out as part of the mammal surveys this would constitute a lacunae.

- Additional overwintering bird surveys welcomed.
- Lapwing are equally as protected as whooper swan in terms of ex-situ habitats they use for foraging and roosting, it is clear that this species uses the site during winter and it must now be identified if they utilise the site for breeding/nesting in the summer.
- Veon failed to list the SCI Wetlands and waterbirds in their NIS dated April 2024, they only include wetlands, therefore a revised NIS and mitigation measures needs to be carried out.
- It is not clear how the NIS 2024 is to be treated, is it an addendum or an updated in NIS, is it supplementary or a replacement.
- Unclear when the phase one habitat survey from the biodiversity management plan was carried out.
- Specific amphibian surveys should be carried out in addition to bat surveys.
- Mitigation presented to combat the lake effect including painting white lines and the implementation of anti-reflective coatings (ARC) is not considered acceptable particularly in light of the development sites hydrological impact on the Blackwater River SAC which traverses the site. ARCs contain PFAS (Per- and poly-fluoroalkylated substances). These can leach into groundwater and surface water systems and contaminate drinking water and aquatic ecosystems. They may also accumulate in soil and plant life. Threat to SAC and Freshwater Pearl Mussel.
- Substantial movement of topsoil and subsoil which will definitively lead to sediment migration in particular during wet weather at construction stage, having a resultant impact on water courses.
- Concerns regarding increased potential for flooding as a result of solar panels.
- Silt barrier design may cause issues for movement of land-based species.

Risk Assessment

- Concerns in relation to risk of fire either caused by solar farm equipment or in the event of wildfires due to natural or human causes. No statutory consultation with the regional fire safety officer.
- Further assessment of the traffic impacts of heavy goods vehicles on local road networks in particularly cumulative impacts with other solar sites, industrial sites and agricultural equipment should be carried out.
- Applicant has not addressed the issue of potential interference with GPS systems used by farmers.
- Independent experts to assess noise assessment and electromagnetic assessments should be engaged by the board.
- Strongly disagree with the updated EIA screening assessment of the development. Screening assessment submitted for Board's consideration.

6.2. Applicant Response

- 6.2.1. The applicant's response to the third-party grounds of appeal, dated 03rd September 2024 (prepared by Entrust Limited, Planning & Environmental on behalf of the applicant) can be summarised as follows:

Status of Submission:

- Significant concerns in respect of the bona fides of the third party appeal statement received – questions of joint appellants consent in relation to other appeal 314431-22 for 110kV substation and validity of the signature attaching to the appeal documentation.
- Taking the above into account the applicant has no confidence that each of the named participants in the appeal ABP-320298-24 have not been similarly approached by the principal party and duly misrepresented and misinformed and as a consequence they request An Bord Pleanála to carefully consider that a vexatious appeal has been submitted.

Public Consultation:

- The planning application submission (see Enclosure I, Appendix XIII), included a Statement of Community Consultation (SCC) which included an account of the pre-application consultation and communication process which was undertaken with the various stakeholders and members of the local community, including 'drop in' events.
- The applicant participated in pre-application consultation with both the planning authority and the N/M20 Project Coordinator.
- The public consultation process resulted in a number of significant design changes to the proposal, including the removal of solar panels in a number of fields and the replacement of panels in some areas with wildflower meadows, with the aim in ensuring that no residential dwelling would have an unacceptable visual impact of the proposal.

Planning Application Process:

- Following the efforts of the applicant in continuing to deal with local residents, even after the planning application was submitted, solar panels proposed in the two furthest fields to the west of the site location were removed and additional landscaping was proposed here as part of the plans. The agent submitted the part of the site layout plan affected by these changes to the Planning Authority on 16/11/2023, however the Further Information Request received from the Planning Authority (dated 11/12/2024) stated that this information constituted unsolicited information and had to be disregarded, however they stated that it could be considered if submitted and addressed in full in any response to the request for further information.
- The above information in relation to the removal of solar panels on lands to the west of the site was submitted as part of the formal response to the request for further information.
- In order to address any confusion in relation to alleged missing plans the agent re-submitted a complete set of planning drawings as part of the response to the further information request.

- Given that the appellants have not challenged the planning authority's decision not to invoke Article 35, it is not open to them to raise Article 35 complaints in the context of the appeal and it is respectfully submitted that the Board has no jurisdiction in relation to same.
- In response to concerns in relation to transport matters the planning authority following consideration of a report from the Area Engineer determined that the response was sufficient.

Environmental Issues

- Surveys adhere to the NRA (2009) 'Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes'. The strategic placement of camera traps within the site was informed by preliminary assessments.
- No evidence of breeding or resting sites for otters were recorded within the study area. Mitigation measures are nonetheless included (See Appendix 4 of Appeal Response).
- An initial day time bat survey was carried out within the site to investigate the presence or absence of active and/or historic bat roosts. The site is not considered to provide significant suitable roosting habitat for bat species. Potential bat corridors in the vicinity of the area were also assessed. Existing hedgerows and trees on site which may provide commuting routes are to be protected and enhanced and preserved for the lifetime of the proposed solar farm.
- Following surveys there is no evidence to suggest that the proposed development site is of significance to Lapwing. A maximum flock size of 3 (the number recorded on site) is not significant within the context of the ROI wintering population.
- The site will not form a significant foraging area for the SCIs of Kilcolman Bog SPA.
- The NIS dated 2024 should be treated as an integral part of the overall environmental assessment, updating the initial findings to ensure a comprehensive evaluation in line with the requirements of the PA.

- The multi-disciplinary ecological walkover surveys comprehensively covered the entire study area. Site visits were carried out on the following dates: 16th of June 2022, 3rd of February 2023, 4th of August 2023, 28th of November 2023, 13th, 15th, 19th and 20th of December 2023, 8th and 13th of February 2024.
- The BMP has been informed by these comprehensive surveys and updated following a further information request from the planning authority.
- While no frogs or frogspawn were identified during the surveys, it is important to note that this does not necessarily indicate an absence of these species. Enhancement measures have been provided in the BMP to provide suitable breeding and resting habitats for amphibians.
- A signed declaration from the solar manufacturer has been submitted (Appendix 6) which states that the panels to be used onsite are Per- and poly-fluoroalkylated substances (PFAS) free.
- A Biodiversity Net Gain Report (BNGR) has been included with the Appeal Response. This report demonstrates the applicant's commitment to achieving the highest level of biodiversity on the site as part of this proposal.
- An updated Landscape Layout Plan & Landscape Management Plan has been produced to be in line with the existing ecology documents and the BNGR.
- As presented in the CEMP, any proposal to re-contour any lands and movement of topsoil or subsoil is 'minor' in nature – it would not trigger EIA, see EIA Screening Report.
- The solar panels will not lead to soil erosion or an increase in flooding. A detailed SSFRA was submitted with the application based on available data at the time.
- Proposed silt traps - all of the proposed pollution control mitigation measures are permeable in nature, and also temporary (3 months). An Ecological Clerk of Works is also to be employed on site during this phase. The proposed hay bales will not act as a barrier for land-based species.

Risk Assessment:

- Fire Risk - stringent national and EU regulations must be met for any electrical components manufactured. The Proposed development has been designed in accordance with stringent Eirgrid and ESB standards.
- No significant cumulative impacts on traffic associated with other industrial sites such as Dawn Meats, other solar farms or agricultural equipment is considered likely. CCC's Area Engineer did not raise any issue.
- GPS Interference - solar farms do not interfere with GPS signals. An EMI report has been submitted with the application which states that 'levels of electromagnetic radiation from the underground cables and overhead powerlines are predicted to be well below International Commission on Non-Ionizing Radiation Protection (ICNIRP) reference levels'.
- An EIA would not be triggered as a result of fire risk or PFAS. Also Solar Farm developments do not trigger EIA.

6.3. Planning Authority Response

6.3.1. Response received on 07th October 2024 which stated:

- The Planning Authority is of the opinion that all the relevant issues have been covered in the technical reports already forwarded to the Board as part of the appeal documentation and has no further comment to make on this matter.

6.4. Observations

6.4.1. None received.

6.5. Further Responses

6.5.1. A Further Response (dated 07th October 2024) was received from the appellant, in response to the first party response to the appeal (dated 03rd September 2024). This can be summarised as follows:

- In response to claims that Jess Foley added names to observation/appeal ABP Ref. 314431 without the 3rd parties' consent (Gavin and Carol Carey,

Graeme Murphy), this is untrue. It is noted that the appeals from the above parties in relation to ABP Ref. 314431 was withdrawn but those above state that they did not write or sign same withdrawal letter.

- In response to claims that Jess Foley may have added all appellants names to the observation/appeal ABP Ref. 320298 without their consent – this is untrue and correspondence confirming consent has been submitted as part of the appendices of the further response received. Letters from the following are also noted – Noel Howard, Eileen Hanly, Martin, Mary and Conor Lane and others.
- The appellant considers that the appeal submission has merit and therefore should not be considered vexatious under section 138 of the Planning and Development Act 2000.
- The applicant's claims behind the intention of the appellant making the appeal are untrue. The appellant states that they are entitled to look for public benefit as part of any permission and reject the idea that only landowners should see any benefit.
- The design changes referred to in paragraph four, page two of the Entrust Limited response did not come about solely as a result of public consultation. It was only after the appellant consulted with the nearby residents that they approached the developer to request these changes.
- The appellant respectively asks the Board to open an investigation into the circumstances surrounding the submission of letters and request further explanations from the applicant in relation to the accusations against the appellants.

7.0 Assessment

7.1. Having examined the application details and all other documentation on file, including all of the observations and submissions received in relation to the appeal, and inspected the site, and having regard to relevant local/regional/national policies and guidance, I consider that the substantive issues in this appeal to be considered are as follows:

- Principle of Development
- Landscape and Visual Assessment
- Glint and Glare
- Biodiversity and Ecology
- Traffic and Infrastructure
- Cultural Heritage
- Flooding and Drainage
- Other Matters

7.2. Principle of Development

- 7.2.1. Renewable energy development is supported in principle at national, regional and local policy levels, with collective support across government sectors for a move to a low carbon future and an acknowledgement of the need to encourage the use of renewable resources to reduce greenhouse gas emissions and to meet renewable energy targets set at a European Level. It is also an action of the NPF under National Policy Objective no. 55 to 'promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'. At regional level the Regional Spatial and Economic Strategy for the Southern Region includes an objective to increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture.
- 7.2.2. The Cork County Development Plan 2022-2028 is supportive of renewable energy in general with Objective ET 13-1 Energy stating 'Ensure that County Cork fulfils its potential in contributing to the sustainable delivery of a diverse and secure energy

supply and to harness the potential of the county to assist in meeting renewable energy targets and managing overall energy demand'. The Plan supports national and European policy with Objective ET 13-14 reaffirming this stating that "In recognition of national targets and commitments to significantly increase renewable energy production, support will be given to solar farm projects at appropriate locations, where such development does not have a negative impact on the surrounding environment, landscape, historic buildings, or local amenities". Section 13.8.5 of the Plan states that there are currently no national planning guidelines to guide the future development of solar farm proposals, considering this the Council provide a list of issues that should be considered for all solar farm proposal e.g. visual and landscape impact, ecology, storage and maintenance, traffic, grid connections, glint and glare, cumulative impacts etc.

- 7.2.3. The appeal site is on unzoned lands – there are no specific designations, although under rural housing policy area types it is considered a 'stronger rural area'. There are no landscape or other designations and there are no scenic routes in the immediate vicinity. While not the current agriculture practice, utilising lands for solar farms is an increasingly common agricultural practice as farmers and landowners diversify their business. This diversification in agriculture is supported in development plan Objective EC 8-15. It is therefore considered that solar farms are an appropriate land use in this rural environment.
- 7.2.4. The proposed cable and associated infrastructure in the public roadway are underground and acceptable in principle having regard to the Development Plan Objective ET 13-21 which aims to facilitate where practical and feasible, infrastructure connections to solar farms subject to normal proper planning considerations.
- 7.2.5. Additionally, I also note the following sections and objectives of the Plan which are also relevant, including Section 14.7 on Landscape, Plan Objectives GI 14-3: Green Infrastructure and Development, GI14-9 Landscape, GI 14-10 draft Landscape Strategy, BE 15-13 – Noise and light emissions, HE 16-9: Archaeology and infrastructure, BE 15-2: Protected sites, habitats and species, and BE 15-6: Biodiversity and New Development. Where relevant these policies will be addressed within the sections below.

- 7.2.6. The proposed development is therefore supported by national, regional, and local policies in terms of renewable energy. Accordingly, I consider the proposal to be acceptable in principle and that it would contribute to the diversity of sources of energy supply and hence the security of energy supply. The acceptability of the proposal is contingent on other issues addressed below.

7.3. Landscape and Visual Assessment

- 7.3.1. A Landscape and Visual Impact Assessment (LVIA) was submitted with the original application. The appraisal work within is based on an area around the site that covers a 5km radius and Zone of Theoretical Visibility maps are attached in Appendices 2 and 3 of the LVIA which support the determination of this distance. The report is also supported by a Photomontage Report which includes visualisations from 18 no. Viewpoints (VPs).
- 7.3.2. The subject site is located within Landscape Character Type 5 (LCT5) – Fertile Plain with Moorland Ridge as detailed in the County Cork Draft Landscape Strategy 2007. The site is located within a gently sloping location and generally well enclosed from any medium and long range views due to the presence of existing hedgerows and trees which surround the site. It is noted that the topography to the north, comprising of gently rising land, as well as commercial forestry and noncommercial woodlands to the south and west effectively contain the views to a large degree. In terms of Landscape Effects, the significance of impact is considered Negligible upon LCT5 and therefore Not Significant.
- 7.3.3. Visual Effects are considered through an examination of the presented 18 no. Viewpoints. The viewpoints used include those from the nearest residential dwellings, local roads and the N20 National Road, as well as important designated heritage assets. According to the submitted Photomontage Report the proposed development is only expected to be partially visible from 3 no.VPs 12, 14 and 15, though I note the submitted LVIA only refers to 2 no. VPs - 12 & 14. I note however that even at these viewpoints the visibility will be severely restricted owing to the existing and proposed vegetation and only very minute portions of the proposed solar farm would be visible in the absence of any mitigation. In addition, the separation distances involved from certain viewpoints would also significantly minimise any visual effects. The predicted visual effect that the nearest associated

dwelling will experience prior to planting mitigation at most is determined as Moderate/Minor impact and with mitigation this impact is determined as Not Significant. Negligible impact is expected on the nearest settlements of Ballyhea (1.5km southeast) and Charleville (3km north). Negligible impact is expected on any of the nearby Record of Monuments and Places (RMP) sites. VP8 examines any impacts on the closest listed building Cooliney House and determines that the proposal will not be visible due to existing screening and the separation distances involved, therefore no significant effects are expected on this protected structure.

7.3.4. I note that a Landscape Management Plan was also submitted, along with the original plans and particulars. This overlaps with additional reports relating to biodiversity and ecology which are discussed further below and the Board should note that an updated version of the report dated March 2024 was submitted as part of the response to the Planning Authority's further information request. The updated report contains additional details in relation to the specific variety of bird boxes to be installed (10 no. in total) to accommodate Kestrel, House Martin, Swift and Swallow. Existing hedgerows and tree lines within the proposed development site are to be retained and wildlife enhancement measures are also proposed (discussed further under Section 7.5 below).

7.3.5. The Board should note that the layout of the proposed solar farm was amended following the submission of updated drawings as part of the further information received by the Planning Authority. The amendments occurred to the western and eastern portions of the subject site and can be seen when comparing the original submitted Landscape Layouts with those received as part of the FI submission on 08/05/24. As can be seen from Landscape Layout 1 of 3 which comprises the western portion of the site four main areas of PV panels have been removed from the northern fields. VPs 16 and 17 provided an assessment of these fields from the northwest, negligible visual impact was expected prior to their removal and subsequent to the amendments the same result is expected. The eastern boundary of the site has been amended also as part of the revised Landscape Layout Drawing 3 of 3, this drawing now includes the proposed M20 route corridor to the east and also the inclusion of a 10m native woodland buffer along the boundary with the route corridor (discussed further in Section 7.5 below).

- 7.3.6. With regard to cumulative visual impacts and landscape effects the submitted LVIA refers to a 'Masterplan' which was initially presented at pre-application stage to the Planning Authority, this depicts the applicant's other developments within the wider area which are either consented or are awaiting decision, an up-to-date list of these developments is presented under Section 4.0 of this report. Following an assessment of surrounding consented and proposed developments it is determined that negligible cumulative landscape and visual impacts are expected.
- 7.3.7. Having surveyed the site and general area, I conclude that the chosen viewpoints in the Photomontage Report along with the LVIA provide an accurate indication of visual impacts, both of the project by itself and potential cumulative impacts with other permitted developments in the area. I concur with the conclusions that the overall landscape impact is generally low and not significant. While I acknowledge that the site itself will undergo a change in character due to the creation of a large solar farm development, I am however satisfied that with the implementation of the Landscape Management and Maintenance Plan, no substantial impact on the character of the wider landscape setting will be experienced as mitigation planting becomes established. While it is an attractive, mature rural landscape, this area is not designated as a scenic landscape in the development plan and solar energy development is identified as a compatible use, and this change must be seen in the context of the energy and climate issues facing the country.
- 7.3.8. I will address the specific issue of glint and glare, an element of potential visual interference, in the next section.

7.4. Glint and Glare

- 7.4.1. The applicant has submitted a Solar Photovoltaic Glint and Glare Study (G&G Report), along with an updated report (dated April 2024) on foot of a request for further information by the planning authority regarding impacts on the N/M20 study area. It is noted in the G&G Report that there is no formal guidance in Ireland for carrying out these assessments and therefore the methodology chosen is set out in Section 2.5 of the submitted report. I am satisfied with the approach taken.
- 7.4.2. The submitted assessment examines Dwelling Receptors and Road Receptors. A total of 69 dwellings were assessed, with a typical height of 1.8m above ground used in the modelling simulations. Solar reflections were geometrically possible towards 6

of the 69 dwellings for more than three months per year but for less than 60 minutes on any given day. In the absence of a sufficient number of mitigating factors the impact is categorised as moderate. Mitigation in the form of enhanced planting screening is proposed and illustrated in the case of each dwelling receptor on Figures 11, 12, 13, 14, 15 and 16 of the report.

- 7.4.3. The G&G Report considered all roads within or close to 1km of the proposal or those proposed routes that have a reasonable prospect of being able to view the panels, the assessment therefore considered the N20, stretches of local roads nearest the development boundary and the proposed M20 motorway corridor. Given existing vegetation and intervening terrain no impact was expected on any of the 10 no. receptors on the N20 national road or any of the 26 no. receptors identified along the L1322 (2.5km section of road).
- 7.4.4. I note the conclusion provided in relation to the N/M20 Cork to Limerick Project within the updated G&G report (April 2024) which states that 'no impact is predicted, and no mitigation is required'. As previously highlighted by the N/M20 Project Office this statement is incorrect given that there is a geometric potential for glare for a 1.3km length on the proposed N/M20 and also the fact that revised plans have been submitted showing mitigation in the form of a proposed 10m wide native woodland buffer along the eastern boundary of the proposed site. The revised layout is presented on submitted Landscape Layout Drawing 3 of 3 (Drwg no. 2316-LA003-Rev4). I note the Project Office's concerns and would suggest that if the Board are minded to grant permission that a specific condition is attached to ensure that appropriate buffer zone and all year round mitigation is included to avoid any glint or glare impact on road users of the proposed future N/M20 road.
- 7.4.5. Cumulative impacts are examined under Section 6 of the submitted April 2024 Report. The assessment considers three other approved developments within proximity to the proposed solar farm which include Fiddane Extension, Coolcaum Solar Farm and Ballyroe Solar Farm (See Section 4.0 of this report for planning history details). No significant cumulative impacts are predicted for those six dwellings that have visibility of the reflective area. In relation to cumulative impacts on the road network no impacts are expected for all identified road receptors.

- 7.4.6. 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.

7.5. Biodiversity and Ecology

- 7.5.1. 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 8.0. Similarly, issues related to flooding and drainage will be addressed in the subsequent Section 7.8 to avoid repetition and duplication. However, it is acknowledged that these topics interact.
- 7.5.2. In addition to a NIS, the applicant submitted an Ecological Impact Assessment (EclA), a Terrestrial Mammal Survey (TMS), a Whooper Swan and Winter Bird Survey Report, Whooper Swan Coordinated Management Programme, and a Biodiversity Management Plan (BMP), Biodiversity Net Gain – Design Stage Report and other related ecological information in its submissions (e.g. Landscape Layouts with vegetation detailed).
- 7.5.3. Site visits were carried out by qualified ecologists, with flora, habitat and faunal surveys of the proposed site carried out on the 4th of August 2023, with sections of the proposed developments previously surveyed on the 16th of June 2022 and the 3rd of February 2023. Dedicated Whooper Swan surveys were also undertaken from October 2022 to April 2023 which included VP watches, targeted distribution and abundance surveys, acoustic surveys and hinterland surveys. Habitats were mapped according to the classification scheme outlined in Fossitt, (2000) and Heritage Council (2011). General bird surveys were carried out in conjunction with habitat surveys and a dedicated mammal survey was carried out following NRA guidelines. Winter bird surveys were carried out using line transect methodology and the proposed development area was also surveyed for invasive species.
- 7.5.4. As per the EclA, the proposed development site consists of a mosaic of habitat types categorised under the Fossitt Classification and consisting of improved agricultural grassland habitat (GA1) used for grazing, farmyard and other built land (BL3) and arable croplands (BC1), with these habitats assessed as low biodiversity / ecological value. Hedgerows (WL1) and treelines (WL2) are located throughout the proposed

development site and adjacent to same. These habitats are considered to be of moderate ecological value and locally important. A pocket of scrub (WS1) was recorded in the western section of the site and a plantation of semi-mature woodland (WD2) is found at the western end of the proposed development site, with the habitat evaluated as moderate ecological value. Drainage ditches (FW4) are also noted to be numerous, and due to the artificial nature of these ditches/channels the habitat is considered to be of moderate value, locally important.

- 7.5.5. Both the Oakfront Stream (EPA Code: 18O12) and Rathnacally Stream (EPA Code: 18R32) flow through the site, with the Rathnacally stream forming part of the Blackwater River (Cork/Waterford) SAC, the boundary of which starts on the development site's central southern boundary. Both watercourses are classified as depositing / lowland rivers (FW2) habitat type and while it is stated that they have highly modified banks within the site, they are noted to be the most important habitats within the survey area, potentially supporting a range of protected species. Both watercourses have been evaluated as high value locally important.
- 7.5.6. The area of potential impact during construction phase is taken as being the site of the proposed development and the downstream aquatic habitat. While the nearby sections of these watercourses are minor shallow and narrow watercourses of poor fisheries value, they are both important contributory watercourse to the Awbeg catchment. Both watercourses form an ecologically important part of the landscape and are offered protection downstream as a Special Area of Conservation. The applicant states that a 15m buffer zone will be observed along the Rathnacally Stream with no construction works within this zone. The proposed grid connection is to pass under the Rathnacally Stream, this is to be done by Horizontal Directional Drilling beneath the stream bed, as such in-stream works will not be required and the potential for contaminants or pollutant input will be significantly reduced as a result.
- 7.5.7. Primarily only low valued habitats are to be lost and the retention of moderate to high valued habitats is ensured, with only a very minor loss of hedgerow. A table has been provided within the revised ecological reports which indicates that the only loss of habitats evaluated as either moderate or high local value is to hedgerow habitat where c.6m is to be removed to facilitate the widening of an existing site entrance. I do note however, that as per the Arboriculture Report c.3m of hedgerow will also be removed to facilitate a proposed cable trench.

- 7.5.8. No rare or protected floral species or high-risk invasive species listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 were recorded on site. I note that per the report the bird species recorded during the site visits are typical of the habitats assemblages present. No Annex I or red listed bird species were recorded on site.
- 7.5.9. Ongoing trends of Whooper Swan occurrence and foraging in the surrounding area indicate flocks and subflocks utilise the floodplain areas of the Awbeg River between the N20 and wetlands south of the proposed development site. However, Whooper Swans are unlikely to use the site for foraging or as a potential roost due to the absence of suitable floodplains and regular standing water. Potential impacts to Whooper Swan are addressed within the submitted NIS and a detailed examination of the information presented in the Whooper Swan & Winter Bird Survey Report and the Whooper Swan Coordinated Management Programme (both dated April 2024) is also given in Section 8.0 of this inspector's report.
- 7.5.10. I note that the Council's ecologist raised concerns regarding the particular specification and methodology for installation and management of silt fences, in response to this the applicant has referenced measures / information specified within the originally submitted CEMP, where it states that it is intended that the drain and watercourse management plan will comprise a simple visual inspection plan and manual vegetation maintenance plan and will not involve any re-grading, re-profiling or any other excavation works within the existing drainage ditches nor will it involve any construction machinery. In addition, the appellants raised concerns regarding movement of land-based species over these proposed silt fences. The applicant has stated that permanent watercourse silt traps are not proposed during the operational phase, as same are not considered to be required having regard to the nature of the proposed development. In addition, in response to the further information request a silt fence system construction method statement has been submitted, this is considered satisfactory.
- 7.5.11. Following the planning authority's request seeking additional information on protected mammal species, an additional survey was completed on site entirely dedicated to the identification of mammals and suitability of habitats on site for mammal species. 6 no. trail cameras were deployed at a number of suitable locations identified during the ecological walkovers and previous site surveys. To

supplement site walkovers and trail cameras, targeted transect surveys were undertaken within the areas identified as the most suitable or which had the most mammal activity. Two active badger setts were found within the survey area, the applicant however states that no actions to exclude badgers from active setts will be undertaken as they are not deemed necessary due to location and by implementing the mitigation measures outlined in both the NIS and EclA reports, residual impacts are considered to be non-significant and short term at a local context. A pre-construction mammal survey including a badger survey will be undertaken within the study area to reconfirm the existing environment and in the event that badger setts are discovered at this stage appropriate NRA guidelines will be implemented and the NPWS will be notified.

- 7.5.12. In relation to otter, signs were limited to a single spraint and prints which were observed along adjoining section of the Oakfront Stream. I note the appellants concerns regarding the possible presence of this species along the watercourse on site. Following surveys no evidence of breeding or resting sites for otter were recorded within the study area. Nonetheless this species is to be protected through a suite of measures including preconstruction surveys and the implementation of water course buffer zones. I am satisfied that with the implementation of these mitigation measures and those to be implemented by way of condition, significant impacts to mammalian fauna can be avoided.
- 7.5.13. With respect to bats, linear treelines and hedgerows on the periphery of the site provide suitable foraging habitat, no roosts were recorded onsite, however potential roost site were recorded in close proximity to the site, therefore potential impacts to foraging or commuting bats is deemed possible. Given that the removal of hedgerow is minor, limited to c. 9m in total, this is not considered a significant factor in relation to potential impacts. Regarding possible impacts as a result of lighting on site I note that any external security lighting will be set on motion-sensors and short (approx. 1 min) timers and lighting is to be directed only to where it is needed and thus preventing light spillage and light pollution. Measures in relation to lighting have been provided within the submitted NIS and EclA and these are considered satisfactory.
- 7.5.14. In response to concerns raised by the Council's Ecologist in relation to the lack of details provided in respect of artificial / man-made species breeding / resting locations e.g. frog / newt hibernaculum etc, the applicant responded by updating and

providing new ecological reports including the Biodiversity Management Plan. I would agree with the Council's Ecologist in that provided the measures specified are implemented in full and under the supervision of an appropriately qualified ecologist the approach and measures are considered acceptable.

7.5.15. An updated Landscape Management Plan and landscape drawings were also provided by the applicant. This information contained a planting schedule which included for Beech and Sycamore in the site planting which are not native species. Given the opportunity the project has to enhance natural habitats on site I would suggest that if the Board are minded to grant permission that a condition is included detailing the replacement of these non-native species with native tree and /or shrub species of Irish provenance, reflecting those species found in the surrounding areas.

7.5.16. Cumulative Impacts are examined under Section 5.8.2 of the EclA where other related and permitted developments including solar farm developments in the general region of the proposed project and relevant programmes and plans within the project zone are assessed for any in combination impacts. The only potential for cumulative effects identified is between hydrologically linked sites through a deterioration in water quality should a construction related pollution event occur. However, with the full implementation of mitigation measures detailed in this Section 6 of the EclA, it is not anticipated that there will be any significant cumulative effects. As stated, a detailed suite of mitigation measures is presented under Section 6 of the EclA, these cover Design Phase, Pre-construction, Construction (Including CEMP) and Operational Phase Mitigation and also include for a Decommissioning Phase Monitoring Programme and Biodiversity Management Plan. These measures are considered adequate.

7.5.17. Notwithstanding the Appropriate Assessment issues to be addressed below (see Section 8.0), I am satisfied that in general terms the overall impact of the proposed development on the local ecology will be minimal. The submitted BMP and also Biodiversity Net Gain – Design Stage Report is likely to result in significant improvements over the existing baseline in terms of augmenting wildlife corridors and strengthening hedgerows. I concur with the findings of the EclA that with the implementation of mitigation measures, including further surveys prior to and during construction, there would be no significant effects on the ecology of the site or surrounding area arising from the proposed development.

7.6. Traffic and Infrastructure

- 7.6.1. The applicants submitted a Traffic Management Plan (which covers construction, operation, and decommissioning) and a Construction and Environmental Management Plan (CEMP).
- 7.6.2. Site access considerations included a swept path analysis, passing locations analysis and an assessment of site access visibility. In relation to construction traffic two routes were tested in the TMP with one associated with travel from the N20 to/from the Site A compound (along the L1324/L1307) and the other the Site C compound (along the L5530/L5529/L5527). It is estimated that over the course of the 12-week construction period there will be less than 50 two-vehicle delivery vehicle movement trips per day in total, likely with notably fewer movements on many days. Between 50 and 100 two-way daily movements are anticipated for staff vehicle movements (lesser of two factors in car sharing). As there are no permanent staff on site during the operational period, it is anticipated that the number of vehicular trips would be negligible (five times a year for maintenance purposes). The decommissioning period is anticipated to be similar in intensity of movement to the construction phase.
- 7.6.3. I note that several issues were raised at application stage by the Area Engineer in Cork County Council, in particular regarding the suitability of the local road network to cater for the vehicles that will be travelling to and from the site, in particular the section of road along the L5529 which showed signs of deterioration along the road edge. The applicant responded to these concerns following a request for further information stating that the initial TMP contained all relevant details, and also referred to previous assessments and approvals received by the same applicant on the Coolcaum and Ballyroe Solar Farms which uses the same legs of roadway. While I note the prior approvals in relation to other solar farm developments in the vicinity, I do not consider it appropriate that the applicant refer to these in support of their current proposal, the impact of the current proposal needs to be considered both individually and cumulatively with other projects and cannot rely on measures imposed on other projects as a way of circumventing possible further requirements.
- 7.6.4. A series of Traffic Management Measures are included under Section 6 of the TMP and I note that Section 6.3 includes Measures to Reduce Conflict & Cumulative

Impact. This section states that should construction of different sites occur simultaneously, deliveries between the sites are to be coordinated to ensure two large vehicles do not attempt to utilise the same section of road at the same time. Given that all the schemes are for the same developer, coordination of movements is likely to be feasible and effective. I note the appellants also raise concerns regarding the cumulative impacts associated with traffic involved in the future development of the approved solar farms and also other industrial and agricultural uses in the area. While these are noted I consider that given the agricultural nature of the area and the relatively short period for which construction will cause an issue, I do not consider that this would create either congestion or a hazard beyond the norm for a road network of this nature, and potential safety issues can be addressed by way of standard management controls typical for construction operations at this scale – these are set out in detail in the TMP/CEMP and additional correspondence on file. I am satisfied that the control measures set out in the submitted TMP and the CEMP adequately address both safety and traffic flow issues, subject to the detailed measures being agreed with the Roads Authority.

- 7.6.5. In relation to the condition of the local roadways L5527, L5529, L5530 and L1324, I note the Area Engineer's report responding to the further information received and the attached special exceptional costs sought by way of condition. I consider this condition excessive given the limited construction period and nature of proposed vehicular movement. I would consider it appropriate instead that a condition is attached to any grant of permission requiring a road condition survey is carried out prior to development and that on agreement with the planning authority a cash deposit/bond, or such other security as may be acceptable, to secure the reinstatement of public roads which may be damaged by the transport of materials to and from the site is lodged prior to commencement. This is in tandem with the measures outlined in the TMP would therefore in my opinion be sufficient. In addition, I also note the specific condition included by the planning authority in relation to the strengthening of the road surface in the vicinity of the entrance, for a distance of 40m to the east and west of the entrances. I consider this acceptable given the additional usage of the road network at these points. If the Board are minded to grant permission I would suggest that similar conditions should be attached to any approval.

- 7.6.6. I would conclude that any residual issues around traffic can be addressed by way of condition, specifically that the details set out in the submission be confirmed in an approved Construction and Environmental Management Plan to be subject to final agreement with the Planning Authority prior to commencement of development.

Grid Connection Cable

- 7.6.7. The underground grid connection route will run underneath private lands and the L5519, L5527, L5528 and L5529 public roads for 1km where it will connect the proposed development to the previously consented electricity grid interconnector (Cork County Council PI. Ref 22/5933). The recently consented 110kV tail fed substation at Ballyroe (ABP Ref. 314431-22) will then export the renewable electricity back to Charleville 110kVa substation via an underground cable.
- 7.6.8. The impact of the laying of the grid connection will be short-term and temporary and would have no permanent impact on the strategic function of the road network in this area given it is underground. The request from Cork County Council to condition the requirement of a road opening licence is noted. However, all parties will be aware of their legal responsibilities and that even if planning permission has been granted and a commencement notice issued, a road opening licence is still required if it is necessary to open the road. In that context a condition is not considered necessary.

N/M20 Cork to Limerick Project

- 7.6.9. As mentioned previously it is acknowledged that there are plans to construct a new dual carriageway road, the N/M20, between Cork and Limerick with the current preferred option alignment for the route utilising land to the west of the current N20, in order to bypass Ballyhea and Charleville. The proposed route corridor is approx. 200m wide with the scheme currently within the design stage and construction anticipated to commence in 2027. As the proposed development is projected for completion in 2025 it is anticipated that there will be no significant overlap with the M20 construction programme.
- 7.6.10. The proposed route study area is located to the immediate east of the proposed site with part of the extent of the solar array, as originally applied for, within the study area. A Report received by the N/M20 Project Office (and Transport Infrastructure Ireland) outlined that, given the siting of these lands within the N/M20 Study Area, they deemed this planning application to be premature at this point in time. Concerns

were also raised in relation to possible future Glint and Glare effects, these have been addressed previously under Section 7.4 above. The applicant in response to concerns reconfigured the eastern site layout and removed an proposed development area of approximately 4.5 acres from the solar farm in this area, in addition they have included a native woodland buffer 10m in width to address any glint and glare concerns ((as per revised site layout drawings and Landscape Layout Plan (Dwg. 2316_LA003_rev. 04). The N/M20 Project Coordinator in their submission in response to further information received stated that as the proposed solar farm extends into the study corridor and there is a high risk that lands within the red line boundary will be included in the future CPO for the N/M20 project they would request that the applicant/landowner are conditioned to enter into an agreement with Limerick City and County Council (Lead Authority for N/M20 project) in respect of future land acquisition claims in respect of these lands. A condition to this effect was attached to the planning authority's decision. In the interest of orderly development, I would suggest that if the Board are minded to grant permission that a similar condition is attached.

7.7. Cultural Heritage

- 7.7.1. An Archaeology, Architecture and Cultural Heritage Report along with a Geophysical Survey Report (which included the results of archaeological testing) has been submitted with the application.
- 7.7.2. 3 no. RMP Sites are located within the proposed development site, namely a redundant record RMP CO00-041, a ring barrow RMP CO007-052 and a ringfort RMP CO007- 053. The redundant record was formerly classified as an enclosure (no surface trace). These sites have been mitigated with the introduction of archaeological exclusion zones. There are further 15no. RMP/SMR sites within 500m of the proposed site.
- 7.7.3. A geophysical survey was undertaken within the proposed development which resulted in the exclusion of a large number of geophysical anomalies. A program of archaeological testing was also carried out within three parcels of land within the proposed development site where access safety and ground conditions allowed. I note that time constraints did not allow for archaeological testing in a number of townlands within the site and in the absence of archaeological testing in the

townlands of Fiddane and Cooliney, a conservative and precautionary approach was taken by the applicant with the proposed mitigation for these areas involving archaeological exclusion and or archaeological buffer zones to protect the recorded monuments and potential archaeological features identified by the geophysical survey. Table 15 - Archaeological mitigation measures (to be read in conjunction with Maps 1-5 contained within the Geophysical Survey Report) is presented on page 84 of the Archaeology, Architecture and Cultural Heritage Report. This table details each feature identified within the site, drawing on the results of the Geophysical survey, results from testing where this was possible and the necessary mitigation. The mitigation varies from archaeological monitoring for example along the proposed access/ cable route, to Exclusion and Buffer Zones (where concrete feet are proposed to support the solar panels). It is noted that certain features were excluded from the development entirely at an earlier stage in the project.

- 7.7.4. There are no protected structures within the proposed development area or within a 500m radius and only one within one kilometre of the site, this is Cooliney House (RPS 20), a country house dating from c. 1740-1780. Due to extensive landscaping around Cooliney House there is predicted to be no visibility of the proposal from the house and this has been demonstrated in the Photomontage Report which accompanies the application. Undesignated sites of built heritage interest in proximity to the proposed development site were also examined. Following this assessment four properties were identified as requiring mitigation, the negative effect on the setting of the 19th Century properties BH1, BH5 and BH 6 (see figure 20 Table 9 of report for details) are to be mitigated by 'gapping up' existing field boundaries around these properties, as detailed in the landscape plan which accompanies the application. BH11 was determined to be very visible from the Fiddane lands and will require more considerable screening also as detailed in the submitted landscape plan.
- 7.7.5. It is considered unlikely, subject to mitigation measures, that significant impacts would arise on built heritage and in particular archaeology. I would therefore suggest that if the Board are minded to grant permission that a condition is attached which takes account of the mitigation presented in the submitted Archaeology, Architecture and Cultural Heritage Report as well as construction stage archaeological monitoring.

7.8. Flooding and Drainage

- 7.8.1. The application included a Site Specific Flood Risk Assessment. The most significant hydrological features in the vicinity of the site are the Dromin Stream which flows in a north to south direction approximately 500 metres beyond the southern boundary of the site, the Rathnacally Stream which flows in a north to south direction through the grid route site, the Oakfront Stream which flows in this north to south direction through the western area of the site and the Awbeg Stream which flows in a northeast to southwest direction approximately 540m beyond the southern boundary of the site. In addition a number of drainage channels are located within and in the vicinity of the site.
- 7.8.2. According to the OPW Flood Info website there are no records or anecdotal instances of flooding on or in the immediate vicinity of the proposed site. OPW Flood Hazards Indicative fluvial flooding mapping indicates that a minor area of one of the eastern land parcels and a minor area of the grid route falls within a 1% AEP (1 in 100 year) and a 0.1% AEP (1 in 1000 year) fluvial flood zone. Potential 0.1% AEP fluvial for depths of 0.1 to 0.2m are mapped within a small area of one of the eastern land parcels. Potential 0.1% AEP fluvial flood depths in the range of 0.1m to 0.7m are mapped within part of the western land parcel. However, given the proposed lower panel edge of the solar panels is to be a minimum of 0.8m above existing ground levels no impacts are expected. In addition, it is noted that the supporting structures comprising of small diameter driven steel pipes shall not impede the conveyance of floodwaters or result in the displacement of floodwaters.
- 7.8.3. Any transformers, inverters or other electrical equipment associated with the proposed site is to be sited and located beyond the 1% AEP and 0.1% AEP fluvial flood extents.
- 7.8.4. With regard to the hydrological impacts of the solar panels, it is noted that the existing ground level between the arrays remains permeable and there will be no net increase in discharge rate or runoff volume from the site anticipated. For this reason, no increase in downstream flood risk is anticipated. It is also note that any existing access tracks within the site shall generally have permeable surfaces.
- 7.8.5. The appellants raise concerns regarding the collection of rainwater across the face of the panels and that the subsequent flow of water off same may cause erosion of

soil and create new pathways for water and sediment migration. Concerns in particular were raised regarding the cumulative impacts associated with nearby solar farms and the possibility of new hydrological regimes. In response to these concerns the applicant has stated that vegetation cover in the form of existing agricultural grazing lands will remain beneath the proposed panels and that no exposed or bare earth or gravel areas are proposed between any of the panels. In this regard runoff from the solar panel arrays will not erode the soil directly beneath nor create any new pathways for water and sediment migration. Furthermore, per the SSFRA, in consideration of the type and form of the development proposed it has been determined the solar farm facility at this location is not expected to result in an adverse impact to the hydrological regime of the area or increase fluvial or pluvial flood risk elsewhere and therefore is considered to be appropriate from a flood risk perspective.

7.8.6. I also note the appellants concerns regarding the reliability of the data used to inform the SSFRA, the applicants have responded stating that it was produced utilising the most up to date, current and relevant data as acquired from the OPW, the Local Authority, the EPA, the GSi and other data sources. Having examined the submitted SSFRA, I am satisfied that information submitted is satisfactory and that the recommendations of same report have influenced the design and layout of the current proposal which is acceptable.

7.8.7. I am satisfied from the information submitted that the proposed development would not significantly alter the hydrological status of the lands or exacerbate any downstream flood risk impacts, and that the proposed panel/transformer design adequately addresses potential flood impacts on the site. I do not therefore recommend any specific conditions relating to water, drainage or flooding above standard best practice requirements.

7.9. Other Matters

Procedural Matters and the Planning Application Process

7.9.1. In terms of procedural matters and the alleged irregularities in terms of the planning application process and the submission of further information which the appellant considered 'significant' thus warranting further consultation opportunity, I note that these matters were considered by the planning authority and the process followed

was deemed acceptable. I am satisfied that this did not prevent the concerned parties from making representations. In addition, I note the public consultation that was facilitated by the applicant prior to the submission of the application (see Statement of Community Consultation). In terms of the drawings submitted as part of the further information response I note that these included for the removal of solar panels in the western portion of the site, this was necessary to protect the residential amenity of the area, as well as the removal of solar panels and associated infrastructure in lands to the furthest eastern part of the site to facilitate the proposed M/N20, the drawings also included for additional landscaping.

- 7.9.2. While the points raised by the appellants are noted, the issue of whether they are relevant are now largely immaterial. The Planning Authority's statutory powers in respect of the planning application has ceased. Those who made observations have exercised their right of third-party appeal. It is now the duty of the Board to administer the application and consider it de novo. In this regard I also note the information received as part of the further response from the appellants dated 07th October 2024. In conclusion I am satisfied that the above assessment represents my de novo consideration of all planning issues material to the proposed development.

Environmental Issues

- 7.9.3. Concerns were raised by the appellants in relation to PFAS (Per- and poly-fluoroalkylated substances) which are associated with the materials used by some solar panel manufacturers. I note the applicant's response to these concerns and the inclusion of a signed declaration from the solar manufacturer submitted as part of the appeal response (Appendix 6) which states that the panels to be used onsite are PFAS free. I therefore consider this matter addressed.

GPS Interference

- 7.9.4. The appellants have raised concerns in relation to the proposed solar farm and the potential interference same may have on GPS systems used by farmers in the vicinity. I note the applicant's response which states that solar farms do not interfere with GPS signals. It is noted that a High-Level Electromagnetic Field Assessment Report was submitted in response to the planning authority's further information request (dated April 2024). In respect of Electro-Magnetic Fields (EMF), the applicant has designed the proposed development in accordance with

recommendations made by national and international agencies including the International Commission for Non-Ionizing Radiation Protection (ICNIRP) and states that 'levels of electromagnetic radiation from the underground cables and overhead powerlines are predicted to be well below ICNIRP reference levels'. I am therefore satisfied that there will be no significant impacts on any surrounding farms and their use of GPS systems.

Fire Risk

- 7.9.5. It is noted that the appellants have raised concerns in relation to the risk of fire either caused by solar farm equipment or in the event of wildfires due to natural or human causes. In response to these concerns the applicant has stated that the proposed solar farm which will be connected to the national grid will be operated autonomously without the need for personnel on site yet will be monitored remotely 24/7 all year round. In addition, scheduled visits to the site from the operations and maintenance team will also take place along with regular reporting. The applicant stresses that the proposed solar farm has been designed in accordance with stringent Eirgrid and ESB standards and any risks are minimised through good design, product selection, installation, operation and maintenance. Taking the aforementioned into consideration, I do not consider the materials to be used as part of the solar farm pose a fire hazard and I am also satisfied that Eirgrid and the ESB employ strict technical standards and requirements to be adhered to, including those relating to fire prevention and fire safety features.

Operational Life

- 7.9.6. I note that planning permission is sought for a period of 10 years with an operational life of 40 years from date of commissioning. I am aware that given technological advances the longevity of solar photovoltaic panels has been extended and in my opinion there would not appear to be any planning rationale to suggest that 40 years operation would be unreasonable. If the Board are minded to grant permission I would suggest inclusion of a condition which addresses this operational period and decommissioning phase also.

8.0 Appropriate Assessment

8.1. Screening Determination

- 8.1.1. In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided in the AA Screening Report, I conclude that the proposed development is likely to have a significant effect 'alone' on the Blackwater River (Cork/Waterford) SAC (Site Code 002170) from possible effects associated with deterioration of water quality, disturbance to fauna resulting in the possible displacement of affected species and possible accidental mortality of wildlife from construction, maintenance, or decommissioning machinery.
- 8.1.2. An appropriate assessment is required on the basis of the effects of the project 'alone'. The Blackwater River (Cork/Waterford) SAC is ecologically connected via the Rathnacally Stream and the possibility of significant effects cannot be ruled out from the project alone.
- 8.1.3. I further conclude that the proposed development is likely to have a significant effect on the Kilcolman Bog SPA 'alone' in respect of effects associated with disturbance to Whooper Swan resulting in the possible displacement of affected species. Although the site is located outside of the core foraging range for Whooper Swan (c. 5km), previous surveys completed for solar farm developments in Coolcaum and surrounding townlands, indicate that Whooper Swans are regularly seen during the winter season on grassland around the Ballyhea/Churchtown area. To this end, the environs within c. 1km of the proposed development site may support ex-situ connectivity to Whooper Swan associated with Kilcolman Bog SPA.
- 8.1.4. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.
- 8.1.5. No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

(See Appendix 2)

8.2. Appropriate Assessment

- 8.2.1. The development of a 92.75ha Solar PV Farm and underground electricity grid connection, located in the townlands of Fiddane, Cooliney, Coolcaum, Ballynoran, Ballynadridden and Ardnageehy, Co. Cork has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000, as amended.
- 8.2.2. Having carried out screening for Appropriate Assessment of the project based on the scientific information presented in the NIS, it was concluded that significant effects could arise for the Blackwater River (Cork/Waterford) SAC and Kilcolman Bog SPA. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of conservation objectives.
- 8.2.3. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European Sites of the Blackwater River (Cork/Waterford) SAC and Kilcolman Bog SPA, or any other European site, in view of the site's Conservation Objectives.
- 8.2.4. This conclusion is based on:
- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Blackwater River (Cork/Waterford) SAC (002170) and the Kilcolman Bog SPA (004095).
 - Detailed assessment of in-combination effects with other plans and projects including historical projects, current proposals and future plans.
 - The development of the solar farm will, through the design and application of mitigation measures, ensure the preservation of the favourable conservation status of habitats characterised as being in favourable status and ensure that habitat characterised as being in unfavourable status will not be further harmed or rendered difficult to restore to favourable status.
 - The development of the solar farm will, through the design and application of mitigation measures as detailed and conditioned ensure the lasting

preservation of the essential components and characteristics of the European Sites.

- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Blackwater River (Cork/Waterford) SAC (002170) or the Kilcolman Bog SPA (004095).

(See Appendix 3)

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 below.

10.0 Reasons and Considerations

Having regard to the following:

- a) The nature, scale and extent of the proposed development,
- b) The pattern of development within the area and context of the receiving environment,
- c) The national targets for renewable energy contribution to the overall national grid,
- d) The national, regional and local policy support for developing renewable energy, in particular:
 - i. The Board to perform its functions in a manner consistent with the Climate Action Plan 2024
 - ii. The Board to perform its functions in a manner consistent with the Climate Action and Low Carbon Development (Amendment) Act 2021
 - iii. Project Ireland 2040 National Planning Framework (2018)
 - iv. National Development Plan 2021-2030
 - v. National Biodiversity Action Plan 2023 – 2030
 - vi. National Energy Security Framework (April 2022)

vii. National Energy & Climate Action Plan 2021-2030

viii. The Regional Spatial and Economic Strategy for the Southern Region,

ix. Cork County Development Plan 2022-2028,

- e) Measures proposed for the construction, operation and decommissioning of the development,
- f) The submissions on the file, and
- g) The documentation submitted with the application and the appeal,

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, national, and regional renewable energy policies and with the provisions of the Cork County Development Plan 2022-2028, would not seriously injure the visual or residential amenities of the area or otherwise of property in the vicinity or have an of unacceptable impact on the character of the landscape or on cultural or archaeological heritage, would not have a significant adverse impact on ecology, would be acceptable in terms of traffic impacts and 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 Screening Determination

The Board considered the Appropriate Assessment Screening Report and relevant submissions and concluded that the Blackwater River (Cork/Waterford) SAC 002170 and the Kilcolman Bog SPA 004095 are the only European Sites in respect of which the proposed development has the potential to have a significant effect and must, therefore, be subject to Appropriate Assessment.

Appropriate Assessment Stage 2 Conclusion

The Board considered the submitted Natura Impact Statement (April 2024) and all other relevant submissions and carried out an appropriate assessment in relation to the potential effects of the proposed development on the Blackwater River

(Cork/Waterford) SAC site code 002170 and the Kilcolman Bog SPA site code 004095, in view of these sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment.

In carrying out the Appropriate Assessment, the Board considered, in particular, the following:

- 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 of the European Sites.

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the report of the Inspector and concluded that the proposed development, by itself, or in combination with other plans or projects in the vicinity, would not adversely affect the integrity of the European Sites, in view of the site's conservation objectives.

EIA Screening Determination

Having regard to –

- (a) the nature and scale of the proposed development, which is below the thresholds in respect of Class 1(a) of Part 2 to Schedule 5 of the Planning and Development Regulations 2001, as revised;
- (b) The consideration of the cumulative effects of the proposed development, subject of the screening, and the wider development of the solar farm which is not, of itself, a class for the purposes of the EIA Directive;
- (c) the nature of the existing site and the existing and permitted pattern of development in the surrounding area;
- (d) the location of the development as it relates to any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as revised;

- (e) the guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003);
- (f) the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as revised, and;
- (g) the features and measures proposed by the developer that are envisaged to avoid or prevent what might otherwise be significant effects on the environment, including measures identified to be provided as part of the project in the submitted Construction Environmental Management Plan, Outline Construction Methodology, Landscape and Visual Impact assessment and Glint and Glare Report, Landscape Management and Maintenance Plan, Archaeology, Architecture and Cultural Heritage Report, Noise Assessment, Ecological Impact Assessment and Flood Risk Assessment Report.

It is considered that restructuring of rural land holdings element of the proposed development would not be likely to have significant direct, indirect or cumulative effects on the environment and that the preparation and submission of an environmental impact assessment report would not, therefore, be required.

11.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars received by the planning authority on the 08th day of May 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 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. The permission shall be for a period of 40 years from the date of the commissioning of decommissioning of the solar array. The solar array and related ancillary structures shall be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

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.

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

this plan and all decommissioned structures shall be removed within three months of decommissioning.

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

4. Prior to the commencement of the development, the applicant and landowner or any person with an interest in the land shall enter into a legal agreement with the Planning Authority, pursuant to Section 47 of the Planning and Development Act 2000, as amended. The details of this agreement shall also be agreed with Limerick City and County Council who are the lead authority of N/M20 Project.

Reason: In the interest of traffic safety and in the interest of orderly development.

5. 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.

6. (a) All of the environmental, construction and ecological mitigation measures, as set out in the Planning Statement, Ecological Impact Assessment, Landscape Management Plan, Solar Photovoltaic Glint and Glare Study, Construction and Environmental Management Plan, Archaeological, Architectural and Cultural Heritage Report, Biodiversity Management Plan, Whooper Swan Co-ordinated Management Programme and other 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 interests of clarity and of the protection of the environment during the construction and operational phases of the development.

7. The mitigation measures contained in the submitted Natura Impact Statement (NIS), shall be implemented in full.

Reason: To protect the integrity of European Sites.

8. The applicant shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice and to liaise with consultants, the site contractor, and the planning authority. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record.

Reason: To protect the environmental and natural heritage of the area.

9. 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.

10. Silt traps shall be provided on all surface water drainage channels. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: To prevent water pollution.

11. Prior to the commencement of development a continuous 10 m wide woodland buffer of indigenous species shall be planted along the eastern site boundary with the N/M20 route corridor. Details to be submitted for the written agreement of the planning authority, which shall include details of the location, number and species to be planted, timescale for implementation and proposals for replacement planting during the operative period of the proposed solar farm.

Reason: To reduce the potential for glint and glare on road users and traffic safety.

12. 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.

Prior to the commencement of development, the applicants shall revise their planting schedule for the site replacing Beech and Sycamore with native tree and /or shrub species of Irish provenance, reflecting those species found in the surrounding areas. Landscape planting shall utilise native species of local origin, reflecting those species naturally occurring in the locality.

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.

13. Before construction commences on site, details of the structure of the security fence showing provision for the movement of mammals at regular intervals shall be submitted for prior approval to the planning authority.

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

14. The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks, dredging and/or the implementation of agreed preservation in-situ measures associated with the development. Prior to the commencement of such works the archaeologist shall consult with and forward to the Local Authority archaeologist or the NMS as appropriate a method statement for written agreement. The use of appropriate tools and/or machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in

consultation with the National Monuments Service, regarding appropriate mitigation.

The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer.

Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.

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

15. 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..

16. (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission;
- (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road;
- (c) The transformers/ inverters shall be dark green in colour.
- (d) The solar panels shall have driven or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission; and
- (e) Cables within the site shall be located underground.

Reason: In the interest of clarity, visual and residential amenity, to allow wildlife to continue to have access to and through the site, and to minimise impacts on drainage patterns and surface water quality.

17. 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;
- f) 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;
- h) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
- i) 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.
- l) details of on-site re-fuelling arrangements, including use of drip trays; (l) details of how it is proposed to manage excavated soil;

The finalised Construction and Environmental Management Plan shall also take account of the mitigation measures outlined within the NIS.

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 environmental protection, amenities, public health and safety.

18. Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a detailed Construction Environmental Management Plan (CEMP) for the written agreement of the planning authority. The CEMP shall incorporate details for the following: collection and disposal of construction waste, surface water run-off from the site, on-site access route construction, and environmental management measures during construction including working hours, noise control, dust and vibration control and monitoring of such measures.

A record of daily checks that the construction works are being undertaken in accordance with the CEMP shall be kept at the construction site office for inspection by the planning authority. The agreed CEMP shall be implemented in full in the carrying out of the development.

Reason: In the interest of environmental protection [residential amenities, public health and safety and environmental protection.

19. (a) Construction activity shall be managed in accordance with a construction noise and vibration management plan, which shall be agreed in writing with the planning authority prior to the commencement of development.

This plan should be subject to periodic review and shall specify the construction practice, including measures for the suppression and mitigation of on-site noise and vibration.

- (b) The plan shall be developed having regard to, and all construction activity shall be undertaken in accordance with, best practise guidelines, including BS 5228-1:2009+A1:2014, parts 1 & 2.

(c) The mitigation measures described in the Environmental Noise Assessment Report and the Traffic Management Plan shall be implemented in full.

(d) Prior to the commencement of development, a plan for the phased development of the site shall be submitted to and agreed in writing with the planning authority which shall seek to maximise separation from site boundaries at commencement of works and move progressively across the site.

Reason: In order to protect the amenities of the area.

20. Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services and, shall otherwise comply with submitted Site Specific Flood Risk assessment. A drainage management plan shall be developed for the construction and the operational phases of the development to include details of the proposed access routes and drains and is to be submitted to the planning authority for approval prior to commencement of development.

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

21. 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.

22. 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.

23. After commissioning of development site, the applicant shall employ the services of an experienced Road Surfacing Contractor, approved by the planning authority, to strengthen the road surface in the vicinity of the entrance, for a distance of 40m to the east and west of the entrance.

Reason: In the interest of orderly development.

24. 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 reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. 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: In the interest of traffic safety and the proper planning and sustainable development of the area.

25. Prior to commencement of development, the developer shall lodge with the Cork County Council 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.

26. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development

Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

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.

Máire Daly
Senior Planning Inspector

13th November 2024

Appendix 1 – Form 3 – Screening Determination

A. CASE DETAILS

An Bord Pleanála Case Reference	320298-24	
Development Summary	A 10 year planning permission for the construction and operation of a solar PV farm and all ancillary works. A Natura Impact Statement accompanies the planning application.	
Sub-threshold - development class referred to under Schedule 5 of Planning and Development Regulations 2001 (as amended):	Class 1 of Part 2 of Schedule 5, <i>(a) Projects for the restructuring of rural land holdings, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.</i>	
	Yes / No / N/A	Comment (if relevant)
1. Was a Screening Determination carried out by the PA?	Yes	EIA Screening Determination included in Planner's report
2. Has Schedule 7A information been submitted?	Yes	Document titled Environmental Impact Assessment Screening
3. Has an AA screening report or NIS been submitted?	Yes	Screening for Appropriate Assessment and a Natura Impact Statement were submitted with the application.
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA	Yes	SEA and AA were undertaken in respect of the Cork County Development Plan 2022-2028. The site is located within lands governed by this plan.

B. EXAMINATION

Where relevant, briefly describe the characteristics of impacts (ie the nature and extent) and any Mitigation Measures proposed to avoid or prevent a significant effect	Is this likely to result in significant effects on the environment?
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	(having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact)	Yes/ No/ Uncertain
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)		
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?	<p>Yes, the proposed development is part of a wider solar farm development which of itself is not a class for the purposes of the EIA Directive, but which is considered in the context of any resulting potential cumulative effects, including visual/landscape, water, drainage, traffic and biodiversity, cultural heritage etc which are addressed separately in the Planning Assessment of my report. This concludes that no significant cumulative effects would arise in respect of the proposed development and the wider solar farm development.</p> <p>It is envisaged that the proposal will result in the loss of c.6m linear meters of hedgerow where widening of existing site entrances are required. I do note however, that as per the Arboriculture Report c.3m of additional hedgerow is also proposed for removal to facilitate the proposed cable trench. Therefore, the volume of hedgerow to be removed at c. 9m is significantly below the 4km threshold and considered insignificant given the remaining linear features present in the surrounding environment.</p> <p>Other Developments in the area include the Ballyroe Substation, and as part of this development c. 15m of hedgerow is proposed for removal, cumulatively this would result in a loss of c. 24m within the immediate area.</p> <p>In relation to minor levelling the submitted EIA Screening Report (April 2024) states that there are 35 transformers proposed with a total area of</p>	No

	<p>490sq.m or 0.049ha proposed for development, I note however that the proposal presented in the application documents only includes for 34 transformers, nonetheless along with 1 no. construction compound area at 1ha in area, totaling 1.049ha (or 1.047ha) the development is again significantly below the threshold which is 5 ha. In addition to the proposed development further transformer locations are listed for other consented developments in the vicinity which include Fiddane – totalling 0.316ha, Ballyroe totalling 0.419ha, Coolcaum totalling 0.395ha and Ballyroe totalling 0.836ha, all having a cumulative total of 1.97ha, It is not considered that this would give rise to significant cumulative environmental effects with the subject project.</p>	
<p>1.2 Will construction, operation, decommissioning or demolition works causing physical changes to the locality (topography, land use, waterbodies)?</p>	<p>Where existing hedgerow is required to be removed infill landscaping, e.g. hedgerows, will be planted where possible.</p> <p>In areas where vegetation is scarce or gaps occur, additional native screening planting in the form of native species characteristic of the local area will be instated.</p>	No
<p>1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?</p>	<p>Standard construction methods and materials. No significant use of natural resources in operational phase. The loss of natural resources (hedgerow) is not regarded as significant in nature.</p>	No
<p>1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?</p>	<p>Hedgerow removal activities and levelling works will require the use of potentially harmful materials, such as fuels and other such substances to power necessary machinery. Use of such materials would be typical for construction sites. Any impacts would be local and temporary in nature and the implementation of the standard construction practice measures outlined in the submitted Construction and</p>	No

	Environmental Management Plan and Outline Construction Methodology would satisfactorily mitigate potential impacts. No operational impacts in this regard are anticipated.	
1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?	Hedgerow removal and levelling works will require the use of potentially harmful materials, such as fuels and other similar substances for necessary machinery and may give rise to waste for disposal. The use of these materials would be typical for construction sites. Noise and dust emissions during these activities are likely. Such impacts would be local and temporary in nature, and with the implementation of the standard measures outlined in the Construction and Environmental Management Plan, the project would satisfactorily mitigate the potential impacts.	No
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	The small area of proposed hedgerow removal is not located in proximity to any watercourses and given the limited nature of the proposed works no impact on groundwater is expected. It is noted that some areas where levelling of lands is proposed to facilitate transformer sites are located within close proximity to field drains, which ultimately drain to watercourses connected to the Blackwater River (Cork/Waterford) SAC, however having regard to the nature of the proposed works, the distance of the subject site from this designated site and the proposed mitigation measures, particularly those relating to water quality as outlined in the submitted associated NIS, significant effects on the environment are not likely. No discharge of pollutants to ground water is likely.	No
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	There is potential for hedgerow removal activity and site levelling works to give rise to noise and vibration emissions. Such emissions will be localised and short term in nature, and their impacts would be	No

	suitably mitigated by the operation of standard measures listed in the Construction Environmental Management Plan. The submitted Noise Assessment also contains proposed mitigation measures including best practice noise reduction methods. No operational impacts in this regard are anticipated.	
1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	Hedgerow removal activity and minor levelling works would be temporary and localised in nature and the application of standard measures within the Construction Environmental Management Plan would satisfactorily address potential risks on human health. No significant operational impacts are anticipated.	No
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No significant risk is predicted having regard to the nature and scale of the development.	No
1.10 Will the project affect the social environment (population, employment)	the construction process for the solar farm and transmission infrastructure is anticipated to be short at approximately 3-4 months we should only management and intermittent maintenance of the site required during operational phase and with agricultural use continuing during the lifetime of the project. While minor traffic disruption is anticipated to local roads, such disturbance will be short in duration and localised and managed through a Traffic Management Plan therefore no significant social environmental impacts anticipated.	No
1.11 Is the project part of a wider large scale change that could result in cumulative effects on the environment?	Yes, the proposed development is part of a wider solar farm development which of itself is not a class for the purposes of the EIA Directive, but which is considered in the context of any resulting potential cumulative effects, including visual/landscape, water, cultural heritage, biodiversity etc. which are addressed separately in the Planning Assessment of my report. In this regard I note the proposed mitigation provided within the submitted EcIA, the	No

	CEMP, the Glint and Glare Assessment, The Landscape Management and Maintenance Plan etc. Following implementation of these measures no potential for significant effect exists at any geographic scale This concludes that no significant cumulative effects would arise in respect of the proposed development and the wider solar farm development.	
2. Location of proposed development		
<p>2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following:</p> <ul style="list-style-type: none"> a. European site (SAC/ SPA/ pSAC/ pSPA) b. NHA/ pNHA c. Designated Nature Reserve d. Designated refuge for flora or fauna e. Place, site or feature of ecological interest, the preservation/conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan 	<p>There is only one Natura 2000 sites within the zone of influence of the project which has a potential pathway from the proposed works. This is the Blackwater River (Cork/Waterford) SAC (Site code: 002137) which is hydrologically connected to the proposed project site. The proposed development site overlaps with the Blackwater River (Cork/Waterford) Special Area of Conservation (SAC) where the Rathnacally stream passes through the Site. Field drains which also provide a pathway to the watercourse are located within proximity to certain areas of proposed works. These pathways are examined in detail under Section 8.0 of the inspector's report above and it has been concluded that following the implementation of those mitigation measures listed within the submitted NIS, no adverse impacts on the site integrity of the Blackwater River SAC will occur. It is noted that a 15m buffer is proposed between the development and the Rathnacally Stream where no development is to occur.</p> <p>It is noted that 2 badger setts (5 separate sett entrances) have been identified as part of the surveys carried out to inform the EcIA, however none of the setts identified are located within proximity to</p>	No

	<p>areas that require hedgerow to be removed. Therefore, no potential impacts are likely. The treeline and hedgerow habitats proposed for removal are used by commuting and foraging bats as they provide connectivity with the wider landscape. In addition nesting birds are also noted to use these hedgerows. The EcIA assesses the impact of the proposal on bats and bird species and concludes that provided mitigation is implemented which includes replacement hedgerow planting, as well as restrictions on the time of year in which hedgerow removal can occur, no significant effects are likely to arise.</p>	
<p>2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be significantly affected by the project?</p>	<p>In total c. 9m of existing hedgerow are to be removed, this hedgerow provides habitat for bird species and linear foraging features for bats. Minor works are also proposed in relation to levelling on site. While it is noted that there will be some temporary impacts on these species, provided the mitigation measures outlined in the submitted EcIA are implemented it is not expected that the removal of hedgerow would result in significant impacts to protected, important or sensitive species.</p>	No
<p>2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?</p>	<p>The lands contain 3 no. Recorded Archaeological Monuments: a redundant record RMP CO00-041, a ring barrow RMP CO007-052 and a Ringfort RMP CO007-053. The redundant record was formerly classified as an enclosure (no surface trace). Potential archaeological features were identified by way of a geophysical survey within the landowner's property folios which are not visible above ground level and which are proposed to be mitigated by the use of concrete shoes and exclusion zones to ensure there will be no impact on site.</p>	No

	<p>Only localised site leveling is anticipated and earthworks will be limited to areas of soft ground underground cable trenches, groundworks for inverter stations and grid works.</p> <p>The potential for impacts to arise during activities exists, these potential impacts include damage to the recorded monuments from excavation works or tracking from machinery. The submitted Archaeology, Architecture and Cultural Heritage Report outlines effective mitigation measures to be implemented to ensure such potential impacts do not occur, exclusion zones and buffer zones around newly identified and existing recorded monuments is recommended. Archaeological monitoring of ground works associated with the construction of the buffer zone fence is also to be undertaken. Section 6.1.1.3.2 of the Archaeological and Cultural Heritage Impact Assessment outlines the mitigation measures proposed. Provided these mitigation measures are implemented no significant impacts are expected.</p>	
2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture, water/coastal, fisheries, minerals?	Given the minor nature of the works proposed there will be no foreseeable impact on any areas of high quality or scarce resources which could be affected by the project.	No
2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	<p>The site is relatively level, & the lands where the solar panels are to be erected are moderately well drained in nature. Good site management & avoidance of field work during wet periods of the construction stage should minimise impacts on surface water quality. The applicant states that a 15m buffer zone will be observed along the Rathnacally Stream with no construction works within this zone.</p> <p>Having considered the locations of the proposed works, the limited nature of the works and the</p>	No

	distance between the proposed hedgerow removal or levelling works locations and any field drains in the vicinity it is unlikely any surface run off would affect watercourses downstream in terms of their volume or flood risk.	
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	No
2.7 Are there any key transport routes (e.g. National primary Roads) on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	The site is served by the local road network which in turn connects to the N20 Cork to Limerick road. While some traffic disruption is likely on the local roads during the initial works on the site entrances, which involves the clearing of c. 9m of hedgerow, this is expected to be temporary in nature and no significant contribution to traffic congestion is anticipated to arise from the proposed development.	No
2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be significantly affected by the project?	The surrounding area is comprised of agricultural land uses, farmsteads, dwellinghouses and some commercial enterprise. Having considered the minor nature of the works no significant impacts on these uses are anticipated as a result of the proposal.	No
3. Any other factors that should be considered which could lead to environmental impacts		
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?	<p>The proposed development is part of a wider solar farm development which of itself is not a class for the purposes of the EIA Directive, but which is considered in the context of any resulting potential cumulative effects, including visual/landscape, water and biodiversity which are addressed separately in the Planning Assessment within this report. However, as outlined in the assessment it is not considered that any significant cumulative effects in combination with the subject project would arise.</p> <p>As discussed previously under Section 1.1 above other consented developments in the vicinity include minor levelling works to accommodate transformers at the</p>	No

	following locations: Fiddane – totalling 0.316ha, Ballyroe totalling 0.419ha, Coolcaum totalling 0.395ha and Ballyroe totalling 0.836ha, all having a cumulative total of 1.97ha, It is not considered that this would give rise to significant cumulative environmental effects with the subject project. Therefore, in summary and as outlined in the assessment it is not considered that any significant cumulative effects in combination with the subject project would arise.	
3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	No
3.3 Are there any other relevant considerations?	No	No
C. CONCLUSION		
No real likelihood of significant effects on the environment.	Agreed	EIAR Not Required
Real likelihood of significant effects on the environment.		EIAR Required
D. MAIN REASONS AND CONSIDERATIONS		
<p>Having regard to –</p> <ul style="list-style-type: none"> (a) the nature and scale of the proposed development, which is below the thresholds in respect of Class 1(a) of Part 2 to Schedule 5 of the Planning and Development Regulations 2001, as revised; (b) The consideration of the cumulative effects of the proposed development, subject of the screening, and the wider development of the solar farm which is not, of itself, a class for the purposes of the EIA Directive; (c) the nature of the existing site and the existing and permitted pattern of development in the surrounding area; (d) the location of the development outside of any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as revised; (e) the guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003); (f) the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as revised, and; 		

(g) the features and measures proposed by the developer that are envisaged to avoid or prevent what might otherwise be significant effects on the environment, including measures identified to be provided as part of the project in the submitted Construction Environmental Management Plan, Outline Construction Methodology, Landscape and Visual Impact assessment and Glint and Glare Report, Landscape Management and Maintenance Plan, Archaeology, Architecture and Cultural Heritage Report, Noise Assessment, Ecological Impact Assessment and Flood Risk Assessment Report.

It is considered that restructuring of rural land holdings element of the proposed development would not be likely to have significant direct, indirect or cumulative effects on the environment and that the preparation and submission of an environmental impact assessment report would not, therefore, be required.

Inspector: _____

Date: _____

ADP: _____

Date: _____

Appendix 2: AA Screening Determination

Screening for Appropriate Assessment

Screening Determination

Description of the project

I have considered the proposed project which comprises a 10 -year permission for the construction of a 40 year operational and subsequent decommissioning of a Solar PV Farm known as Ardnageehy Solar Farm consisting of 92.75ha and underground electricity grid connection, located in the townlands of Fiddane, Cooliney, Coolcaum, Ballynoran, Ballynadridden and Ardnageehy, Co. Cork in light of the requirements of S177U of the Planning and Development Act 2000 as amended.

The subject site is located c. 3.4km to the southeast of Charleville Town with the grid connection route for the site located within the Blackwater River (Cork Waterford) SAC (Site Code 002170), c.5.8km from the Ballyhoura Mountains SAC (Site Code 002036) and c. 8.4km from the Kilcolman Bog SPA (Site Code 004095).

The Blackwater River (Cork/Waterford) Special Area of Conservation (SAC) is both physically and hydrologically connected to the proposed development site. The proposed site intersects with the Blackwater River SAC where HDD is used to install cable under the Rathnacally stream (EPA Code: 18R32). The Blackwater River SAC then follows the path of the Rathnacally stream south. The SAC also has an additional hydrological connection with the proposed development site c. 1.6km downstream via the Oakfront River (EPA Code: 18O12).

As there are no pathways (physical or hydrological connections which could act as a route for potential impacts) from the source site to the Ballyhoura Mountains SAC (002036), it cannot be considered a potential receptor and impacts on this European sites Conservation Objectives can be screened out at this early stage in the process (See Table 1 below).

Whooper Swan (*Cygnus cygnus*) listed as Special Conservation Interests for Kilcolman Bog SPA (004095) winters not only within the SPA site, but also within surrounding farmlands. Given the movements of wintering Whooper Swans to and

from Kilcolman Bog SPA and the floodplain areas of the Awbeg River, potential impacts of the proposed development must be considered. Thus, the environs surrounding the proposed development site may support ex-situ connectivity to Whooper Swan associated with Kilcolman Bog. Based on this rationale, Kilcolman Bog SAC (004095) has undergone further assessment below under Table 3.

An AA Screening Report and Natura Impact Statement (NIS) (as well as Updated NIS dated April 2024) have been submitted with the application. These reports have been prepared by David M. McGillicuddy, Ecologist with Veon Ecology, on behalf of Soleire Renewables SPV Ltd.

The report was also informed by Whooper Swan surveys which were completed by a third-party ornithologist Barry O'Mahony on behalf of Entrust in the surrounding area. These surveys were carried out from late October 2022 until April 2023 and October 2023 until April 2024 (total of 12 months over two consecutive wintering seasons), at multiple locations in the vicinity of the proposed development site. Detailed findings of the survey are reported separately in the prepared Whooper Swan and Winter Bird Survey Report (Veon, 2024).

Potential impact mechanisms from the project

The proposed development will not result in any direct effects such as habitat loss on any European Site. The proposed development site intersects with the Rathnacally Stream where HDD is used to install cable under the stream, this watercourse is offered protection from the downstream as a Special Area of Conservation (i.e. Blackwater River (Cork/Waterford) SAC).

Elements of the proposed development that may give rise to impacts which have been considered with regards to potential likely significant effects to European sites are as follows:

- Release of sediment and pollutants which may be discharged into surface water systems, particularly during high rainfall events and flow downstream towards the SAC.
- Movement of vehicles and machinery associated with construction works and the potential for spillages of oils, fuels or other pollutants which could be transported to the surface water system during rainfall events.

- Transportation, pouring of concrete onsite and washing of concrete lorry flume – risk for entry into surface water.
- Increased silt loading, which may stunt aquatic plant growth, limit dissolved oxygen capacity and overall reduce the ecological quality of watercourses, with the most critical period associated with low flow conditions.
- The introduction or spread of invasive alien species due to construction works.
- Disturbance to fauna (e.g. through noise from construction activity and/or human presence) resulting in the displacement of affected species.
- Accidental mortality of wildlife from construction, maintenance, or decommissioning machinery.

Where an ecological pathway exists, these direct impacts could negatively alter the quality of the existing environment, negatively affecting qualifying interest species and habitats that are dependent on high water quality or that may be impacted as a result of disturbance due to construction noise or movements and subsequent displacement.

These potential impacts listed above are associated with the construction, and not the operational phase.

Using the source-pathway-receptor model an examination of the potential effects of the Proposed Development was undertaken (alone and in-combination with other plans and projects) to identify what European Sites, and which of their Qualifying Interests or Special Conservation Interest species were potentially at risk. This examination was used to determine the Zone of Influence (Zol) for the Proposed Development.

With regards to potential habitat degradation effects associated with the release of sediment and other pollutants to surface water, the Zol of the Proposed Development is considered to include receiving water bodies adjacent to, or downstream of, the proposed development site during the construction, operational and decommissioning phases.

Noise from construction activities has the potential to cause disturbance to resting, foraging and commuting Qualifying Interest and Special Conservation Interest

species. With regards to disturbance effects, the potential Zol is considered to be in the local vicinity (within 300m) of the proposed development during the Construction Phase.

European Sites at Risk

Table 1: European Sites at risk from impacts of the proposed project			
Effect mechanism	Impact pathway/ Zone of influence	European Site(s) and distance from project	Qualifying interest features at risk
<p>Release of sediment and pollutants to surface water – causing deterioration in water quality</p> <p>Disturbance to fauna/birds resulting in the possible displacement of affected species.</p> <p>Possible accidental mortality of wildlife from construction, maintenance, or decommissioning machinery.</p>	Hydrological connection via Rathnacally Stream which could act as a route for potential impacts	Blackwater River (Cork/Waterford) SAC (002170) – 0km overlaps site	<p>[1130] Estuaries;</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide;</p> <p>[1220] Perennial vegetation of stony banks;</p> <p>[1310] Salicornia and other annuals colonising mud and sand;</p> <p>[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>);</p> <p>[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>);</p> <p>[3260] Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation;</p> <p>[91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles;</p>

			<p>[91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*;</p> <p>[1421] Killarney Fern (<i>Trichomanes speciosum</i>);</p> <p>[1103] Twaite Shad (<i>Alosa fallax fallax</i>);</p> <p>[1099] River Lamprey (<i>Lampetra fluviatilis</i>); [1096] Brook Lamprey (<i>Lampetra planeri</i>);</p> <p>[1095] Sea Lamprey (<i>Petromyzon marinus</i>);</p> <p>[1106] Salmon (<i>Salmo salar</i>);</p> <p>[1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>);</p> <p>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>);</p> <p>[1355] Otter (<i>Lutra lutra</i>).</p>
Release of sediment and pollutants to surface water – causing deterioration in water quality	None - no pathways (physical or hydrological connections which could act as a route for potential impacts) from the source site and so the Qualifying Interests of this SAC cannot be affected. Therefore, this	Ballyhoura Mountains SAC (002036) c.5.8km	<p>4010] Northern Atlantic wet heaths with <i>Erica tetralix</i>;</p> <p>[4030] European dry heaths;</p> <p>[7130] Blanket bogs (* if active bog).</p>

	Natura 2000 cannot be considered a potential receptor.		
Disturbance and Displacement to SCIs. Wetland Habitat - There are no pathways (physical or hydrological connections which could act as a route for potential impacts) from the source site, thus, habitats within this Natura 2000 site cannot be affected.	Possible disturbance as a result of construction activities on grazing lands in the vicinity of the site and lands adjacent to the Awbeg River c. 1.3km to south.	Kilcolman Bog SPA (004095) c. 8.4Km	[A052] Teal (<i>Anas crecca</i>); [A038] Whooper Swan (<i>Cygnus cygnus</i>); [A056] Shoveler (<i>Anas clypeata</i>); [A999] Wetlands and Waterbirds.

Likely significant effects on the European sites 'alone'

Table 2: Could the project undermine the conservation objectives 'alone'

European Site and qualifying feature	Conservation objective (summary)	Could the conservation objectives be undermined (Y/N)?		
		Deterioration in water quality as a result of construction works.	Disturbance to fauna resulting in the possible displacement of affected species.	Possible accidental mortality of wildlife from construction, maintenance, or decommissioning machinery.
Blackwater River (Cork/Waterford) SAC (002170)	Blackwater River (Cork/Waterford) SAC National Parks & Wildlife Service			
Estuaries [1130]	To maintain the favourable conservation condition	N	N/A	N/A
Mudflats and sandflats not	To maintain the favourable	N	N/A	N/A

covered by seawater at low tide [1140]	conservation condition			
Perennial vegetation of stony banks [1220]	To maintain the favourable conservation condition	N	N/A	N/A
Salicornia and other annuals colonising mud and sand [1310]	To maintain the favourable conservation condition	N	N/A	N/A
Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]	To restore the favourable conservation condition	N	N/A	N/A
Mediterranean salt meadows (Juncetalia maritimi) [1410]	To maintain the favourable conservation condition	N	N/A	N/A
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]	To maintain the favourable conservation condition	Y	N/A	N/A
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To restore the favourable conservation condition	N	N/A	N/A
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition	N	N/A	N/A

* <i>Taxus baccata</i> woods of the British Isles [91J0]	Currently under review	N	N/A	N/A
<i>Margaritifera</i> <i>margaritifera</i> (Freshwater Pearl Mussel) [1029]	To restore the favourable conservation condition	Y	N/A	N/A
<i>Austropotamobius</i> <i>pallipes</i> (White- clawed Crayfish) [1092]	To maintain the favourable conservation condition	Y	N/A	N/A
<i>Petromyzon</i> <i>marinus</i> (Sea Lamprey) [1095]	To restore the favourable conservation condition	Y	N/A	N/A
<i>Lampetra planeri</i> (Brook Lamprey) [1096]	To maintain the favourable conservation condition	Y	N/A	N/A
<i>Lampetra</i> <i>fluviatilis</i> (River Lamprey) [1099]	To maintain the favourable conservation condition	Y	N/A	N/A
<i>Alosa fallax fallax</i> (Twaite Shad) [1103]	To restore the favourable conservation condition	Y	N/A	N/A
<i>Salmo salar</i> (Salmon) [1106]	To maintain the favourable conservation condition	Y	N/A	N/A
<i>Lutra lutra</i> (Otter) [1355]	To restore the favourable conservation condition	Y	Y	Y
<i>Trichomanes</i> <i>speciosum</i> (Killarney Fern) [1421]	To maintain the favourable conservation condition	N	N	N

Table 3: Could the project undermine the conservation objectives ‘alone’

European Site and qualifying feature	Conservation objective (summary)	Could the conservation objectives be undermined (Y/N)?
		Potential for impacts in relation to water quality, lake effect as a result of installation of solar panels and disturbance to SCI resulting in the possible displacement of affected species.
Kilcolman Bog SPA (004095)	Kilcolman Bog SPA National Parks & Wildlife Service	
Whooper Swan (Cygnus cygnus) [A038]	To maintain or restore the favourable conservation condition of the bird species	Y – Potential for petrochemical and indirect impacts on Whooper Swans as a result of the proposed operations. A wintering population of Whooper Swan occupies the region of north Cork comprising lands adjacent to the Awbeg River and its feeder streams. Previous surveys completed for solar farm developments in Coolcaum and surrounding townlands, indicate that Whooper Swans are regularly seen during the winter season on grassland around the Ballyhea/Churchtown area. To this end, the environs within c. 1km of the proposed development site may support ex-situ connectivity to Whooper Swan associated with Kilcolman Bog SPA
Teal (Anas crecca) [A052]	To maintain or restore the favourable conservation condition of the bird species	N
Shoveler (Anas clypeata) [A056]	To maintain or restore the favourable conservation condition of the bird species	N
Wetland and Waterbirds [A999]	To maintain or restore the favourable conservation condition	N - No source pathway connectivity via surface water, groundwater or environmental vectors.

Overall Conclusion - Screening Determination

In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information, I conclude that the proposed development is likely to have a significant effect on the Blackwater River (Cork/Waterford) SAC 'alone' from effects associated with Deterioration of water quality, Disturbance to fauna resulting in the possible displacement of affected species and Accidental mortality of wildlife from construction, maintenance, or decommissioning machinery.

I further conclude that the proposed development is likely to have significant effects on the Kilcolman Bog SPA 'alone' in respect of effects associated with Disturbance to SCI resulting in the possible displacement of Whooper Swan.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

Appendix 3: Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive,
- The Natura Impact Statement and associated documents, and
- Appropriate Assessment of implications of the proposed development on the integrity of each European site.

Compliance with Article 6(3) of the EU Habitats Directive

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

The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

The Natura Impact Statement

The application included a Natura Impact Statement by VEON Ecology dated the 4th October 2023, this was subsequently updated in response to a request for further information from Cork County Council. The subsequent updated NIS dated 22nd April 2024 is the document which has been examined for the purposes of this appeal. The submitted NIS examines and assesses potential adverse effects of the proposed development on the following European Sites:

- Blackwater River (Cork/Waterford) SAC (002170)

- Kilcolman Bog SPA (004095)

The applicant's NIS was prepared in line with current best practice guidance. The applicant's NIS concluded that:

"given the application of prescribed protective measures for the avoidance of impacts and the implementation of the required mitigation measures, the proposed works will not give rise to adverse effects on the integrity of any of the identified European Sites evaluated herein" and that it "has been objectively concluded, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed development during construction, operational and decommissioning phases, that the proposed development will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion".

Having reviewed the documents and submissions etc, I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects:

- Blackwater River (Cork/Waterford) SAC (002170)
- Kilcolman Bog SPA (004095)

Appropriate Assessment of implications of the proposed development

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

The following Guidance was adhered to in my assessment:

- DoEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.

- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC.
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC].

European Sites – Assessment of Potential Effects

The following sites are considered in the Appropriate Assessment:

- Blackwater River (Cork/Waterford) SAC (002170)
- Kilcolman Bog SPA (004095)

Brief Description of Sites

The River Blackwater is one of the largest rivers in Ireland, draining a major part of Co. Cork and five ranges of mountains. The site consists of the freshwater stretches of the River Blackwater as far upstream as Ballydesmond, the tidal stretches as far as Youghal Harbour and many tributaries, the larger of which include the Licky, Bride, Flesk, Chimneyfield, Finisk, Araglin, Awbeg (Buttevant), Clyda, Glen, Allow, Dalua, Brogeen, Rathcool, Finnow, Owentaraglin and Awnaskirtaun. The River Blackwater is of considerable conservation significance for the occurrence of good examples of habitats and populations of plant and animal species that are listed on Annexes I and II of the E.U. Habitats Directive respectively. The Rathnacally stream (EPA Code: 18R32) is a smaller stream (FW2) that adjoins the site. The Rathnacally Stream adjoins the eastern land parcel along the site boundary and intersects the part of the proposed development site where the proposed cable route crosses the stream.

Kilcolman Bog is situated on the southern foothills of the Ballyhoura Mountains in Co. Cork. It occupies a glacially eroded hollow in Carboniferous limestone. The site comprises a quaking fen fed by calcareous groundwater, with areas of reed swamp, freshwater marsh and wet grassland. The site is of ornithological interest because it supports nationally important numbers of three species. Of particular note is the regular presence of Whooper Swan and Golden Plover, two species that are listed on Annex I of the E.U. Birds Directive.

A description of both sites and their Conservation and Qualifying Interests (QIs)/ Special Conservation Interests (SCIs), including any relevant attributes and targets for these sites, are set out in the NIS and summarised in Tables 2 & 3 of the Screening Determination above as part of my assessment.

The sections below examine the Potential Impact from the Proposed Development on these sites:

River Blackwater SAC – Potential Impacts

There is connectivity between the proposed development site and the Blackwater River (Cork/Waterford) SAC via the Oakfront River and Rathnacally Stream. This European Site overlaps the proposed development site where the Rathnacally Stream which is designated as part of the River Blackwater (Cork/Waterford) SAC, intersects the redline boundary. Therefore the proposed development site supports potential hydrological connectivity to one European Sites, i.e. the River Blackwater (Cork/Waterford) SAC. A number of small agricultural type drainage ditches intersect the proposed development site also, for the most part these drainage ditches are hydrologically linked to the Rathnacally Stream and the Oakfront Stream.

During the construction phase, contaminated surface water runoff and/or an accidental spillage or a pollution event into the relevant water courses has the potential to have a significant negative effect on the water quality. Hydrocarbons, sediments, and chemicals may enter the relevant watercourses during the proposed development work, which may in turn adversely impact water quality, potentially impacting aquatic organisms. These aquatic species may be impacted as a result of their food supplies being adversely affected downstream. In the case of Lampreys, Salmon, Twait Shad, White-clawed Crayfish, and Freshwater Pearl Mussels, spawning/breeding may be impacted if eggs/larvae are smothered, and spawning/breeding grounds become unsuitable. Any increased siltation and/or eutrophication in the water may decrease the oxygen levels in the water, which could have a direct impact on respiration in these species.

Kilcolman Bog SPA – Potential Impacts

As there are no pathways (physical or hydrological connections which could act as a route for potential impacts) from the source site, habitats within this Natura 2000 site

cannot be affected. However, one of the bird species listed as a SCI for this SPA is Whooper Swan, a flock of which winters not only within the SPA site, but also around local farmland. A wintering population of Whooper Swan occupies the region of north Cork comprising lands adjacent to the Awbeg River and its feeder streams. The area consists primarily of agricultural grazing land, much of which is liable to flooding. Whooper Swans are regularly seen on grassland around the Ballyhea/Churchtown area.

The proposed development site is located outside of the core foraging range for Whooper Swan (c. 5km), however, previous surveys indicate that Whooper Swans utilise nearby grasslands during the winter season. Thus, the environs greater than 1 km away of the proposed development site may support ex-situ connectivity to Whooper Swan associated with Kilcolman Bog and therefore the possibility cannot be ruled out that the Whooper Swans that frequent the surrounding area (within c. 1km) of the proposed development site, are from the same Whooper Swan population for which the Kilcolman Bog SPA is designated. Given the movements of wintering Whooper Swans to and from Kilcolman Bog SPA and grazing lands adjacent to the Awbeg River and its feeder streams, potential impacts of the proposed development must be considered.

Potential Impacts as a result of the Proposed Development

In addition to possible impacts on water quality the following Construction Phase Impacts are also considered Noise, Vibration, Security Lighting, Human presence and Movements of vehicles associated with construction activities. The Zone of Influence varies by the affected habitat and reliant species. This can be assessed within 500m of the proposed development footprint for wintering birds. However, distance can be significantly lower (e.g. 150 m for otter underground sites (NRA, 2006), or higher for other species.

In relation to the proposed underground grid connection, this route will run underneath private lands and the L5527, L5528 and L5529 public roads for 1km where it will connect the proposed development to the previously consented electricity grid interconnector (Cork County Council Pl. Ref. 22/05933). The underground grid connection route from the proposed solar farm terminates at the southern most transformer. The proposed grid connection shall pass under the

Rathnacally Stream. Potential impacts on water quality as a result of the works may occur without appropriate mitigation.

Potential impacts associated with trenching, ducting, cable laying and upgrade of existing tracks include:

- Suspended solids drained to nearby watercourses could potentially lead to siltation and physical effect on flora and fauna.
- Excavated soil could be mobilised in the surface water runoff during an extreme rainfall event.
- The excavation of trenches for cable laying could lead to silt laden surface water run-off.
- Inadequate storage of fuels and oils could lead to contamination of surface water.
- Although considered slight, there is a potential of risk of contamination of watercourses by petrochemicals during the works resulting from spillage during refuelling or from lubricating oils and leaks from machinery.
- Standing water in excavations could contain an increased concentration of suspended solids as a result of the disturbance of the underlying soils.
- Haul roads passing close to watercourses could allow the migration of silt laden runoff into watercourses.
- Silt carried on the wheels of vehicles leaving the off-road section of the development site could be carried onto the public road.
- A blockage in the drains could allow a breakout of silt laden runoff to reach adjacent watercourses or streams.
- Overland flow entering excavations could increase the quantity of surface water to be treated for sediment removal.
- Inappropriate management of excavations could lead to loss of suspended solids to surface waters.
- Inappropriate management of the excavated material could lead to loss of suspended solids to surface waters.
- During the construction works there is a potential to release suspended solids into the watercourse.

Operation Phase Impacts are also assessed, these include

- Collision Risk - Although considered slight there is potential for collision with associated infrastructure and barrier to dispersal during the operational phase.
- Impacts from Movement of People, soils, and vehicles associated within maintenance works, again the ZOI varies by affected habitat and reliant species but has been assessed within 500m of the proposed development site for wintering birds and 150m for mobile species such as otter.
- Although considered slight there is potential for collision with associated infrastructure and barrier to dispersal during the operational phase.
- Potential displacement of birds due to loss of suitable feeding and/or breeding/wintering habitat.
- Reduction in prey due to impacts from emissions to water as identified above.
- Potential displacement of otters etc. due to disturbance/loss of suitable feeding habitat.
- Terrestrial contact (direct contact with operational personnel or machinery on site).
- Noise associated with the proposed development.
- Potential to contribute water quality impacts to the receiving and surrounding environment, in the absence of mitigation.

Decommissioning Phase impacts including those as a result of:

- Dismantling and disassembling of solar farm infrastructure,
- Localised excavations and backfilling and
- Site restoration and landscaping could result in terrestrial - contact (direct contact with operational personnel or machinery during site works), air (through its ability to transmit noise effects), visibility (on site presence of construction personnel) and Hydrological pathways; i.e. drainage channels, streams and rivers which provide connectivity with downstream sections of the River Blackwater (Cork/Waterford) SAC.

A full list of potential impacts is provided under Section 5.7 of the NIS.

Kilcolman Bog SPA – Whooper Swan

It is noted that following a request from the Planning Authority for further information a Whooper Swan and Winter Bird Survey was completed by Veon Forestry, Ecology and Environment on behalf of the applicant. The field surveys which informed the report were undertaken during the 2022-2023 (26 survey site visits) and the 2023-2024 winter seasons (29 survey site visits) by Mr Barry O'Mahony, an Ornithologist with more than 40 years' experience in bird surveying. The Whooper Swan survey sites all lie south of the proposed Ardnageehy solar farm site and included the Blackwater Flats, Caherconnor, Ballyhea SAC, Ballyroe Quarry Pond and Ballyroe Main Quarry. These are the closest survey locations to the proposed development and lie between 1.2km to 2km south of the site. In addition to the targeted Whooper Swan surveys Winter Bird Surveys were also carried out using 4 no. different transects throughout the four parcels of the subject site. The submitted Whooper Swan and Wintering Bird report provides an assessment of the local Whooper Swan and other bird populations during the winter season in the area of the proposed development and considers risk of impact on the populations as a result of the proposed development.

The results of the winter bird survey recorded a total of no. 36 bird species from November 2023 to March 2024. Notably six Red-Listed species Redwing, Snipe, Woodcock, Meadow Pipit, Barn Owl and Lapwing.

The targeted Whooper Swan surveys confirmed that Whooper Swans do not regularly use any of the lands within the proposed Ardnageehy solar farm site for grazing, foraging or roosting. In addition to this the surveys established the regularly used flightpaths of Whooper Swan at dawn and dusk moving to and from the roost sites. None of these flightpaths cross the proposed development site. Whooper Swans were regularly recorded flying between the Ballyroe Quarry ponds and grazing fields at the Blackwater Flats, Caherconnor and the Ballyroe SAC fields, all of which lie at least 1.2km south of the proposed development site. The potential impacts that were considered as part of this report include disturbance and displacement of wintering birds, particularly Whooper Swans. This report concluded that the risk of potential impacts is not high as the primary locations of Whooper Swan and wetland winter bird activity lies outside the proposed development site

boundary. Therefore the proposed works will not have significant negative impacts on the local wintering bird population, particularly Whooper Swan.

In addition to the submitted Survey report, a Whooper Swan Coordinated Management Programme was also submitted in response to the Council's further information request. This management programme specifically examined the interactions between the current proposed development and other related and permitted solar farm developments, and the conservation of Whooper Swan. The purpose of the report was to inform Whooper Swan mitigation measures and prescribe a collaborative way forward for the conservation of the Whooper Swan populations in the solar farm hinterland and suitable/known Whooper Swan grazing and roosting habitats in the wider area.

Collated Management Actions including:

- Mitigation by Avoidance and Design,
- Avoidance of Disturbance through installation of appropriate buffer zones and
- The appointment of an Environmental Clerk of Works

The above measures (detailed further under Section 3 of the report) are all proposed in order to robustly mitigate any adverse impacts on the SPA's site integrity.

Based on the findings of the up-to-date Whooper Swan surveys, I would agree with the conclusion that from an avifaunal perspective, the proposed development will have very low to insignificant impacts on the receiving environment prior to the implementation of mitigation measures. With mitigation, impacts can be reduced to insignificant levels. I am therefore satisfied that the proposed development as submitted and with the implementation of the specified mitigation measures below would not in itself adversely affect Whooper Swan populations.

Mitigation Measures

The applicant has proposed a series of mitigation measures to avoid adverse effects on the Blackwater River (Cork/Waterford) SAC (002170) and Kilcolman Bog SPA (004095), these are listed in detail under Section 6 of the NIS. A summary assessment of these measures is provided in Table 4 below.

Table 4: Summary of assessment of mitigation measures

Mitigation Measures	Assessment	Implementation	Monitoring
Mitigation by Avoidance and Design	Reduce potential of adverse effects to the surface water	Applicant	Ongoing by Applicant
Construction Environmental Management Plan (CEMP)	Reduce potential of adverse effects to water quality of Blackwater River if implemented. Manage noise, ecology, dust and the potential sources of pollution during the construction of the proposed development.	Applicant/Contractor Appointment of qualified person to implement CEMP during period of construction	Ongoing by Applicant
Pre-Construction Pollution Mitigation Measures	Routine inspections and monitoring of all construction activities and oversight of mitigation measures to ensure environmental compliance.	Environmental Clerk of Works (ECoW)	Ongoing by Applicant
Main Watercourse Buffer Zone and mitigation in relation to Horizontal Directional drilling (HDD) to accommodate grid connection works.	Maintain a 15m wide buffer zone from the Rathnacally Stream and the Oakfront Stream. The proposed grid connection shall pass under the Rathnacally Stream. No excavation works are proposed within the 15m buffer zone to facilitate the directional	Applicant/ Contractor	Applicant

	<p>drilling crossings of the Rathnacally Stream (Sruhaneballiv Stream). The specific construction methodology for the proposed directional drilling under the Rathnacally Stream is detailed in the 'Construction Methodology' document. For the duration of the construction stage works the 15m wide buffer zone shall be maintained as a naturally vegetated area with a minimum natural vegetation height of approximately 0.25m (~9 inches).</p> <p>As detailed in the CEMP a four-stage pollution mitigation control measure shall be implemented along both banks of the Rathnacally Stream at the location of the proposed development stie.</p>		
Silt Fences & Straw Bales - primary silt fence system, adjacent staked straw	four-stage pollution mitigation control measure shall be implemented along	On-site ecological supervisor and contractor.	Applicant

<p>bales, a minimum 1.5m wide vegetation strip and a secondary silt fence system.</p> <p>Where straw bales are placed in drainage ditches a minimum of 2 No. standard size bales shall be placed, with a minimum separation distance of 2.5m between each bale so as to form a silt trap area between the bales.</p>	<p>both banks of the Rathnacally Stream and the Oakfront Stream.</p> <p>Prevent any silt-laden waters discharging to the Rathnacally Stream and the Oakfront Stream.</p>		
Construction Compound and Designated Storage Areas	Reduce potential of adverse effects to the surface water.	On-site ecological supervisor	Applicant
Inspection prior to construction commencing	Implementation of environmental protection measures	Site environmental manager or an appropriately qualified person	Applicant
Construction Plan - haul road and access roads shall be constructed using permeable material laid on a suitable geotextile membrane only if necessary. Use existing Site Entrance and Internal Access tracks	Reduce potential of adverse effects to the surface water.	On-site ecological supervisor	Applicant
Trenching Methodology and Mitigation Measures	Reduce potential of adverse effects to the surface water.	Site Manager and Project Ecological Clerk of Works (ECoW).	Applicant

Directional Drilling Methodology	Reduce potential of adverse effects to the surface water or groundwater	Site Manager and Project Ecological Clerk of Works (ECoW).	Applicant
Dust Minimisation	Reduce potential of adverse effects to surface water and air quality	Applicant/ Contractor	Applicant
Control of Noise	Reduce potential of adverse effect on mobile species	Applicant/ Contractor	Applicant
Protection of Soil, Surface Waters and Groundwater	Reduce potential of adverse effects to the surface water or groundwater	Applicant/ Contractor	Applicant
Refuelling Measures	Reduce potential of adverse effects to the surface water	Applicant/ Contractor	Applicant
Site Tidiness, Construction Generated Waste & Housekeeping	Reduce the potential accidents between vehicles and the potential for fuel leaks/ spills and adverse effects on surface water.	Applicant/ Contractor	Applicant
Protection of Flora and Fauna - on-going monitoring of wildlife in the vicinity of the construction site. Mitigation for Bat Roosts where required. Lighting mitigation for Bats. Badgers, Otters, Avi-fauna.	Reduce potential for adverse impacts on mobile species and protected flora as well as native plant/tree species.	Pre-works check by a qualified ecologist. Construction Manager and/or Environmental Officer	Applicant

<p>Overwintering Birds – Whooper Swan</p> <p>Buffer zone of 200-600m for overwintering Whooper Swan (Oct. – March incl.).</p> <p>Visual/acoustic screen to avoid line-of-sight disturbance to feeding and roosting Whooper Swan and to reduce noise propagation to feeding locations where required.</p> <p>Area of semi-improved grassland is to be retained free from project infrastructure to be managed for Whooper Swan foraging habitat.</p> <p>Measures to reduce problems of solar panels being potentially mistaken for waterbodies i.e. 'Lake effect'.</p> <p>Implementation of Anti-Reflective Coatings (ARC's).</p>	<p>Reduce potential for adverse effects</p>	<p>The project Environmental/ Ecological Clerk of Works will conduct walkover surveys to check for wintering birds prior to commencing works.</p>	<p>Applicant</p>
<p>Other Waterfowl and waterbirds</p> <p>Measures to reduce problems of solar panels being potentially mistaken</p>	<p>Reduce potential for adverse effects</p>	<p>The project Environmental/ Ecological Clerk of Works will conduct walkover surveys to check for</p>	<p>Applicant</p>

for waterbodies i.e. 'Lake effect' by certain faunal species. Implementation of Anti-Reflective Coatings (ARC's).		wintering birds prior to commencing works.	
Biosecurity	Manage the potential that aquatic and/or terrestrial invasive species (e.g. Japanese knotweed or giant hogweed) or pathogens (e.g. crayfish plague) may be accidentally introduced to a location via contaminated vehicles and/or equipment, in particular tracked vehicles, which previously were used in locations that contained invasive species	The project Environmental/Ecological Clerk of Works.	Applicant
Biodiversity Management Plan	Provide suitable management measures to be undertaken for the enhancement of biodiversity,	The project Environmental/Ecological Clerk of Works	Applicant
Operational Phase Mitigations - Monitoring Programme	Ensure that the site works and measures discussed above are successful. Ensure that the site works and measures	Applicant/ suitable qualified environmental professional will be engaged to oversee the monitoring program	Applicant - Yearly recording and an annual report are envisaged.

	discussed above are successful		
Decommissioning, Site restoration and Monitoring Program including site restoration.	Proposed potential pollution mitigation measures to be implemented to ensure no impacts on water quality, mobile species or flora/fauna.	Suitably qualified environmental professional will be engaged to oversee the monitoring program	Applicant

In-Combination Effects

There is potential for water emissions and elements in relation to disturbance from the project alone and in combination with other plans and projects to undermine the conservation objectives of the Natura 2000 network. The applicant's NIS identifies the following plans/ projects as presenting a risk of acting in-combination with the proposed development and an assessment of each is carried out and summarised as follows:

Plans:

- Cork County Council Development Plan 2022-2028 - provides objectives outlined for the protection of the natural environment and its component European Sites. This plan will not contribute to in-combination or cumulative negative impacts with the proposed development.
- River Basin Management Plan for Ireland (2018 – 2021 & Draft 2022 – 2027) - The implementation of the RBMP and achievement or maintenance of environmental objectives which will be set for the receiving water bodies will have a positive impact on water dependent habitats and species within European sites. This plan will not contribute to in-combination or cumulative negative impacts with the proposed development.
- Inland Fisheries Ireland Corporate Plan 2021 -2025 - The implementation of this corporate plan will have a positive impact for biodiversity of inland fisheries and ecosystems. This plan will not contribute to in-combination or cumulative negative impacts with the proposed development.

Other Projects:

- EPA Licenced Facilities - P0173 - Dawn Meats Ireland t/a Dawn Charleville - This facility is located adjacent to the upper reaches of the Rathnacally watercourse (IE_SW_18A050550), also known as the Srubanaballina Stream, a tributary of the Awbeg River - subject to conditions and parameters associated with licencing requirements, restricting the release of polluted or contaminated materials to the receiving or surrounding environment. Therefore, these facilities will not contribute towards significant negative effects to European Sites.
- Ballyroe Substation and Grid Connection route (ABP-314431-22) - Potential for in-combination effects to the receiving environment and the receiving areas of the Awbeg River, which is designated as part of the River Blackwater (Cork/Waterford) SAC, however with implementation of mitigation measures outlined in submitted NIS and CEMP – no in-combination effects are anticipated.
- Fiddane to Ballyroe Grid Interconnector Project (22/5933) - NIS stated that it could be objectively concluded that, when mitigation measures are implemented, there will be no direct, indirect or in-combination effects on the features of Qualifying Interest within the proposed development's Zone of Influence.
- Fiddane Solar Farm (Planning Reference No. 226536) - with implementation of mitigation measures outlined in submitted NIS - no in-combination effects are anticipated.
- B&R Wind Limited (175292) – AA Screening exercise completed by Board – no likely significant effects identified – therefore no in-combination effects are anticipated.
- Annagh Wind Farm Limited (Planning Reference No. 217246) – Permission refused – no in combination effects.
- Rathnacally Windfarm (Aerie Renewables Ltd) (124446) - Given implementation of mitigation measures for protection of what ecological aspects of the site exist, the overall impacts of the proposed construction

of two wind turbines at Rathnacally may be considered as negligible - therefore no in-combination effects are anticipated.

- Ballyhea Asset Holdings Ltd. (154659) - Sand and gravel quarry – NIS prepared - considering impacts to the receiving environment and prescribing water quality and surface water mitigation measures to protect the nearby Awbeg River watercourse and the nearby areas of the River Blackwater (Cork/Waterford) SAC - therefore no in-combination effects are anticipated.
- Proposed M20 Road Project - The proposed M20 road project will be subject to the Appropriate Assessment process and should be cognisant of significant negative effects to European Sites within the receiving environment, particularly the River Blackwater (Cork/Waterford) SAC. At the time of writing this report the proposed motorway's 200m wide corridor has been taken into account, by the removal of approximately 4.5 acres of the solar farm to the east of the site which is detailed in the RFI submission.
- Coolcaum Solar Farm (Planning Reference No. 22/5681) – NIS submitted - with the implementation of construction best practice and mitigation measures, there will be no significant effects which would adversely affect the Qualifying Interests or Conservation Objectives of the European Site - therefore no in-combination effects are anticipated.
- Ballyroe Solar Farm (Planning Reference No. 204041) - NIS submitted - with the implementation of construction best practice and mitigation measures, there will be no significant effects which would adversely affect the Qualifying Interests or Conservation Objectives of the European Site - therefore no in-combination effects are anticipated.

Integrity Test

Following the Appropriate Assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of the Blackwater River (Cork/Waterford) SAC (002170) or the Kilcolman Bog SPA (004095) in view of the Conservation Objectives for these sites.

Appropriate Assessment Conclusion

The development of a 92.75ha Solar PV Farm and underground electricity grid connection works, located in the townlands of Fiddane, Cooliney, Coolcaum, Ballynoran, Ballynadrideen and Ardnageehy, Co. Cork has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended.

Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the Blackwater River (Cork/Waterford) SAC (002170) and the Kilcolman Bog SPA (004095). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European Site No.'s 002170 and 004095, or any other European site, in view of the sites' Conservation Objectives.

This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Blackwater River (Cork/Waterford) SAC (002170) and the Kilcolman Bog SPA (004095).
- Detailed assessment of in-combination effects with other plans and projects including historical projects, current proposals and future plans.
- The design and application of mitigation measures ensure the preservation of the favourable conservation status of habitats characterised as being in favourable status and ensure that habitat characterised as being in unfavourable status will not be further harmed or rendered difficult to restore to favourable status.
- The overall design and layout of the solar farm, with particular regard to the protected areas for ecological enhancement and application of mitigation

measures as detailed and conditioned ensure the lasting preservation of the essential components and characteristics of the European Sites.

- The overall nature and drainage characteristics of the land.
- The distance between the lands, areas for construction, and the designated habitats, plus other lands associated with foraging/roosting behaviour by Whooper Swans; and
- The identified foraging and roosting behaviour of the identified bird species within the SPA.

This conclusion is based on a complete assessment of all aspects of the proposed development and there is no reasonable doubt as to the absence of adverse effects.