



Comhairle Contae Chill Mhantáin  
Wicklow County Council

Pleanáil, Forbairt Eacnamaíochta agus Tuaithe  
Planning, Economic and Rural Development

Áras An Chontae / County Buildings  
Cill Mhantáin / Wicklow  
Guthán / Tel: (0404) 20148  
Faics / Fax: (0404) 69462  
Rphost / Email: [plandev@wicklowcoco](mailto:plandev@wicklowcoco)  
Suíomh / Website: [www.wicklow.ie](http://www.wicklow.ie)

Highfield Energy Services Limited  
Design Studio 7  
Old Castle View  
Kilgobbin Road  
Dublin 18  
D18 A243

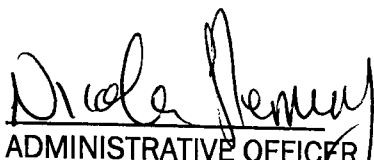
35 May 2024

RE: Declaration in accordance with Section 5 of the Planning & Development Acts 2000 (As Amended) - EX43/2024

I enclose herewith Declaration in accordance with Article 5 (2) (A) of the Planning & Development Act 2000.

Where a Declaration is used under this Section any person issued with a Declaration under subsection (2) (a) may, on payment to An Bord Pleanála of such fee as may be prescribed, refer a declaration for review by the Board within four weeks of the date of the issuing of the declaration by the Local Authority.

Is mise, le meas,

  
ADMINISTRATIVE OFFICER  
PLANNING ECONOMIC & RURAL DEVELOPMENT





# Comhairle Contae Chill Mhantáin Wicklow County Council

Pleanáil, Forbairt Eacnamaíochta agus Tuaithe  
Planning, Economic and Rural Development

Áras An Chontae / County Buildings  
Cill Mhantáin / Wicklow  
Guthán / Tel: (0404) 20148  
Faics / Fax: (0404) 69462  
Rphost / Email: plandev@wicklowcoco  
Sulomh / Website: www.wicklow.ie

## DECLARATION IN ACCORDANCE WITH ARTICLE 5 (2) (A) OF THE PLANNING & DEVELOPMENT ACT 2000 AS AMENDED

Applicant: Clonswees Limited

CHIEF EXECUTIVE ORDER NO. CE/PERD/769/2024

A question has arisen as to whether “construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” at Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraine, Co. Wicklow is or is not exempted development.


### Having regard to:

- (a) The details submitted with the Section 5 declaration application
- (b) ABP -312936-22 (PRR SI202201), ABP-302037-18 (PRR 17/1440), ABP PL27.246527 (PRR 16/176) Referral ABP-313557-22
- (c) Section 2, 3, 4 of the Planning and Development Act 2000(as amended)
- (d) Articles 6 and 9 of the Planning and Development Regulations, 2001 (as amended)
- (e) Class 26, of Part 1 Schedule 2 of the Planning and Development Regulations, 2001 as amended.

### Main Reasons with respect to Section 5 Declaration:

- i. the laying of the underground cables comes within the scope of Sections 2(1) and 3(1) of the Planning and Development Act 2000, as amended, and therefore constitutes development,
- ii. Clonswees Limited, would come within the meaning of an undertaker authorised to provide an electricity service having regard to the authorisation received under Section 14 and 16 of The Electricity Regulation Act 1999, from the Commission for Regulation of Utilities.
- iii. the carrying out by the referrer of the development in question comes within the scope of Class 26 of Part 1 of Schedule 2 to the Planning and Development Regulations 2001 (as amended) and is, therefore, exempted development, and
- iv. none of the restrictions on exemption set out in Article 9 of the Planning and Development Regulations, 2001, as amended, apply in this instance.

The Planning Authority considers that “construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” at Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraine, Co. Wicklow **is development and is exempted development**

Signed:   
ADMINISTRATIVE OFFICER  
PLANNING ECONOMIC & RURAL DEVELOPMENT

Dated 3<sup>rd</sup> May 2024



WICKLOW COUNTY COUNCIL

PLANNING & DEVELOPMENT ACTS 2000 (As Amended)  
SECTION 5

CHIEF EXECUTIVE ORDER NO. CE/PERD/769/2024

Reference Number: EX43/2024

Name of Applicant: Clonswees Limited

Nature of Application: Section 5 Referral as to whether or not “construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” is or is not development and is or is not exempted development.

Location of Subject Site: Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraíney, Co. Wicklow

Report from Edel Bermingham SEP

With respect to the query under section 5 of the Planning & Development Act 2000 as to whether “construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” at Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraíney, Co. Wicklow is or is not exempted development within the meaning of the Planning & Development Acts 2000 (as amended).

Having regard to:


- (a) The details submitted with the Section 5 declaration application
- (b) ABP -312936-22 (PRR SI202201), ABP-302037-18 (PRR 17/1440), ABP PL27.246527 (PRR 16/176) Referral ABP-313557-22
- (c) Section 2, 3, 4 of the Planning and Development Act 2000 (as amended)
- (d) Articles 6 and 9 of the Planning and Development Regulations, 2001 (as amended)
- (e) Class 26, of Part 1 Schedule 2 of the Planning and Development Regulations, 2001 as amended.

Main Reason with respect to Section 5 Declaration:

- i. the laying of the underground cables comes within the scope of Sections 2(1) and 3(1) of the Planning and Development Act 2000, as amended, and therefore constitutes development,
- ii. Clonswees Limited, would come within the meaning of an undertaker authorised to provide an electricity service having regard to the authorisation received under Section 14 and 16 of The Electricity Regulation Act 1999, from the Commission for Regulation of Utilities.
- iii. the carrying out by the referrer of the development in question comes within the scope of Class 26 of Part 1 of Schedule 2 to the Planning and Development Regulations 2001 (as amended) and is, therefore, exempted development, and
- iv. none of the restrictions on exemption set out in Article 9 of the Planning and Development Regulations, 2001, as amended, apply in this instance.

**Recommendation:**

The Planning Authority considers that construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” at Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraíney, Co. Wicklow is development and is exempted development as recommended in the report by the SEP.

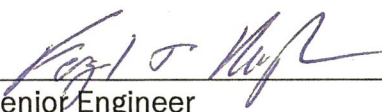
Signed: 

Dated 31<sup>st</sup> day of May 2024

**ORDER:**

**I HEREBY DECLARE:**

That “construction of a grid connection in the form of an underground HV cabling and ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm” at Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraíney, Co. Wicklow is development and is exempted development within the meaning of the Planning & Development Act 2000 (as amended).

Signed:   
Senior Engineer  
Planning, Economic & Rural Development

Dated 31<sup>st</sup> day of May 2024

## Section 5 Application EX 43/2024

Date : 31<sup>st</sup> May 2024

Applicant : Clonwees Limited

Address : Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templeraíney, Co.Wicklow

Exemption Whether or not :

Underground Construction of a Grid Connection in the form of an underground HV cabling and Ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm.

constitutes exempted development within the meaning of the Planning and Development Acts, 2000(as amended).

### Planning History :

ABP PL27.246527 (PRR 16/176) - Granted a 10 year permission for the construction of a solar pv energy development within a total site area of up to 13.76ha, to include one single storey electrical substation building, electrical transformer/inverter station modules, solar pv panels ground mounted on steel support structures, access roads, fencing and associated electrical cabling, ducting and ancillary infrastructure.

ABP-302037-18 (PRR 17/1440)

Grant 10 year permission for the construction of a Solar PV Energy development at Ballinaclea, Ballyrichard & Templeraíney, Arklow, Co. Wicklow within a total site area of up to 58.9 hA, to include one single storey electrical substation building, electrical transformer / inverter station modules, battery storage modules, solar PV panels ground mounted on steel support structures, access roads, fencing and associated electrical cabling, ducting and ancillary infrastructure

An Bord Pleanála Reference 312936 (PRR SI202201) –

Grant a 10 year permission for the construction of an electrical substation and associated 110kV and MV ancillary infrastructure required to connect ground mounted solar PV generation to the electricity transmission system; Including Underground electrical cabling (approximately 1.4km in length) connecting the proposed substation to the Arklow 220kV substation, (entirely along the public road network - the R772 - from where it leaves the site of the proposed substation and access road). Not subject to EIA or AA.

### EX 34/17

The Planning Authority considers that the provision of underground cabling and ducting for an Underground Electrical Connection linking permitted Solar Farm PL 27.246527 (PRR 16/176) to Kilmagig 38Kv substation, is development and **is exempted development**.

SI202201

a 10 year permission for the construction of an electrical substation and associated 110kV and MV ancillary infrastructure required to connect ground mounted solar PV generation to the electricity transmission system;

### **Relevant An Bord Pleanala Declaration**

ABP-313557-22

WHEREAS a question has arisen as to whether works consisting of a proposed underground 10kV grid connection to connect a permitted onsite solar farm substation to the existing 38kV Castlerea substation is or is not development and is or is not exempted development.

**AND WHEREAS** An Bord Pleanala has concluded that works consisting of a proposed underground 10kV grid connection to connect a permitted on-site solar farm substation to the existing 38kV Castlerea substation constitutes 'development', as defined under Section 3(1) of the Planning and Development Act, 2000 as amended and would come generally within the scope of the exempted development provision provided at Class 26 of Part 1, Schedule 2 of the Planning and Development Regulations 2001 - 2023, as amended.

AND WHEREAS An Bord Pleanala, in considering this referral, had regard particularly to -

- (a) Section 2(1) of the Planning and Development Act, 2000, as amended,
- (b) Section 3(1) of the Planning and Development Act, 2000, as amended,
- (c) Article 6(1) and Article 9(1) of the Planning and Development Regulations, 2001 - 2023, as amended,
- (d) Class 26 of Part 1 of Schedule 2 to the Planning and Development Regulations, 2001 - 2023, as amended, and
- (e) The planning history of the site.

### **County Development Plan 2022-2028**

Protected Sites and Species

CPO 17.4

To contribute, as appropriate, towards the protection of designated ecological sites including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs).

To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including but not limited to the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended) , the Birds Directive (2009/147/EC) , the Environmental Liability Directive (2004/35/EC) , the Environmental Impact Assessment Directive (2011/92/EU, as amended), the Water Framework Directive (2000/60/EC), EU

Groundwater Directive (2006/118/EC) and the Strategic Environmental Assessment Directive (2001/42/EC); EU 'Guidance on integrating ecosystems and their services into decision-making' (European Commission 2019);

- National legislation, including the Wildlife Acts 1976 and 2010 (as amended) , European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011), the European Communities (Environmental Liability) Regulations 2008 (as amended) and the Flora Protection order 2015;
- National policy guidelines (including any clarifying circulars or superseding versions of same), including 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment' (2018), 'Guidance for Consent Authorities regarding Sub-Threshold Development' (2003), 'Tree Preservation Guidelines', 'Landscape and Landscape Assessment' (draft 2000), 'Appropriate Assessment Guidance' (2010);
- Catchment and water resource management plans, including the National River Basin Management Plan 2018-2021 (including any superseding versions of same);
- Biodiversity plans and guidelines, including National Biodiversity Action Plan 2017-2021 (including any superseding versions of same) and the County Wicklow Biodiversity Action Plan;
- Ireland's Environment – An Integrated Assessment 2020 (EPA), including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

CPO 17.7 To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites in Wicklow.

### **Relevant legislation :**

*Planning and Development Act 2000 (as amended)*

Section 2 : (1) In this Act, except where the context otherwise requires—

"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

*.'structure': means any building, structure, excavation, or other thing constructed or made on, in or under and land, or any part of a structure so defined, and -*

*(a) where the context so admits, includes the land on, in or under which the structure is situate, and*

...

"statutory undertaker" means a person, for the time being, authorised by or under any enactment or instrument under an enactment to—

- (a) construct or operate a railway, canal, inland navigation, dock, harbour or airport,
- (b) provide, or carry out works for the provision of, gas, electricity or telecommunications services, or
- (c) provide services connected with, or carry out works for the purposes of the carrying on of the activities of, any public undertaking;

Section 3.—(1) In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

Section 4(2) provides that the Minister may by regulations provide any class of development to be exempted development. The Regulations which are applicable in this case are the Planning and Development Regulations 2001 (as amended).

*Planning and Development Regulations 2001(as amended).*

Article 3

electricity undertaking" means an undertaker authorised to provide an electricity service,

Article 6

(1) Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1.

Article 9(1) - Note see Regulations for full Article

Development to which article 6 relates shall not be exempted development for the purposes of the Act—  
(a) if the carrying out of such development would—

(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan

(viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places,

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment

(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.



Schedule 2, Part 1

Class 26

*The carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking.*

*Conditions / Limitation: none*

**Assessment:**

The query under Section 5 of the Planning and Development Act 2000 (as amended) is whether the *Construction of a Grid Connection in the form of an underground HV cabling and Ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm* is or is not exempted development

The cabling will connect the permitted Solar Farm at Ballycooleen into the Ballinaclea Lower Solar farm infrastructure, to allow for connection to the grid.

The route as indicated in the Ecological and AA Screening reports is c. 5.25km, and mainly crosses agricultural lands, with three road crossings at points on the following local roads i.e L-6180-0 L-6172-0 and L-2172-70. The route is not located within any Notification area for any National Monuments or any Natura 2000 sites. The route would be located adjoining the Templerainey Stream in some areas of the route, and will cross underneath this stream at three points, with one other crossing of the Ballycooleen stream located at the start of the route.

The first assessment must be whether or not such works are development within the remit of Section 3 of the Planning and Development Act 2000(as amended). In this regard, Section 3 of the Planning and Development Act provides that:

“development” means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

It should be noted that Section 2 of the Act defines works as:

“works” includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

With regard to the above, it is considered that the provision of an underground electrical cable connection which would involve excavation/ trenching, would fall within the definition of works, and as such would constitute ‘development’ under the meaning of the Act.

The second stage of the assessment is to determine whether the works involved in the provision of an underground electrical cable connection from the Ballycooleen Permitted Solar Farm into the Ballinaclea Lower Solar farm infrastructure, to allow for connection to the grid is or is not exempted development.

In this regard it is noted that Class 26 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended) provides an exemption for:

*The carrying out by any undertaker authorized to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking.*

The definition of electricity undertaking" means an undertaker authorised to provide an electricity service. A letter from Commission for Regulation of Utilities is attached to the application confirming Clonswees Limited has been authorised for such an undertaking.

The works identified in the submitted details ie. underground cabling etc would come within the definition of Class 26.

Article 9 restricts the application of the exemptions set out under Schedule 2, and an examination of the relevant restrictions is set out below :

(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan

The route of the cabling would intersect with 2 streams i.e. Ballycooleen Stream and Templeraíney stream, which are connected to Avoca River pNHA (800m) , Arklow Town Marsh pNHA (2.4km), and Arklow Sand Dunes pNHA (1.5km). Having regard to the methodology for construction of the cabling and under stream crossings, and the construction mitigation measures as set out in Section 6 of the Ecological Impact Assessment, and distance to this pNHA, the works would not it is considered result in any alteration of these pNHAs.

(viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places,

No Recorded Archaeological Monuments will be impacted.

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment

A screening report was submitted with respect to the proposed cabling works. The cabling/ ducting proposed is located on lands which are not within or adjacent to any Natura 2000 site. The closest Natura 2000 site is the Buckroneý- Brittas Dunes and Fen c. 2.5km north east, with the Kilpatrick Sandhills SAC 10.5km and the Slaney River Valley SAC at its closest point c. 14km to the south. From examination it is apparent that there is no direct link to any of these Natura 2000 sites. It is considered that given the nature of the works that the provision of cabling on its own or in combination will not give rise to any negative impacts on any Natura 2000 site and therefore the need to proceed to the Second Stage i.e. Appropriate Assessment is not considered necessary in this instance.

Having regard to the above assessment the works are development and are exempted development.

**Recommendation :**

With respect to the query under Section 5 of the Planning and Development Act 2000, as to whether :

the Construction of a Grid Connection in the form of an underground HV cabling and Ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm at, Ballycooleen, Ballinakill, Templemichael, Ballinaclea & Templerainey, Co. Wicklow

is or is not development and is or is not exempted development

The Planning Authority considers that:

the Construction of a Grid Connection in the form of an underground HV cabling and Ducting to link the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm **is development and is exempted development**

Main Considerations with respect to Section 5 Declaration:

- (a) The details submitted with the Section 5 declaration application
- (b) ABP -312936-22 (PRR SI202201), ABP-302037-18 (PRR 17/1440), ABP PL27.246527 (PRR 16/176) Referral ABP-313557-22
- (c) Section 2, 3,4 of the Planning and Development Act 2000(as amended)
- (d) Articles 6 and 9 of the Planning and Development Regulations, 2001( as amended)
- (e) Class 26, of Part 1 Schedule 2 of the Planning and Development Regulations, 2001 as amended

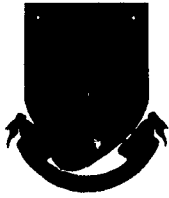
Main Reasons with respect to Section 5 Declaration:

- i. the laying of the underground cables comes within the scope of Sections 2(1) and 3(1) of the Planning and Development Act 2000, as amended, and therefore constitutes development,
- ii. Clonswees Limited, would come within the meaning of an undertaker authorised to provide an electricity service having regard to the authorisation received under Section 14 and 16 of The Electricity Regulation Act 1999, from the Commission for Regulation of Utilities.
- iii. the carrying out by the referrer of the development in question comes within the scope of Class 26 of Part 1 of Schedule 2 to the Planning and Development Regulations 2001 (as amended) and is, therefore, exempted development, and
- iv. none of the restrictions on exemption set out in Article 9 of the Planning and Development Regulations, 2001, as amended, apply in this instance.

*Seán Donoghue SEP.*

31/5/2024

*Issue declaration as recommended  
Paul J. Murphy  
31/05/24*



**Comhairle Contae Chill Mhantáin**  
**Wicklow County Council**

**Pleanáil, Forbairt Eacnamaíochta agus Tuaithe**  
**Planning, Economic and Rural Development**

Áras An Chontae / County Buildings  
Cill Mhantáin / Wicklow  
Guthán / Tel: (0404) 20148  
Faics / Fax: (0404) 69462  
Rphost / Email: [plandev@wicklowcoco.ie](mailto:plandev@wicklowcoco.ie)  
Suíomh / Website: [www.wicklow.ie](http://www.wicklow.ie)

**MEMORANDUM**

**WICKLOW COUNTY COUNCIL**

---

**TO: Edel Bermingham**  
**Senior Executive Planner**

**FROM: Nicola Fleming**  
**Staff Officer**

---

**RE:- Application for Certificate of Exemption under Section 5 of the**  
**Planning and Development Acts 2000 (as amended).**  
**EX43/2024**

I enclose herewith application for Section 5 Declaration received 13<sup>th</sup> May 2024.

The due date on this declaration is 9<sup>th</sup> June 2024.

---

**Staff Officer**  
**Planning Development & Environment**





**Comhairle Contae Chill Mhantáin**  
**Wicklow County Council**

**Pleanáil, Forbairt Eacnamaíochta agus Tuaithe**  
**Planning, Economic and Rural Development**

Áras An Chontae / County Buildings  
Cill Mhantáin / Wicklow  
Guthán / Tel: (0404) 20148  
Faics / Fax: (0404) 69462  
Rphost / Email: [plandev@wicklowcoco.ie](mailto:plandev@wicklowcoco.ie)  
Suíomh / Website: [www.wicklow.ie](http://www.wicklow.ie)

14<sup>th</sup> May 2024

**Highfield Energy Services Limited**  
**Design Studio 7**  
**Old Castle View**  
**Kilgobbin Road**  
**Dublin 18**  
**D18 A243**

**RE: Application for Certificate of Exemption under Section 5 of the Planning and Development Acts 2000 (as amended). – EX43/2024 for Clonswees Limited**

A Chara

I wish to acknowledge receipt on 13/05/2024 details supplied by you in respect of the above Section 5 application. A decision is due in respect of this application by 09/06/2024.

Mise, le meas

---

**Nicola Fleming**  
**Staff Officer**  
**Planning, Economic & Rural Development**



Planning Department  
Wicklow County Council  
County Buildings  
Whitegates  
Wicklow Town  
Co. Wicklow

25 April 2024

Our ref: HFSL-WW-pl033

Your ref:

**Re: Section 5 Application**



Dear Sir or Madam,

Highfield Energy Services Limited act as Agents for Clonswees Limited.

This letter accompanies an application for exempted development of underground HV cabling and ducting linking the following consented solar farm developments;

- **Ballycooleen Solar Farm (16/176)** - located in the townland of Ballycooleen, Avoca, Co. Wicklow
- **Ballinlea Solar Farm (17/144)** - located in the townlands of Ballinlea, Ballyrichard & Templerainey, Arklow, Co. Wicklow

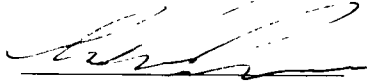
The appropriate payment of €80 for this application is attached to this cover letter.

Please find attached;

- 1no. completed application form signed by the agent;
- 1no. copy of the Site Location drawing (Figure 1.0 @ 1:2500)
- 1no. copy of the Block Plan and Site Layouts (Figures 1.1 & 1.2 @ 1:500);
- 1no. copy of further plans and particulars (there is a schedule of the planning drawings attached);
- 1no. copy of an Appropriate Assessment Screening Report in relation to the proposed works.
- 1no. copy of correspondence received from the CRU confirming an Authorisation to Construct and Licence to Generate for Clonswees Limited.

If there are any issues with the information presented or you have any queries while processing this application please contact me as required and I will give every assistance possible, my details are below.

Yours faithfully,



Christopher Doogan

Highfield Energy Services

Ph: +353 86 7313160

Email: [christopher.doogan@highfieldenergy.com](mailto:christopher.doogan@highfieldenergy.com)

Annex A; Completed Application Form

Annex B; Schedule of Drawings

Annex C; Appropriate Assessment Screening Report

Annex D; CRU Correspondence

# Annex A; Completed Application Form



Wicklow County Council  
Council Buildings  
Wicklow  
0404 20100

13/05/2024 10:54:16

Receipt No L11/0/329194

HIGHFIELD ENERGY LTD

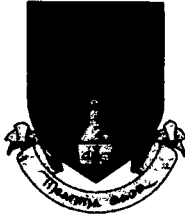
EXEMPTION CERTIFICATES	80 00
GOODS	80 00
VAT Exempt/Non-vatable	

Total 80 00 EUR

Tendered  
Cheque 80 00

Change 0 00

Issued By Cindy Driver  
From Customer Service Hub  
Vat reg No 0015233H



Wicklow County Council  
County Buildings  
Wicklow  
Co Wicklow  
Telephone 0404 20148  
Fax 0404 69462

Office Use Only

Date Received \_\_\_\_\_

Fee Received \_\_\_\_\_

APPLICATION FORM FOR A  
DECLARATION IN ACCORDANCE WITH SECTION 5 OF THE PLANNING &  
DEVELOPMENT ACTS 2000(AS AMENDED) AS TO WHAT IS OR IS NOT  
DEVELOPMENT OR IS OR IS NOT EXEMPTED DEVELOPMENT

**1. Applicant Details**

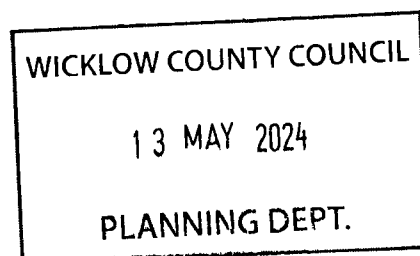
- (a) Name of applicant: Clonswees Limited  
Address of applicant: Design Studio 7, Old Castle View, Kilgobbin Road  
Dublin 18, D18 A243

Note Phone number and email to be filled in on separate page.

**2. Agents Details (Where Applicable)**

- (b) Name of Agent (where applicable) Highfield Energy Services Limited  
Address of Agent : Design Studio 7, Old Castle View, Kilgobbin Road  
Dublin 18, D18 A243

Note Phone number and email to be filled in on separate page.



### 3. Declaration Details

- i. Location of Development subject of Declaration Ballycooleen, Ballinakill  
Templemichael, Ballinlea, Templerainy, Co. Wicklow  
\_\_\_\_\_
- ii. Are you the owner and/or occupier of these lands at the location under i. above ?  
Yes/  No.  Tenant
- iii. If 'No' to ii above, please supply the Name and Address of the Owner, and or occupier Clive Crammond; Mineview Avoca County Wicklow  
Charles Pollard; Ballinakill Arklow County Wicklow  
Clifford Heath; Templemichael, Arklow, County Wicklow  
John Vigers; Ballinlea House Rockview Arklow County Wicklow  
Thomas Vigers; Ballinlea House Rockview Arklow County Wicklow  
Laura Alison Armstrong; Dunganstown, Wicklow, Co. Wicklow  
Michael Horsman / Christopher Hill; Templerainey; Arklow, Co. Wicklow, Y14W862  
(co-executors for the estate of Peter Horsman)  
Sarah Horsman; 43 The Maples, Wexford Road, Arklow, Co. Wicklow  
The County Council of the County of Wicklow; County Buildings, Wicklow, County Wicklow
- iv. Section 5 of the Planning and Development Act provides that : If any question arises as to what, in any particular case, is or is not development and is or is not exempted development, within the meaning of this act, any person may, on payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question. You should therefore set out the query for which you seek the Section 5 Declaration \_\_\_\_\_  
Are the underground MV ducting and cabling works outlined in the attached submission  
considered development works and if so, are these works Exempted Development?  
\_\_\_\_\_  
\_\_\_\_\_

*Additional details may be submitted by way of separate submission.*

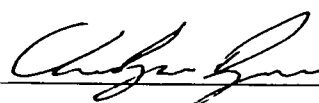
- v. Indication of the Sections of the Planning and Development Act or Planning Regulations you consider relevant to the Declaration \_\_\_\_\_  
Section 5 of the Planning and Development Act 2000-2015 \_\_\_\_\_  
Class 26 of Part 1 of Schedule 2 (Article 6) of the Planning and Development Regulations 01 as amended \_\_\_\_\_

\_\_\_\_\_  
*Additional details may be submitted by way of separate submission.*

- vi. Does the Declaration relate to a Protected Structure or is it within the curtilage of a Protected Structure ( or proposed protected structure) ? No

- vii. List of Plans, Drawings submitted with this Declaration Application \_\_\_\_\_  
Figure 1.0 - Site Location Map \_\_\_\_\_  
Figure 1.1 - Block Plan \_\_\_\_\_  
Figure 1.2 - Blocks A-R (18 drawings) \_\_\_\_\_

- viii. Fee of € 80 Attached ? Cheque attached to cover letter

Signed :  Dated : 25/04/2024  
(Agent acting on behalf of the applicant)

**Additional Notes :**

As a guide the minimum information requirements for the most common types of referrals under Section 5 are listed below :

- A. Extension to dwelling - Class 1 Part 1 of Schedule 2
- Site Location Map
  - Floor area of structure in question - whether proposed or existing.
  - Floor area of all relevant structures e.g. previous extensions.

- Floor plans and elevations of relevant structures.
- Site Layout Plan showing distance to boundaries, rear garden area, adjoining dwellings/structures etc.

#### B. Land Reclamation -

The provisions of Article 8 of the Planning and Development Regulations 2001 (as amended) now applies to land reclamation, other than works to wetlands which are still governed by Schedule 2, Part 3, Class 11. Note in addition to confirmation of exemption status under the Planning and Development Act 2000( as amended) there is a certification process with respect to land reclamation works as set out under the European Communities ( Environmental Impact Assessment) (Agriculture) Regulations 2011 S.I. 456 of 2011. You should therefore seek advice from the Department of Agriculture, Fisheries and Food.

Any Section 5 Declaration should include a location map delineating the location of and exact area of lands to be reclaimed, and an indication of the character of the land.

#### C. Farm Structures - Class 6 -Class 10 Part 3 of Schedule 2.

- Site layout plan showing location of structure and any adjoining farm structures and any dwellings within 100m of the farm structure.
- Gross floor area of the farm structure
- Floor plan and elevational details of Farm Structure and Full details of the gross floor area of the proposed structure.
- Details of gross floor area of structures of similar type within the same farmyard complex or within 100metres of that complex.

# Annex B; Schedule of Drawings

## Schedule of Drawings & Specifications

<i>Title</i>	<i>Drawing Size</i>	<i>Drawing No.</i>	<i>Scale</i>
Site Location Plan	A1	FIGURE 1.0	1:7500
Site Layout - Block Plan	A1	FIGURE 1.1	1:7500
Site Layout – Block Plan A	A1	FIGURE 1.2 (Block A)	1:500
Site Layout – Block Plan B	A1	FIGURE 1.2 (Block B)	1:500
Site Layout – Block Plan C	A1	FIGURE 1.2 (Block C)	1:500
Site Layout – Block Plan D	A1	FIGURE 1.2 (Block D)	1:500
Site Layout – Block Plan E	A1	FIGURE 1.2 (Block E)	1:500
Site Layout – Block Plan F	A1	FIGURE 1.2 (Block F)	1:500
Site Layout – Block Plan G	A1	FIGURE 1.2 (Block G)	1:500
Site Layout – Block Plan H	A1	FIGURE 1.2 (Block H)	1:500
Site Layout – Block Plan I	A1	FIGURE 1.2 (Block I)	1:500
Site Layout – Block Plan J	A1	FIGURE 1.2 (Block J)	1:500
Site Layout – Block Plan K	A1	FIGURE 1.2 (Block K)	1:500
Site Layout – Block Plan L	A1	FIGURE 1.2 (Block L)	1:500
Site Layout – Block Plan M	A1	FIGURE 1.2 (Block M)	1:500
Site Layout – Block Plan N	A1	FIGURE 1.2 (Block N)	1:500
Site Layout – Block Plan O	A1	FIGURE 1.2 (Block O)	1:500
Site Layout – Block Plan P	A1	FIGURE 1.2 (Block P)	1:500
Site Layout – Block Plan Q	A1	FIGURE 1.2 (Block Q)	1:500
Site Layout – Block Plan R	A1	FIGURE 1.2 (Block R)	1:500

# Annex C; Appropriate Assessment Screening Report



**Underground Cable Route from Ballycooleen Solar Farm to  
Ballinaclea Lower Solar Farm, Arklow, County Wicklow**

**Appropriate Assessment Screening**

**April 2024**

**Prepared for:**

**Highfield Solar Limited**

**By:**



**wetland  
surveys  
ireland**

*WetlandSurveys.ie*

**Wetland Surveys Ireland Ltd.  
Bell Height  
Kenmare  
Co Kerry**

**T: + 353 86 8510292**

**E: [info@wetlandsurveys.ie](mailto:info@wetlandsurveys.ie)**

**[www.wetlandsurveys.ie](http://www.wetlandsurveys.ie)**

## Document Control Sheet

Client	Highfield Solar Limited
Project Title	North Arklow Highfield Solar
Document Title	Appropriate Assessment Screening
Project Number	WS0864
Document No.	WSI_Ballycooleen SF UGC AA_DRAFT.docx

Revision	Status	Author	Review	Approved	Date
001	Draft	JOS			16/04/2024
001	FINAL		PC	PC	30/04/2024
<b>Wetland Surveys Ireland</b>					

**CONTENTS**

	<b>Page</b>
<b>1 INTRODUCTION .....</b>	<b>3</b>
1.1 STATEMENT OF AUTHORITY .....	3
1.2 STATUTORY CONTEXT .....	4
<b>2 METHODOLOGY .....</b>	<b>5</b>
2.1 APPROPRIATE ASSESSMENT .....	5
2.2 ECOLOGICAL ASSESSMENT .....	6
<b>3 APPROPRIATE ASSESSMENT SCREENING.....</b>	<b>7</b>
3.1 PROJECT DESCRIPTION.....	7
3.2 SITE DESCRIPTION (EXISTING ENVIRONMENT) .....	11
3.3 IS THE PROJECT NECESSARY TO THE MANAGEMENT OF EUROPEAN SITES.....	14
3.4 IDENTIFICATION OF EUROPEAN SITES.....	14
3.5 IDENTIFICATION AND DESCRIPTION OF POTENTIAL IMPACTS .....	18
3.6 IN-COMBINATION / CUMULATIVE IMPACTS.....	21
3.7 CONCLUSION OF SCREENING.....	23
<b>4 REFERENCES.....</b>	<b>24</b>

**LIST OF FIGURES**

FIGURE 1: PROPOSED UGC ROUTE.....	7
FIGURE 2 .....	8
FIGURE 3: HDD PIT LOCATIONS.....	10
FIGURE 4: EUROPEAN SITES WITHIN 5KM OF THE PROPOSED UGC ROUTE.....	15

**LIST OF TABLES**

TABLE 1: QUALIFYING INTERESTS OF THE BUCKRONEY – BRITTAS DUNES AND FEN SAC (SOURCE: WWW.NPWS.IE) .....	16
TABLE 2: POTENTIAL FOR LIKELY SIGNIFICANT EFFECTS ON THE BUCKRONEY – BRITTAS DUNES AND FEN SAC .....	20

**LIST OF APPENDICES**

Appendix I:	Published NPWS SAC description
Appendix II:	Completed Appropriate Screening matrix summarising the outcome of AA Screening process.

## 1 INTRODUCTION

Wetland Surveys Ireland Ltd. were commissioned by Highfield Solar Ltd. to determine the potential impacts, if any, of developing a grid connection in the form of an Underground Cable (UGC) from the consented Ballycooleen Solar Farm to the consented Ballinaclea Lower Solar Farm, Arklow, Co. Wicklow on sites designated as European conservation areas known as Natura 2000 sites (hereafter referred to as European sites).

The proposed UGC route is located circa 2km north of Arklow, Co. Wicklow where it runs through the townlands of Ballycooleen, Ballinakill, Templemichael, Ballinaclea and Templeraingy. The proposed route occurs within agricultural lands for the most part and crosses 3 public roads. The proposed UGC route is not located within any site designated for nature conservation.

The nearest European site to the proposed development is the Buckronee – Brittas Dunes and Fen SAC (NPWS site code: 000729) located approximately 2km north-east of the proposed route at the nearest point. The aim of this assessment is to determine the appropriateness, or otherwise of the proposed development in the context of the conservation objectives of relevant European sites.

### 1.1 STATEMENT OF AUTHORITY

This report was prepared by Dr. Patrick Crushell and Mr. Joe O’Sullivan, Ecologists with Wetland Surveys Ireland Ltd. Dr. Crushell (BSc Applied Ecology; MSc Environmental Resource Management, PhD Environmental Sciences, C Ecol, MCIEEM) received an honours degree in Applied Ecology from UCC, a Masters degree in Environmental Resource Management from UCD and defended his PhD at Wageningen University, the Netherlands. He is a Chartered Ecologist and Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Dr. Crushell has been working in the area of nature conservation and ecological impact assessment for the past twenty-two years.

Joe O’Sullivan (BSc Environmental Science) received an honours degree in Environmental Science from the University of Galway (formerly NUIG). He is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management. Since joining Wetland Surveys Ireland, Joe has worked on a wide range of projects including baseline ecological surveys and ecological assessments for a variety of developments. Joe also has worked on various projects relating to nature conservation biodiversity such as raised bog conservation assessments and county wetland surveys.

## 1.2 STATUTORY CONTEXT

This Appropriate Assessment Screening Report has been prepared in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (European Commission 2021), the European Commission Guidance Managing Natura 2000 Sites (European Commission 2018) and with reference to the Department of the Environment and Heritage and Local Government guidance on Appropriate Assessment of plans and projects in Ireland (DEHLG 2010).

The EU Habitats Directive (92/43/EEC) provides the framework for legal protection for habitats and species of European importance. The directive provides the legislative means to establish a network of sites (known as the Natura 2000 network) throughout the EU with the objective of conserving habitats and species deemed to be of community interest. These sites include Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive (formally known as the Conservation of Wild Birds Directive 79/409/EEC).

Article 6(3) and 6(4) of the Habitats Directive lays down the procedure to be followed when planning new developments that might affect a European site. This stepwise procedure requires that a plan or project having a likely significant negative effect on a Natura 2000 site undergoes an 'Appropriate Assessment' to study these effects in detail and to see how they relate to the conservation objectives of the site. Depending on the findings of the Appropriate Assessment, the competent authority agrees to the plan or project as it stands if it has ascertained that it will not adversely affect the integrity of the site(s) concerned.

However, should this assessment have ascertained that there will be an adverse effect it may require one or more of the following, depending on the degree of impact:

- Specific mitigation measures are introduced to remove the negative effects;
- Certain conditions are respected during the construction, operational or decommissioning phases of the project, again to remove the likelihood of negative effects or to reduce them to an insignificant level where they no longer affect the integrity of the site;
- Feasible alternatives are explored instead.

In exceptional circumstances, a plan or project may still be allowed to go ahead under certain conditions, in spite of being assessed as having negative effects on the site provided the procedural safeguards laid down in the Habitats Directive are followed. This may be possible, for instance, if the plan or project is considered to be of overriding public interest and there are no alternatives available. In such cases, compensation measures will need to be implemented to ensure that the overall coherence of European sites is protected.

## 2 METHODOLOGY

### 2.1 APPROPRIATE ASSESSMENT

This Appropriate Assessment Screening Report has been prepared in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland*. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, 2010.
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, 2021.
- Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission, 2019.
- Office of the Planning Regulator (OPR). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01, 2021

There are up to four successive stages involved in the Appropriate Assessment process (European Commission 2002). The outcome at each stage determines whether the next stage in the process is required. The following describes each of the four stages:

#### **Stage 1 – Screening**

This is the first stage in the process and is carried out to determine the necessity for a more detailed Stage 2 Appropriate Assessment where likely significant impacts on European sites are identified. The following steps are involved in the Stage 1 Screening:

- Description of the project / plan and site characteristics (existing environment)
- Determination of whether the project is directly connected with, or necessary to, the management of a Natura 2000 site
- Identification and description of European sites that could potentially be affected
- Identification and description of potential impacts
- Assessment of potential impacts
- Exclusion of sites where no significant effects are foreseen

#### **Stage 2 – Appropriate Assessment**

If likely significant effects are foreseen, this stage involves assessing the impact of the plan or project on the integrity of the European site, either alone or in combination with other plans or projects, with respect to the structure and function of the site and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts is carried out. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage 3.

**Stage 3 – Procedure under Article 6(4) Assessment where no Alternative Solutions Exist and where Adverse Impacts Remain**

This final stage only comes into play if, despite a negative assessment, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed. The plan or project process examines alternative ways of achieving the objectives of the plan or project that may avoid adverse impacts on the integrity of the European site. This is only possible if there are no alternative solutions, the imperative reasons of overriding public interest are duly justified, and if suitable compensatory measures are adopted to ensure that the overall coherence of the Natura 2000 network is protected.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the project or plan should aim to avoid any impacts on European sites by identifying possible impacts early in the process and designing / writing the project or plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project or plan is still likely to result in impacts on European sites, and no further practicable mitigation is possible, then it must be rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

In the case of this Appropriate Assessment Screening Report, it was found that the project does not require Stage 2 Appropriate Assessment.

**2.2 ECOLOGICAL ASSESSMENT**

A desktop survey and an ecological field survey were undertaken to inform the baseline ecological environment of the study area. The desktop study of the proposed route was undertaken by referring to aerial photography and other GIS and ecological datasets. A targeted multidisciplinary walkover survey was undertaken throughout the study area. The aim of the walkover survey was to record the ecological characteristics of the habitats along the proposed route with a view to identifying any ecological sensitivities or constraints. Surveys were undertaken by a surveyor who walked the proposed route and recorded features of ecological interest using a GPS enabled mobile device. The grid route was assessed as a 20m corridor to allow for flexibility in the design.

### 3 APPROPRIATE ASSESSMENT SCREENING

#### 3.1 PROJECT DESCRIPTION

The project under consideration in this assessment is the construction of a grid connection in the form of an UGC that would connect the Ballycooleen Solar Farm to the Ballinaclea Lower Solar Farm. The proposed UGC route is 5.25km in length, occurs within agricultural lands and crosses 3 public roads. The proposed route intersects with the Templerainey stream at 3 locations. The lands through which the UGC route runs drain to the west to the Avoca River and south, to the Templerainey Stream. The layout of the proposed development is shown in Figure 1 below.

The desktop review of watercourses along the route found another intersection with an unnamed stream at the northwestern end of the route (see Figure 1). During the walkover survey of the proposed route it was noted that this stream does not occur as mapped on the EPA website and there is no intersection with the stream in this location. The unnamed stream runs along the field boundary to the southwest removed from the proposed route.

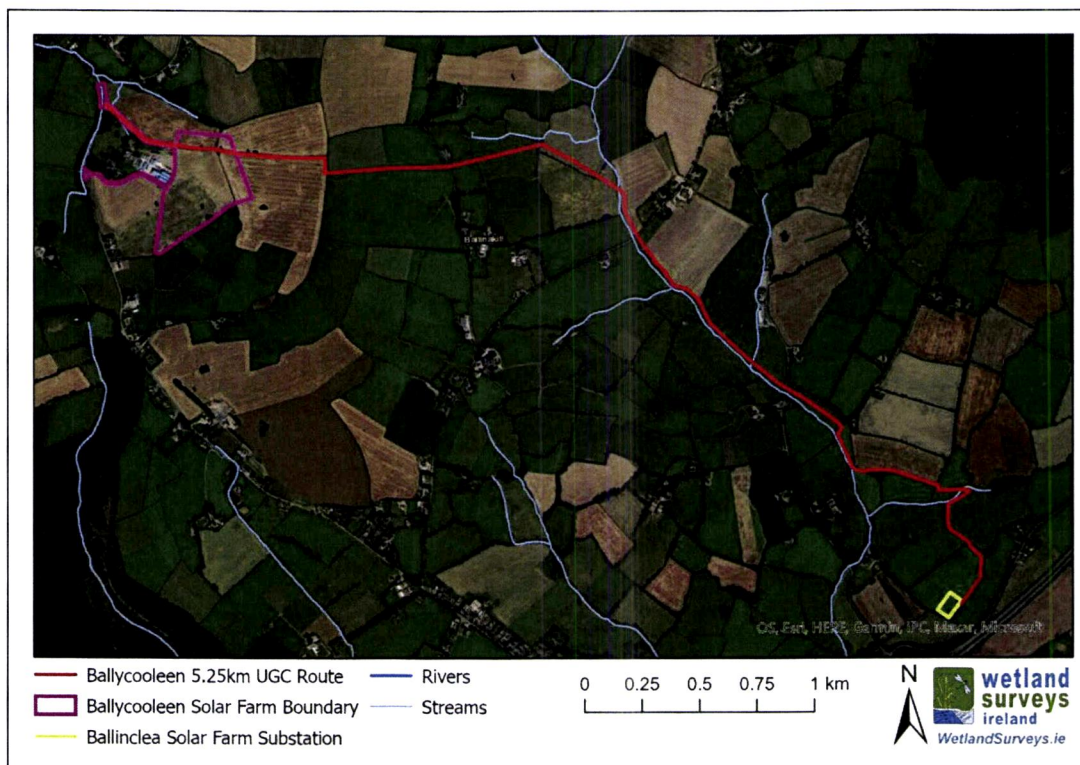


Figure 1: Proposed UGC Route



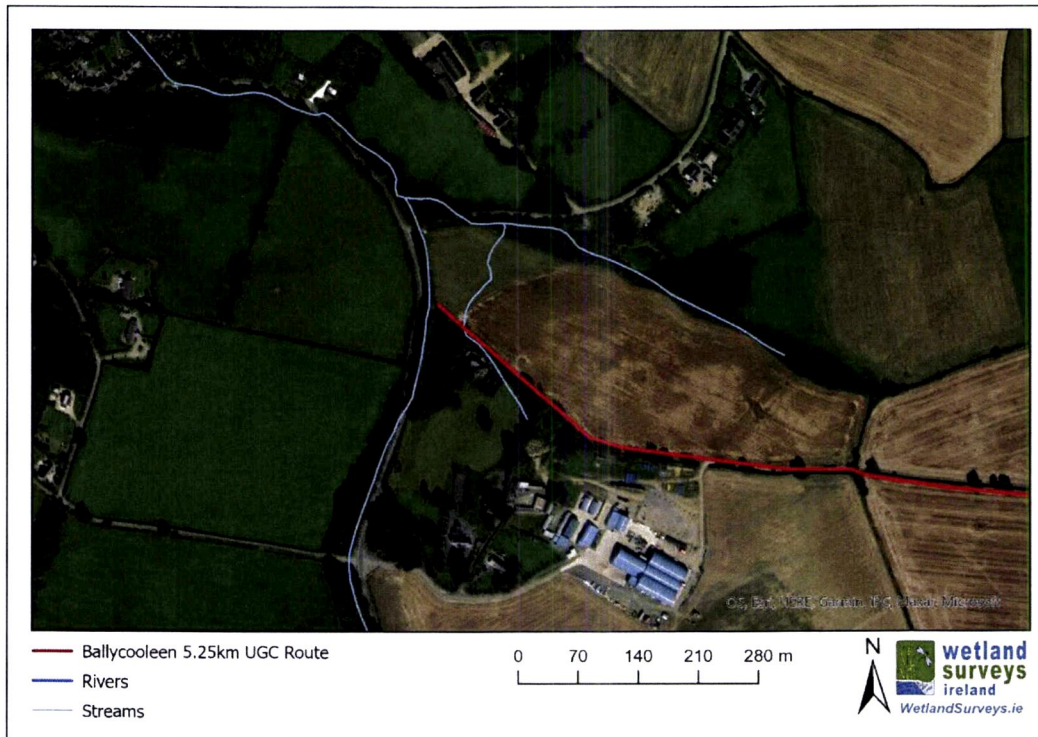


Figure 2: Wester extent of the study area. The watercourse shown as crossing the UGC is a mapping error and the watercourse occurs to the southwest removed from the cable route.

### 3.1.1 Construction Phase

Works associated with the UGC installation will be carried out in accordance with the EirGrid (2020) Ecology Guidelines for Electricity Transmission Projects. Adequate control checks throughout the installation phase will be undertaken by the contractor. No in-stream works associated with the installation of the UGC are foreseen. The proposed works include the following:

- A trench typically less than 1.5m deep is excavated using an excavator machine. The length of the trench excavated varies depending on the location along the route and the distance between joint bays.
- Medium voltage (MV) Cables are installed directly into the ground in the excavated trench.
- Cable joints are installed in joint bays which are typically concrete structures buried underground, occurring generally every 500 - 700m along an alignment, and ranging in size up to 6m long, 2.5m wide and 1.8m deep.
- Soil is backfilled and the surface sods will be reinstated.
- Where a cable route is in an open area, it is returned to agricultural/grassland use.
- Where a cable passes through forested land the route is not replanted with trees to prevent any damage to the cable by tree root growth.

Horizontal Directional drilling (HDD) will be used to install the UGC beneath streams and roads along the proposed route. Figure 3 shows the locations of the proposed HDD locations. The operation shall take place from one side of the stream / road and will be carried out by an experienced HDD specialist. It is expected to take place in a single day under one mobilisation. The process will involve setting up a small, tracked drilling rig on one side of the stream/road, within the development boundary. A shallow starter pit will be excavated at the point of entry. A pilot hole will be bored as per the agreed alignment and shall be tracked and controlled using a transmitter in the drill head. Typically, the drilling operation is lubricated using a fluid. When the pilot hole has been drilled to the correct profile, its diameter is increased (if necessary) to match the external diameter of the cable duct. The flexible plastic ducting is then pulled through the pre-drilled hole and sealed at each end until required for cable installation.



Figure 3: HDD pit locations.

### 3.1.2 Operational Phase

The UGC will function as a grid connection throughout the operational phase of the Ballycooleen Solar Farm. The lands through which the proposed route occurs will return to their current land use shortly after construction has been completed. There are no identified emissions (noise, water, etc.) from the project during the operational phase. Maintenance works may be required over the lifespan of the project requiring similar excavation works to those described above, these will likely be localized and infrequent, if required.

### 3.2 SITE DESCRIPTION (EXISTING ENVIRONMENT)

A detailed description of the existing ecological environment within and immediately surrounding the proposed development route is presented in the Ecological Impact Statement that accompanies the application.

The proposed UGC route crosses agricultural lands from the Ballycooleen Solar Farm to the Ballinaclea Solar Farm. The route crosses fields consisting primarily of Improved Agricultural Grassland with Hedgerows and Treelines forming the field boundaries. The proposed route intersects with 3 public roads and 3 streams and crosses a number of drainage ditches along field boundaries. The route is easily accessible across agricultural land from the public road network. A typical agricultural field along the UGC route is shown in Plate 1 below. The area of waterlogged ground shown in Plate 1 is avoided by the UGC route which passes through the fenced area to the left of the image.



Plate 1: Typical field along UGC route.

Where the UGC route leaves the Ballycooleen Solar Farm the route runs through large fields of Improved Agricultural Grassland. The route also passes through some fields of cultivated lands with drainage ditches, fencing and hedgerows mark the field boundaries. Hedgerows along the route typically consist of Hawthorn (*Crateagus monogyna*), Bramble (*Rubus fruticosus* agg.) and Gorse (*Ulex europaeus*) with some Ivy (*Hedera helix*) and Bracken (*Pteridium aquilinum*) throughout (see Plate 2).



Plate 2: Typical hedgerow along UGC route.

The route intersects a public road at Ballinakill, here the road is bordered by a Bramble and Holly (*Ilex aquifolium*) hedge. Large trees are avoided along the UGC route. The route crosses more agricultural fields tightly grazed by sheep as it moves east and intersects field boundaries marked by Gorse hedges (see Plate 3). The route crosses through these hedgerows at pre-existing gated gaps.



Plate 3: Typical Gorse hedge along the proposed UGC route.

As the route turns south-east toward the Ballinlecka Solar Farm it crosses the Templerainey stream (see Plate 4). Here HDD will be used to install the UGC beneath the stream avoiding in stream works. The route runs parallel to Templerainey stream for approximately 1km occurring more than 15m from the edge of the stream in fields of Improved Agricultural Grassland. The route intersects with a further 2 roads in the townland of Ballinlecka including the L2172.



Plate 4: The Templerainey Stream.

### **3.3 IS THE PROJECT NECESSARY TO THE MANAGEMENT OF EUROPEAN SITES**

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the project is not the nature conservation management of European sites, but to develop a grid connection in the form of an UGC from the Ballycooleen Solar Farm to the Ballinlea Solar Farm. Therefore, the project is not considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

### **3.4 IDENTIFICATION OF EUROPEAN SITES**

This section of the screening process identifies and describes the European sites potentially affected by the proposed development. A distance of 5km is considered as a precautionary measure, taking account of the scale and character of the proposed solar farm development, to ensure that all potentially affected European sites are included in the screening process. Additionally, European sites within the zone of influence of the proposed development have also been considered. The Office of the Planning Regulator (OPR) Source-Pathway-Receptor (S-P-R) model was used to determine the European sites within the zone of influence of the proposed development.

The source of likely significant effects relates to the characteristics of the proposed development including the nature, scale, and location of the planning development area and the type of impacts likely to arise from the development. Direct and indirect impacts arising from the construction and operation of the proposed development were considered. The existence and characteristics of potential pathways that could link the proposed development to European sites and their qualifying features were assessed. The location, nature and potential sensitivities of ecological receptors that support the conservation objectives specified to maintain or restore the favourable conservation status of the potentially affected site were also considered.

Taking account of the nature, scale, and location of the proposed development, the relevant European sites potentially affected by the proposed development (using the S-P-R model) are included in the screening process. One European site occurs within 5km of the proposed development; the Buckronev – Brittas Dunes and Fen SAC (see Figure 4). A detailed description published by NPWS is presented in Appendix I. The Buckronev – Brittas Dunes and Fen SAC

(NPWS Site Code: 000729) occurs circa 2km north-east of the proposed UGC route at its nearest point. The location of the proposed development in the context of European sites is presented in Figure 4. There are no hydrological connections between the proposed UGC route and the SAC.

The nearest SPA to the proposed development site is the Wicklow Head SPA (NPWS Site Code: 004127) which is located circa 17km north-east of the proposed development. There are no hydrological connections between the proposed development and the SPA. The species regarded as special conservation interests of this SPA is Kittiwake (*Rissa tridactyla*) a seabird that breeds on cliffs along Irish coasts during the summer months and winters at sea. Considering the distance removed, the nature of the proposed works, and the special conservation interests of the site, it is deemed that adverse impacts on the SPA will not arise and therefore the site is not considered further in this assessment.

Since the conservation management objectives for the European sites focus on maintaining the favourable conservation status of the qualifying interests of each site, the screening process concentrated on assessing the potential implications of the proposed development against the qualifying interests of the site. The qualifying features and other site details have been obtained through a review of information available from the National Parks and Wildlife Service (NPWS). The Buckronev – Brittas Dunes and Fen SAC is described in further detail in the following section.

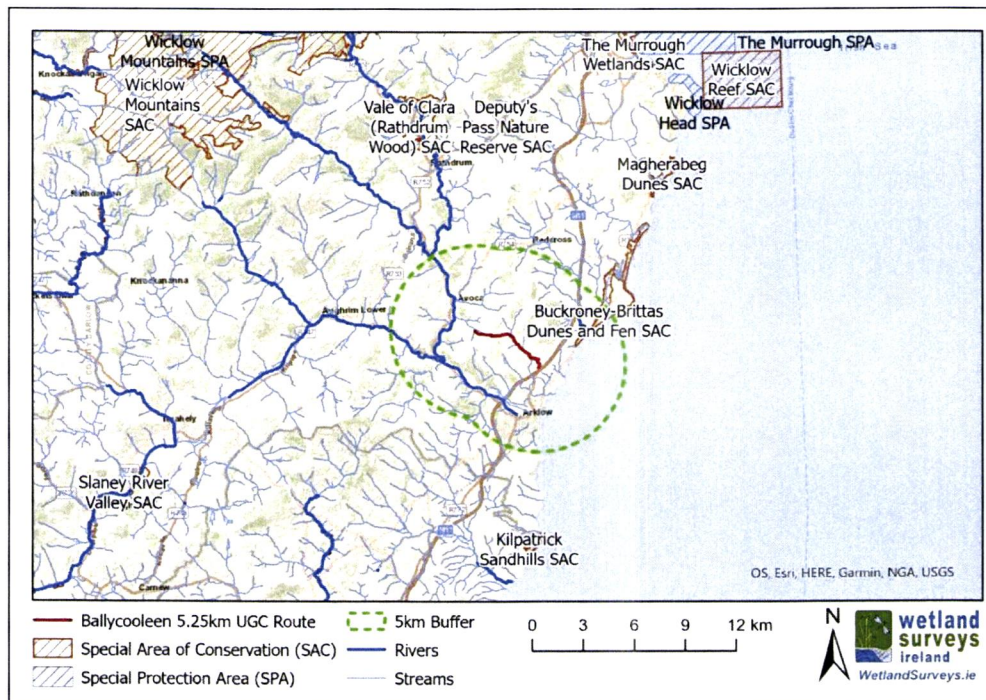


Figure 4: European sites within 5km of the proposed UGC route.



### 3.4.1 Buckronev – Brittas Dunes and Fen SAC

As outlined above the proposed UGC route occurs circa 2km to the south-west of the Buckronev – Brittas Dunes and Fen SAC at its nearest point. There is no surface water connectivity between the route and the SAC. The lands through which the UGC route runs drain to the west, to the Avoca River and south, to the Templerainey Stream. The Templerainey stream discharges to the Irish Sea over 2km downstream at Arklow North Beach. There are no designed European sites downstream of the proposed route.

#### Recognised Threats and Vulnerabilities

Brittas Bay dunes are subject to intensive agricultural and recreational pressures. Stocking at high densities threatens the older dunes and dune heath. The recent development of a golf course on part of Buckronev dunes may threaten the hydrology of the overall system. Buckronev fen is threatened by a general lowering of the water table through drainage and water abstraction. Further reclamation of marginal areas of the fen would be detrimental.

#### Qualifying Interests (QIs)

The site has been selected by the National Parks and Wildlife Services for the qualifying habitats of conservation interest listed in Table 1 below.

**Table 1: Qualifying interests of the Buckronev – Brittas Dunes and Fen SAC (source: [www.npws.ie](http://www.npws.ie))**

<b>EU Annex I Habitat [EU Code]</b>
Drift lines [1210]
Perennial vegetation of stony banks [1220]
Mediterranean salt meadows [1410]
Embryonic shifting dunes [2110]
Fixed dunes (grey dunes) [2130]
Decalcified dune heath* [2150]
Dunes with creeping willow [2170]
Dune slack [2190]
Alkaline Fen [7230]

\*Priority habitat in danger of extinction

#### Conservation Objectives

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. The maintenance of habitats

and species within European sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

In the case of the Buckronev – Brittas Dunes and Fen SAC whilst a conservation management plan has not yet been prepared detailed site specific conservation objectives (SSCOs) are available (NPWS 2017).

These detailed SSCO's present a series of attributes and targets for each of the QIs for which the site has been selected. These attributes and targets define the favourable conservation condition of the feature at the site level. The overall objective for the site is:

*“To maintain or restore the favourable conservation condition of the Annex I habitats and the Annex II species for which the SAC has been selected.”*

### 3.5 IDENTIFICATION AND DESCRIPTION OF POTENTIAL IMPACTS

Ecological receptors of the potentially affected European site that are sensitive to potential impacts from the proposed development include habitats for which the sites are designated (see Section 3.4 above). The characteristics, location, and scale of the development together with the ecological requirements of the conservation interests of the European site potentially affected have been taken into consideration in identifying potential impacts.

#### 3.5.1 Elements of the proposed Project with Potential to Give Rise to Significant Effects

The grid connection comprises the development of an UGC route along primarily agricultural lands. Those elements of the development with the potential to give rise to effects on the conservation objectives of the Buckronev-Brittis Dunes and Fen SAC are described below.

##### Construction Phase

- Excavations during the construction phase could give rise to sediment run-off and potentially impact aquatic receptors downstream;
- Potential run-off of hydrocarbons or other harmful substances could lead to a deterioration of downstream water quality;
- The construction phase of the proposed UGC route will result in temporary loss of habitat.
- The construction phase of the proposed UGC route may give rise to disturbance of resident fauna along the proposed route, due to additional noise and vibration;
- The proposed works could lead to the introduction or spread of non-native invasive species.

##### Operational Phase

- Routine maintenance of the UGC may cause temporary disturbance to wildlife.

#### 3.5.2 Direct, Indirect or Secondary Impacts

The potential for impacts to occur through the implementation of the proposed development can be assessed under the following headings (as outlined by guidelines issued by the European Commission (2002)):

- Loss / reduction of habitat area  
Direct habitat loss within European sites will not occur as the proposed UGC route does not occur within any sites designated for nature conservation. The habitats directly affected by the proposed development include Hedgerows (WL1), Treelines (WL2), Improved agricultural grassland (GA1) and Tilled land (BC3). These habitats do not correspond with any EU Habitats Directive (HD) Annex I habitats and do not support any HD Annex II species or EU Birds Directive (BD) Annex I species. In conclusion habitat loss

associated with the development will not give rise to any direct or indirect impact on European sites in the surroundings.

- **Disturbance to key species**  
Based on habitats present and surrounding the proposed route, it is determined that species listed as QIs and SCIs for European Sites within 5km of the proposed development do not occur or interact with habitats directly affected by the proposed route. The habitats along the proposed route are not suitable to be used by bird species listed as SCIs of the Wicklow Head SPA and it is concluded that there is no potential for any significant disturbance on bird species associated with the Wicklow Head SPA. The European Sites located within 5km of the proposed route are sufficiently removed that disturbance impacts arising from the development during the operational phase will not occur.
- **Habitat or species fragmentation**  
The proposed site is in an agricultural area 2km north of Arklow town. Habitats along the proposed route include Hedgerows (WL1), Treelines (WL2), Improved agricultural grassland (GA1) and Tilled land (BC3). The proposed development will not give rise to fragmentation of any semi-natural habitat within European sites. It is therefore concluded that there is no potential for fragmentation impacts on the SACs and / or the SPA which are removed from the proposed UGC route.
- **Reduction in species density**  
The habitats directly affected by the proposed UGC route are considered to be of low ecological value and are not deemed capable of supporting those species listed as QIs for the closest SAC or bird species listed as SCIs of the closest SPA. Considering the characteristics of the receiving environment, a reduction in species density will not arise due to the proposed development.
- **Changes in key indicators of conservation value such as decrease in water quality and quantity.** There is no potential for this project to impact water quality in designated sites as there is no hydrological connectivity between the proposed UGC route and any designated sites.

The qualifying interests and their conservation requirements of the Buckronev – Brittas Dunes and Fen SAC are considered together with the characteristics of the proposed development. The outcome of the assessment is summarised in Table 2 below.

### 3.5.2.1 *Buckronev – Brittas Dunes and Fen SAC*

The Buckronev – Brittas Dunes and Fen SAC is located approximately 2km north-east of the proposed development site. There are no hydrological connections / connectivity between the proposed UGC route and the SAC. The Annex I habitats within the SAC are confined to coastal habitats approximately 2km north-east of the proposed development site. As there are no direct hydrological connections between the SAC and the proposed development, and the SAC is well removed from the footprint of the proposed development, adverse impacts on the Buckronev – Brittas Dunes and Fen SAC are not foreseen.

Potential run-off of sediment or hydrocarbons and other harmful substances during the construction phase could potentially, in the absence of appropriate controls, give rise to impacts on sensitive downstream receptors. No designated European sites occur downstream of the proposed development.

The proposed UGC route is largely confined to agricultural lands. The proposed route crosses streams at four locations and crosses a number of drainage ditches. It is considered that best construction practice and the various controls to protect downstream water quality are adequate to ensure that impacts on aquatic receptors in the surroundings will not arise. Table 2 below presents the outcome of screening in relation to each qualifying interest of the SAC.

**Table 2: Potential for likely significant effects on the Buckronev – Brittas Dunes and Fen SAC**

<b>EU Annex I Habitats</b>	<b>Potential for significant impacts</b>	<b>Potential for significant effects</b>
Drift lines	These coastal habitats occur more than 2km to the north-east of the proposed route at the nearest point. Considering the absence of connectivity to the SAC, and the distance from the proposed UGC route, adverse impacts are not foreseen.	No
Perennial vegetation of stony banks		
Embryonic shifting dunes		
Marram dunes (white dunes)		
Fixed dunes (grey dunes)*		
Decalcified dune heath*		
Dunes with creeping willow		
Dune slack		
Mediterranean salt meadows	This habitat type is not mapped on the SSCOs prepared for the site. Considering the absence of connectivity between the proposed UGC route and the SAC, and its distance from the proposed route, adverse impacts on alkaline fen in the SAC are not foreseen.	No
Alkaline fens		

### 3.6 IN-COMBINATION / CUMULATIVE IMPACTS

It is a requirement of Appropriate Assessment that the combined effects of the proposed development together with other plans or projects be considered.

- A review of large scale planning applications in proximity to the proposed development lodged in recent years;
- Strategies and Objectives from Wicklow County Development Plan 2022-2028

Templeraíne East Solar Farm located less than 1km to the west of the proposed UGC route, has recently been granted planning permission (April 2017; Planning Ref. 161285). The consented solar farm will be developed on approximately 21.5ha of agricultural land. Drainage from Templeraíne East Solar Farm largely discharges to the Templeraíne Stream. The solar farm has been subject to ecological assessment and Appropriate Assessment Screening and there are a range of measures and safeguards incorporated into the project to minimise ecological impacts. Considering scale and characteristics of both projects and the receiving environment no potential in-combination impacts on ecology are foreseen.

Planning permission has been sought for a solar farm, Templemichael Solar Farm (Planning Reference: 211131) which occurs circa 2km to the north of the proposed UGC route. The proposed Templemichael Solar Farm has undergone an Appropriate Assessment Screening and it was concluded that the solar farm that significant adverse effects on the Natura 2000 network would not arise from the construction of the solar farm.

The following strategies and objectives from the Wicklow County Development Plan 2022 -2028 are relevant to the solar farm development. It is concluded that the proposed development will not conflict with any of these strategies or objectives.

#### **Natural Heritage & Biodiversity Strategy**

- To conserve and enhance biodiversity in recognition of the many ecosystem services provided to society;
- To avoid negative impacts upon the natural environment and promote appropriate enhancement of the natural environment as an integral part of any development;
- To promote an integrated approach to landscape planning and management in order to protect the County's unique landscape character;
- To conserve and enhance the County's geological heritage; and
- To support the actions in the County Wicklow Heritage Plan which seek to enhance the understanding, appreciation and protection of Wicklow's biodiversity including the County Wicklow Biodiversity Action Plan.

## **Chapter 17 Natural Heritage & Biodiversity**

### **Biodiversity Objectives**

**CPO 17.12** - To protect non-designated sites from inappropriate development, ensuring that ecological impact assessment is carried out for any proposed development likely to have a significant impact on locally important natural habitats, species or wildlife corridors. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

**CPO 17.13** - To facilitate, in co-operation with relevant stakeholders, the ongoing identification and recording of locally important biodiversity areas and species in County Wicklow, not otherwise protected by legislation and ensure that consideration is given to these in the development management process.

**CPO 17.14** - Ensure that development proposals support the protection and enhancement of biodiversity and ecological connectivity within the plan area in accordance with Article 10 of the Habitats Directive, including linear landscape features like watercourses (rivers, streams, canals, ponds, drainage channels, etc), woodlands, trees, hedgerows, road and railway margins, semi-natural grasslands, natural springs, wetlands, stonewalls, geological and geo-morphological systems, features which act as stepping stones, such as marshes and woodlands, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones that taken as a whole help to improve the coherence of the European network in Wicklow.

## **Chapter 16 – Energy & Information Infrastructure**

### **Solar Energy Objectives**

**CPO 16.08** - To facilitate and support the development of solar generated electricity.

**CPO 16.09** - To positively consider all applications for the installation of building mounted PV cells at all locations, having due regard to architectural amenity and heritage.

**CPO 16.10** - To support the development of commercial scale ground mounted solar PV 'Solar Farms' subject to compliance with emerging best practice and available national and international guidance.

### **3.7 CONCLUSION OF SCREENING**

In order to determine the potential impacts if any, of the development of a grid connection in the form of an UGC from the Ballycooleen Solar Farm to the Ballinlea Soloar Farm, Arklow, Co. Wicklow on European sites, Appropriate Assessment screening was undertaken. One European site has been identified as potentially being impacted by the proposed project; Buckronee – Brittas Dunes and Fen SAC. The likely impacts (direct, indirect, and cumulative), which could arise from the development have been examined in the context of a number of factors that could potentially give rise to significant effects on the conservation interest of European sites.

In conclusion, it has been determined that the proposed development is not directly connected with or necessary to the management of European sites. Secondly, it can be objectively concluded that there are not likely to be any significant effects on the Natura 2000 network of sites resulting from the proposed development and accordingly it is considered that there is no need to prepare a Natura Impact Statement / Appropriate Assessment, in this instance.

A screening matrix summarising the outcome of the screening exercise in relation to the relevant European site is presented in Appendix II.



#### 4 REFERENCES

- CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. (Chartered Institute of Ecology and Environmental Management).
- DAHG (2024). Irelands National Biodiversity Action Plan 2023 – 30.
- Department of the Environment, Heritage and Local Government (2009), Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.
- EirGrid (2020) Ecology Guidelines for Electricity Transmission Projects A Standard Approach to Ecological Impact Assessment of High Voltage Transmission Projects
- European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of articles 6(3) and (4) of the Habitats Directive 92/43/EECA Luxembourg: Office for official publications of the European Communities.
- European Commission (2018). Managing Natura 2000 sites: the provisions of Articles 6 of the habitats directive 92/43/EECA Luxembourg: Office for official publications of the European Communities.
- European Commission (2021). Assessment of plans and project in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg: Office for official publications of the European Communities.
- Fossitt, J.A. (2000). *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.
- Inland Fisheries Ireland (2016) Guidelines on protection of fisheries during construction works in and adjacent to waters (IFI/2016/I-4298)
- NPWS (2017) Conservation Objectives: Buckronev-Brittias Dunes and Fen SAC 000729. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- Office of the Planning Regulator (OPR) (2021). Practice Note PN01. Appropriate Assessment Screening for Development Management. Dublin

**Ballycooleen Solar Farm Underground Grid Connection, Arklow,  
County Wicklow**

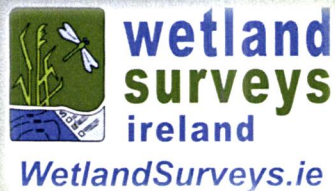
**Ecological Impact Assessment**

**April 2024**

**Prepared for:**

**Highfield Solar Limited**

**By:**



**Wetland Surveys Ireland Ltd.  
Bell Height  
Kenmare  
Co Kerry  
T: + 353 (64) 664 2524  
E: info@WetlandSurveys.ie  
www.wetlandsurveys.ie**

**Document Control Sheet**

Client	Highfield Solar Limited
Project Title	Ballycooleen Highfield Solar Farm Underground Grid Connection
Document Title	Ecological Impact Assessment
Project Number	WS0864
Document No.	Ballycooleen SF 5.25km UGC EclA

Revision	Status	Author	Review	Approved	Date
001	Draft	JOS			26/04/2024
001	FINAL		PC	PC	30/04/2024
Wetland Surveys Ireland					

**CONTENTS**

	<b>Page</b>
<b>1 INTRODUCTION .....</b>	<b>4</b>
1.1 STATEMENT OF AUTHORITY.....	4
1.2 STATUTORY CONTEXT.....	5
<b>2 METHODOLOGY.....</b>	<b>6</b>
<b>3 PROJECT DESCRIPTION.....</b>	<b>6</b>
3.1.1 Construction Phase.....	8
3.1.2 Operational Phase.....	9
<b>4 ELEMENTS OF THE PROJECT THAT COULD GIVE RISE TO ECOLOGICAL IMPACTS.....</b>	<b>10</b>
<b>5 EXISTING ENVIRONMENT, EVALUATION, AND POTENTIAL IMPACTS.....</b>	<b>10</b>
5.1 DESIGNATED SITES.....	10
5.2 TERRESTRIAL HABITATS AND FLORA.....	15
5.3 AQUATIC HABITATS AND FAUNA.....	17
5.4 BIRDS.....	20
5.5 TERRESTRIAL MAMMALS.....	21
5.6 BATS.....	22
5.7 NON-NATIVE INVASIVE SPECIES.....	23
<b>6 MITIGATION .....</b>	<b>24</b>
<b>7 RESIDUAL IMPACTS.....</b>	<b>25</b>
<b>8 BIBLIOGRAPHY.....</b>	<b>26</b>

**LIST OF TABLES**

TABLE 1: DESIGNATED SITES WITHIN 5KM OF THE PROPOSED DEVELOPMENT SITE.....	12
--	----

**LIST OF FIGURES**

FIGURE 1: PROPOSED UGC ROUTE.....	7
FIGURE 2: HDD PIT LOCATIONS.....	9
FIGURE 3: THE PROPOSED UGC ROUTE IN RELATION TO SACs AND SPAs.....	13
FIGURE 4: THE PROPOSED UGC ROUTE IN RELATION TO NHAS AND PNHAS.....	13

## 1 INTRODUCTION

*Wetland Surveys Ireland Ltd.* were commissioned by *Highfield Solar Ltd.* to determine the potential impacts, if any, of the construction of a new grid connection in the form of an underground cable (UGC) from the consented Ballycooleen Solar Farm to the consented Ballinlecka Lower Solar Farm, Arklow, County Wicklow on flora and fauna.

The proposed UGC route would connect the Ballycooleen Solar Farm to the Ballinlecka Lower Solar Farm in the south-east. The proposed route is approximately 5.25km in length and is located circa 2km north of Arklow, Co. Wicklow where it runs through the townlands of Ballycooleen, Ballinakill, Templemichael, Ballinlecka and Templerainy. The route crosses agricultural lands used for the production of arable crops and for sheep grazing. The route crosses three public roads and intersects with the Templerainey stream at three locations.

The proposed UGC route is not located within any site designated for nature conservation. The nearest designated site is the Bunrockey-Brittias Dunes and Fen SAC (NPWS Site Code: 000729) located over 2km to the east of the proposed route. A number of proposed Natural Heritage Areas (pNHAs) occur within 5km of the proposed route. The closest pNHA is the Avoca River Valley pNHA (NPWS Site Code: 001748) located approximately 800m to the west of the route.

The aim of this assessment is to assess potential impacts of significance on flora and fauna taking into account the site location and characteristics of the proposed development.

### 1.1 STATEMENT OF AUTHORITY

This report was prepared by Dr. Patrick Crushell and Mr. Joe O'Sullivan, Ecologists with Wetland Surveys Ireland Ltd. Dr. Crushell (BSc Applied Ecology; MSc Environmental Resource Management, PhD Environmental Sciences, C Ecol, MCIEEM) received an honours degree in Applied Ecology from UCC, a Masters degree in Environmental Resource Management from UCD and defended his PhD at Wageningen University, the Netherlands. He is a Chartered Ecologist and Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Dr. Crushell has been working in the area of nature conservation and ecological impact assessment for the past twenty-two years.

Joe O'Sullivan (BSc Environmental Science) received an honours degree in Environmental Science from the University of Galway (formerly NUIG). He is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management. Since joining Wetland Surveys Ireland, Joe has worked on a wide range of projects including baseline ecological surveys and ecological assessments for a variety of developments. Joe also has also worked on various projects relating to nature conservation biodiversity such as raised bog conservation assessments and county wetland surveys.

## 1.2 STATUTORY CONTEXT

This appraisal has consideration to the following legislation:

- Consolidated EIA Directive 2011/92/EU;
- Wildlife Acts 1976-2021;
- The Habitats Directive 92/43/EEC;
- The Birds Directive 2009/147/EC;
- The European Communities (Birds and Natural Habitats) Regulations 2011 [S.I. No. 411 of 2011];
- European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011 [S.I. No. 456 of 2011];
- European Union (Environmental Impact Assessment and Habitats) Regulations 2011 [S.I. No. 473 of 2011];
- European Union (Environmental Impact Assessment and Habitats) Regulations 2012 [S.I. No. 246 of 2012]; and
- Flora (Protection) Order, 2022.

In addition, in considering the ecological impacts of the proposed development regard was made to the following guidance and information documents:

- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal and Marine. (Chartered Institute of Ecology and Environmental Management), Revised 2022;
- DAHG (2024). Irelands National Biodiversity Action Plan 2023 - 2030;
- EirGrid (2020). Ecology Guidelines for Electricity Transmission Projects
- EPA (2022). Guidelines on the information to be contained in Environmental Impact Reports;
- EPA (2015). *Advice notes on current practice in the preparation of Environmental Impact Reports*. Draft September 2015;
- Fossitt (2000). A Guide to Habitats in Ireland;
- Smith et al. (2011). Best Practice Guidance for Habitat Survey and Mapping in Ireland;
- NRA (2009). Guidelines for Assessment of Ecological Impacts of National Road Schemes (Revision 2);
- WCC (2022). Wicklow County Development Plan 2022-2028.

## 2 METHODOLOGY

Data required to carry out the assessment was collected through a combination of a desktop review of existing datasets and published reports (see reference list at the end of the document), together with a multidisciplinary ecological walkover of the proposed route undertaken on the 25<sup>th</sup> of January 2024. The proposed route was assessed as a 20m corridor to allow for flexibility in the design. While the timing of the survey was not optimal for botanical and habitat survey, it was deemed adequate to identify key ecological constraints considering the agricultural landscape and the absence of designated sites along the route.

The evaluation of ecological value follows guidance outlined by 'Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018)' and 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (NRA, 2009). The description of impacts and impact significance follows the approach and terminology outlined in the 'Guidelines on the information to be contained in Environmental Impact Reports' (EPA, 2022)

## 3 PROJECT DESCRIPTION

The project under consideration in this assessment is the construction of a grid connection in the form of an UGC that would connect the Ballycooleen Solar Farm to the Ballinlea Lower Solar Farm. The proposed UGC route is 5.25km in length, occurs within agricultural lands and crosses 3 public roads. The proposed route intersects with the Templeraíneay stream at 3 locations. The lands through which the UGC route occurs drain to the west to the Avoca River and south to the Templeraíneay Stream. The layout of the proposed development is shown in Figure 1 below.

The desktop review of watercourses along the route identified another possible crossing with an unnamed stream (tributary of the Avoca River) at the northwestern end of the route (see Figure 2). During the walkover survey of the proposed route it was noted that this stream is removed from the UGC route as it occurs along the field boundary to the southwest of the proposed route until it meets another unnamed stream along the public road to the west.



Figure 1: Proposed UGC route.

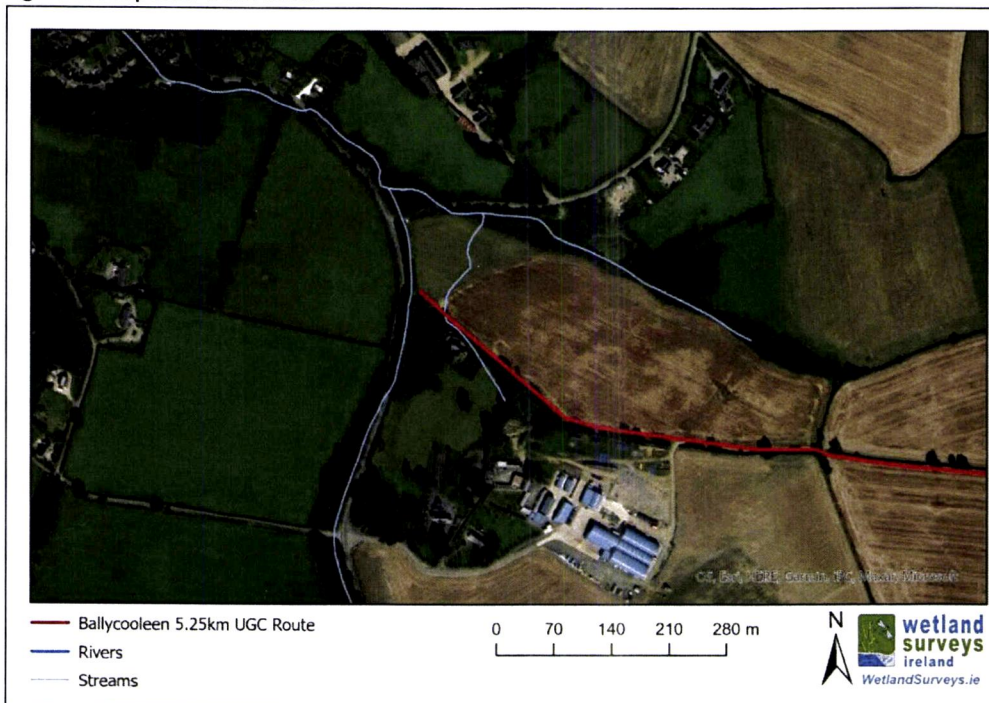


Figure 2: Unnamed stream at northwestern end of route as mapped by the EPA. Following a field visit, the watercourse shown crossing the UGS is not present on the ground and follows the hedge to the south and is therefore removed from the UGC route.



### 3.1.1 Construction Phase

Works associated with the UGC installation will be carried out in accordance with the EirGrid (2020) Ecology Guidelines for Electricity Transmission Projects. Adequate control checks throughout the installation phase will be undertaken by the contractor. No in-stream works associated with the installation of the UGC are foreseen. The proposed works include the following:

- A trench typically less than 1.5m deep is excavated using an excavator machine. The length of the trench excavated varies depending on the location along the route and the distance between joint bays.
- Medium voltage (MV) Cables are installed directly into the ground in the excavated trench.
- Cable joints are installed in joint bays which are typically concrete structures buried underground, occurring generally every 500 - 700m along an alignment, and ranging in size up to 6m long, 2.5m wide and 1.8m deep.
- Soil is backfilled and the surface sods will be reinstated.
- Where a cable route is in an open area, it is returned to agricultural/grassland use.

Horizontal Directional drilling (HDD) will be used to install the UGC beneath streams and roads along the proposed route. Figure 3 shows the locations of the proposed HDD locations. The operation shall take place from one side of the stream / road and will be carried out by an experienced HDD specialist. It is expected to take place in a single day under one mobilisation. The process will involve setting up a small, tracked drilling rig on one side of the stream/road, within the development boundary. A shallow starter pit will be excavated at the point of entry. A pilot hole will be bored as per the agreed alignment and shall be tracked and controlled using a transmitter in the drill head. Typically, the drilling operation is lubricated using a fluid. When the pilot hole has been drilled to the correct profile, its diameter is increased (if necessary) to match the external diameter of the cable duct. The flexible plastic ducting is then pulled through the pre-drilled hole and sealed at each end until required for cable installation.



Figure 3: HDD pit locations.

### 3.1.2 Operational Phase

The UGC will function as a grid connection throughout the operational phase of the Ballycooleen Solar Farm. The lands through which the proposed route occurs will return to their current land use shortly after construction has been completed. There are no identified emissions (noise, water, etc.) from the project during the operational phase. Maintenance works may be required over the lifespan of the project requiring similar excavation works to those described above, these will likely be localized and infrequent if required.

#### **4 ELEMENTS OF THE PROJECT THAT COULD GIVE RISE TO ECOLOGICAL IMPACTS**

This section highlights those elements of the project that could give rise to potential impacts on sensitive flora and fauna. In determining those parts of the project that are most relevant the project description above and the sensitivity of the receiving environment as presented below have been considered:

- Excavations during the construction phase could give rise to sediment run-off and potentially impact aquatic receptors downstream;
- Potential run-off of hydrocarbons or other harmful substances could lead to a deterioration of downstream water quality;
- The construction phase of the proposed UGC route will result in temporary disturbance of habitat.
- The construction phase of the proposed UGC route may give rise to disturbance of resident fauna along the proposed route, due to additional noise and vibration;
- The proposed works could lead to the introduction or spread of non-native invasive species.

#### **5 EXISTING ENVIRONMENT, EVALUATION, AND POTENTIAL IMPACTS**

##### **5.1 DESIGNATED SITES**

The proposed development site does not occur within any designated nature conservation sites or sites being considered for such designation. The lands through which the UGC route runs drain to the west, to the Avoca River and south, to the Templeraíne Stream providing hydrological connectivity to three proposed Natural Heritage Areas. Details of designated sites or sites under consideration for designation that occur within 5km of the proposed development are presented in Table 1. Their location relative to the proposed development is shown in Figure 4 and Figure 5. Given the characteristics and scale of the project it is considered that there is no potential for impacts to occur on sites more than 5km from the development.

Special Areas of Conservation (SACs) are sites of international importance due to the presence of listed habitats or species that are of European importance. The closest SAC to the proposed development site is the Buckronev - Brittas Dunes and Fen SAC (000729) which occurs ca 2km to the north-east of the proposed route at its closest point. The proposed route is located outside of the hydrological catchment of the SAC thereby providing no hydrological connectivity. There are no species of qualifying interest listed for this SAC. The habitats listed as qualifying interests of this SAC include alkaline fen and a range of coastal habitats.

Ireland is required under the terms of the EU Birds Directive (2009/147/EC) to designate Special Protection Areas (SPAs) for the protection of endangered species of wild birds. Sites are selected based on one or more of the following features:

- Presence of listed rare and vulnerable species (Annex I Birds Directive);
- Regularly occurring migratory species, such as ducks, geese, and waders; and
- Wetlands, especially those of international importance, which attract large numbers of migratory birds each year.

The nearest SPA to the proposed route is the Wicklow Head SPA (NPWS Site Code: 004127) located more than 16km to the north-east. The species regarded as special conservation interests of this SPA is Kittiwake (*Rissa tridactyla*) a seabird that breeds on cliffs along Irish coasts during the summer months and winters at sea. Considering the ecology of Kittiwake as well as the habitats along the proposed route it can be concluded that the proposed project will have no effect on the Wicklow Head SPA.

Natural Heritage Areas (NHAs) are sites of national importance due to the presence of species and habitats that are recognised as being important on a national level and are afforded protection under the Wildlife (amendment) Act 2000. The nearest NHA to the proposed route is Coan Bogs NHA (002382) which occurs approximately 60km to the west of the proposed route. A number of proposed (p)NHAs which have not formally gone through the designation process occur within 5km of the proposed route. These are the Avoca River Valley pNHA, Arklow Town Marsh pNHA, Arklow Sand Dunes pNHA and Bunrockey-Brittias Dunes and Fen pNHA. The nearest pNHA to the proposed route is the Arklow River Valley pNHA which occurs approximately 800m from the north-western end of the proposed route. The proposed route is hydrologically connected to the Avoca River Valley pNHA, Arklow Town Marsh pNHA and the Arklow Sand Dunes pNHA. Brief descriptions of these pNHAs have been included in the following section.

Table 1: Designated sites within 5km of the proposed development site.

European Site	Site Description	Distance and connectivity to proposed route
Buckronev – Brittas Dunes and Fen SAC / pNHA (000729)	The Buckronev – Brittas Dunes and Fen pNHA largely overlaps with the larger Buckronev – Brittas Dunes and Fen cSAC. It comprises two main sand dune systems, Brittas Bay and Buckronev Dunes, connected on the coast by the rocky headland of Mizen Head. This site is important as an extensive sand dune / fen system with well-developed plant communities. The cSAC includes two priority habitats – fixed dune and decalcified dune heath. A rich flora and fauna has persisted on this site despite extensive amenity use and adjacent farming.	This SAC occurs ca 2km to the north-east of the proposed route in a separate hydrological catchment. The SAC is removed from the route with no direct ecological or hydrological connectivity. There are no habitats for which SAC is designated along the route or in proximity. The SAC does not have species listed as qualifying interests.
Avoca River Valley pNHA (001748)	The site comprises a large mixed woodland located in the valleys of the Avoca and Aughrim Rivers. The site contains good examples of deciduous woodland with typical flora and fauna and some rare species occurring. This area is a remnant of a more extensive deciduous woodland throughout the river valleys.	This pNHA occurs ca 800m west of the proposed route. The north-western end of the proposed route is hydrologically connected to this pNHA.
Arklow Town Marsh pNHA (001931)	The site is the principle wetland area in Arklow. This site is recognized as a good example of a large wetland, and the presence of at least one scarce plant species also increases the interest of the site.	This pNHA occurs ca 2.4km to the south of the proposed route. The north-western end of the proposed route is hydrologically connected to this pNHA.
Arklow Sand Dunes pNHA (001931)	This coastal site is located just north of Arklow town and mainly comprises a sand dune system. A low ridge of fore-dunes, stabilised by Marram Grass ( <i>Ammophila arenaria</i> ), runs parallel to the shore. Sea Holly ( <i>Eryngium maritimum</i> ) and Sea Bindweed ( <i>Calystegia soldanella</i> ) are also present. Although the site is small and vulnerable to pressures from the adjacent amenity sites, the Arklow Sand Dunes pNHA is an important example of a sand dune system which is relatively intact.	This pNHA occurs ca 1.5km to the south of the proposed route. The proposed route is hydrologically connected to this pNHA.

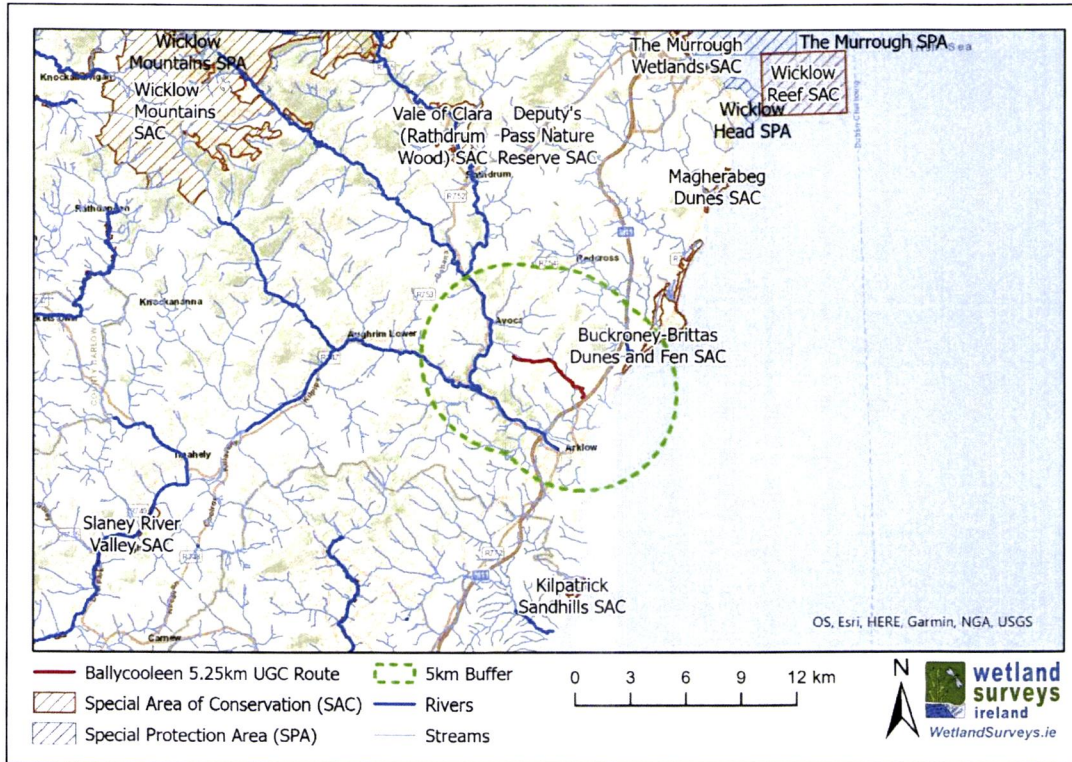


Figure 4: The proposed UGC route in relation to SACs and SPAs.

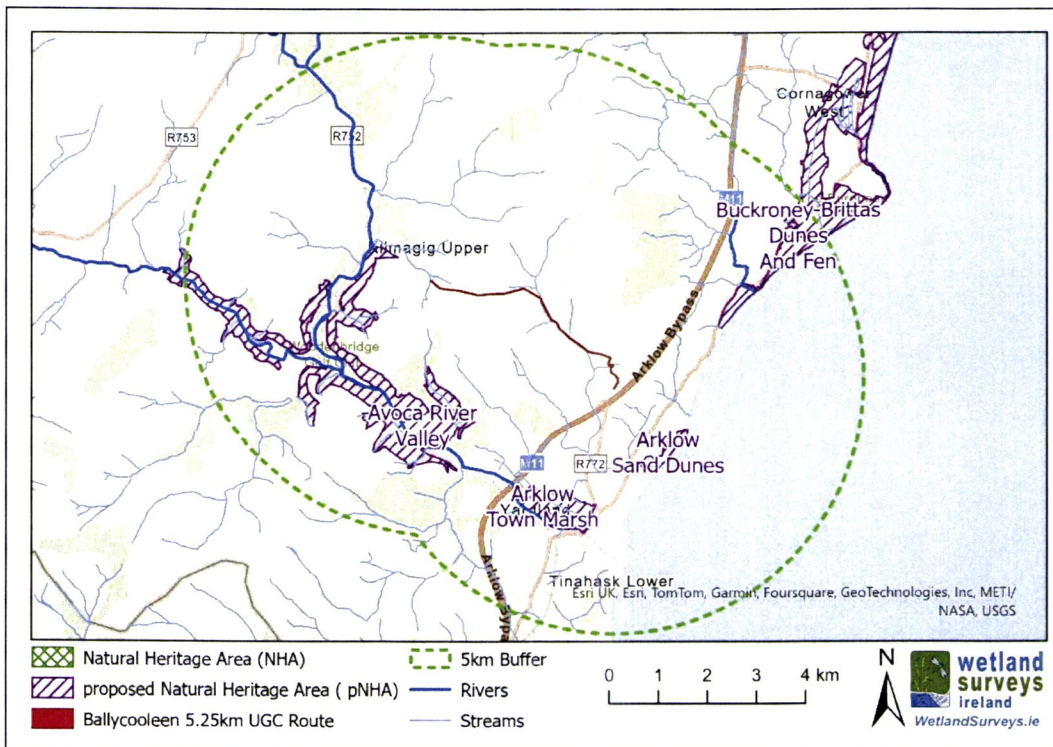


Figure 5: The proposed UGC route in relation to NHAs and pNHAs.

### 5.1.1 Evaluation

The proposed UGC route does not occur within any sites designated for nature conservation or sites currently under considered for designation. There are 4 pNHAs sites located within a 5km radius of the proposed route. Three of these sites are hydrologically connected to the proposed route. The western end of the route crosses lands that are within the hydrological catchment of the Avoca River. The Avoca River flows through the Avoca River Valley pNHA down to the Arklow Marsh pNHA and enters the Irish Sea. The central and easter sections of the proposed route occur within the catchment of the Templerainey stream which flows to the Arklow Sand Dunes pNHA in the southeast where it meets the Irish Sea.

The Buckronev – Brittas Dunes and Fen SAC/pNHA occurs within the hydrological catchment of the Redcross River ca 3km to the northeast of the proposed route. There is no hydrological connectivity between the Buckronev – Brittas Dunes and Fen SAC/pNHA and the proposed route. Potential effects on this site from the proposed development are assessed in the Appropriate Assessment Screening Report which accompanies this application. Potential impacts on this SAC are therefore not considered further in this report.

### 5.1.2 Potential Impacts

During the construction phase of the project, there is a possibility of downstream water quality impacts. There are three downstream Priority Natural Heritage Areas (pNHAs) which could be affected. However considering the scale of the project, the sensitivities of the habitats in the pNHAs, the distance from the proposed route to the pNHAs, and the proposed measures to safeguard water quality, significant effects are highly unlikely.

The Arklow Town Marsh is a wetland habitat, reliant on hydrological connectivity with the Avoca River. Significant alterations to water quality in the Avoca River could potentially influence water quality in the marsh located approximately 5km downstream. Given the scale of the proposed project and the downstream distance from the site, significant impacts are highly unlikely.

The Avoca River Valley pNHA does not host habitats that are notably sensitive to variations in water quality. Potential impact on the conservation interest of the pNHA are therefore not foreseen.

The Arklow Sand Dunes pNHA consists of terrestrial coastal habitats and therefore are not sensitive to potential water quality impacts associated with the proposed development.

## 5.2 TERRESTRIAL HABITATS AND FLORA

The proposed UGC route crosses agricultural lands from the Ballycooleen Solar Farm to the Ballinlea Solar Farm. The route crosses fields consisting primarily of Improved agricultural grassland (GA1) or Tilled land (BC3), with Hedgerows (WL1) and Treelines (WL2) forming the field boundaries. The primary land use along the UGC route is agriculture with fields being grazed by cattle or used in tillage. The proposed route intersects with three public roads and crosses a number of drainage ditches along field boundaries. The route is easily accessible with access crossing agricultural fields accessed from the public road network. A typical agricultural field along the UGC route is shown in Plate 1 below. The area of waterlogged ground shown in Plate 1 is avoided by the UGC route which passes through the fenced area to the left of the image.



Plate 1: Typical field along the UGC route.





Plate 2: Field of Tilled Land (BC3) along the proposed route.

Most fields along the proposed routes have drains along the field boundaries as well as hedgerows or treelines (see Plate 2). Hedgerows along the route typically consist of Hawthorn (*Crateagus monogyna*), Bramble (*Rubus fruticosus*) and Gorse (*Ulex europaeus*) with some Ivy (*Hedera helix*) and Bracken (*Pteridium aquilinum*) throughout (see Plate 3). Large trees are avoided along the UGC route and the route passes through pre-existing openings in hedgerows where possible.



Plate 3: Typical gorse and bracken hedge along proposed route.

No rare or protected plant species were recorded during surveys undertaken at the site. Considering the habitats present it is concluded that there is a low likelihood of rare flora species being present.

### 5.2.1 Evaluation

The main terrestrial habitats along the UGC route are fields of Improved agricultural grassland (GA1) or Tilled land (BC3), with Hedgerows (WL1) and Treelines (WL2). Terrestrial habitats present along the proposed route are of low ecological value. Rare or protected plant species were not recorded along the route and are highly unlikely to occur. The hedgerows and treelines are of value to local biodiversity as they provide habitat for a range of species including small mammals, insects and birds.

### 5.2.2 Potential Impacts

Some hedgerow removal will be required where the UGC route intersects with hedgerows. Hedgerow removal will be minimal with no more than 5m long sections being removed from any hedgerow along the route. These hedgerows are of relatively low ecological value. Excavations will occur within fields of Improved agricultural grassland or arable crops. These are habitats of low ecological value and the soil will be reinstated after installation works. Clearance of large trees will be avoided along the route. No direct or indirect impacts of significance on habitats of conservation interest are foreseen.

## 5.3 AQUATIC HABITATS AND FAUNA

The proposed route crosses the Templerainey stream at three locations. Where the route crosses the stream, the stream runs along field boundaries in an agricultural landscape (see Plate 4). The stream is shallow at crossing points with a stoney bottom. At one of the crossing points the stream is vegetated on both sides but at two locations there is only one bank with a good cover of vegetation (see Plate 5). The proposed route runs parallel to the Templerainey stream for 1.5km occurring more than 15m from the edge of the stream in fields of Improved agricultural grassland. The northwestern end of the proposed route runs through a tilled field which is bordered by small unnamed stream that flows to the Avoca River (see Figure 6)

The desktop review of recorded fish species in the Templerainey stream considered the 2021 ARUP Environmental Impact Assessment Report for the Arklow Bank Wind Park (ARUP 2021). This report identified fish species in the Templerainey stream to include Sea Trout (*Salmo trutta trutta*), Brown Trout (*Salmo trutta*), European Eel (*Anguilla Anguilla*), River Lamprey (*Lampetra fluviatilis*) and Brook Lamprey (*Lampetra planeri*). Otter (*Lutra lutra*) also likely utilise the stream.



Plate 4: Templeraíneay Stream running along the boundary of a tilled field.



Plate 5: The Templeraíneay stream with a stoney bottom and a vegetated bank.

The unnamed stream at the northwestern end of the proposed route runs to the Avoca River and likely supports a number of species recorded within the Avoca River. These include Atlantic Salmon (*Salmo salar*), Sea Trout, Brown Trout, European Eel, Sea Lamprey (*Petromyzon marinus*) and River Lamprey. Otter are likely utilise the stream.



Figure 6: Small unnamed stream at the northwestern end of the proposed route.

### 5.3.1 Evaluation

Both the Templeraíne stream and the Avoca River are important watercourses for fish and other aquatic fauna of conservation importance (see Table 2). The European Eel is listed as ‘Critically Endangered’ on the IUCN red list of threatened species and is widespread in watercourses across Ireland. Both the watercourses and the species that depend on them have a high local value to biodiversity.

Table 2: Conservation status of Aquatic Fauna from NPWS 2019 report.

Species	Annex	Overall Conservation Status
Atlantic Salmon	II, V	Inadequate Stable
Sea Lamprey	II	Bad Stable
River Lamprey	II, V	Unknown
Brook Lamprey	II, V	Unknown
Otter	II, IV	Favourable

### 5.3.2 Potential Impacts

Potential impacts include silt and other contaminants entering water courses along the route during the construction phase of the proposed UGC route. There is the potential for silt and other contaminants to enter the Templeraíne stream, particularly at HDD pit locations and where the route occurs in close proximity to the stream. In the northwestern end of the proposed route where an unnamed stream occurs in the field boundary, there is potential for water quality impacts on the stream where excavation works will occur in proximity to the stream. In the absence of mitigation, these impacts to water quality have the potential to have an adverse effect on fish and other aquatic fauna of conservation importance.

## 5.4 BIRDS

Common bird species including Jackdaw (*Corvus monedula*), Rook (*Corvus frugilegus*), Wood Pigeon (*Columba palumbus*) were noted along the route during the field survey. Red Kites (*Milvus milvus*) were seen and heard on a number of occasions along the route during the walkover survey. Kingfisher (*Alcedo atthis*) are likely to utilize the watercourses in proximity to the proposed route.

The desktop review of the National Biodiversity Data Centre map for Birds of Ireland, found records of Red Kite, Eurasian Sparrowhawk (*Accipiter nisus*), Great Spotted Woodpecker (*Dendrocopus major*) and Common Buzzard (*Buteo buteo*) in the areas along and surrounding the proposed route.

### 5.4.1 Evaluation

Birds recorded during the walkover survey and the desktop review of the area are listed in table Table 3 below. The table shows the conservation status of each species according to the Birds of Conservation Concern in Ireland Assessment published by Birdwatch Ireland in 2021. The conservation status is signaled using a traffic light system with red being species of highest concern and green the least. The table also includes if the species is listed on the EU Birds Directive as an Annex species or as a species of Special Conservation Interest (SCI) for an SPA.

**Table 3: Conservation status of birds species relevent to the proposed project and their conservation status.**

Species and BoCCI Status	EU Birds Directive
Red Kite	Annex II
Kingfisher	Annex II
Common Buzzard	-
Eurasian Sparrowhawk	-
Great spotted woodpecker	-
Jackdaw	-
Rook	-
Woodpigeon	-

Hedgerows along the proposed route likely provide nesting and foraging habitat for a number of bird species. The route avoids large trees which are the favored nesting habitat for Red Kites. Kingfishers are known to breed in tunnels dug in vertical banks along streams and rivers. The route avoids potential Kingfisher nesting habitat through the use of HDD.

#### 5.4.2 Potential Impacts

Hedgerows function as nesting and foraging habitat for a number of bird species. Sections of hedgerows will be cleared where the proposed route intersects with existing hedgerows. In this way the local bird population will be impacted by temporary loss of habitat. Considering the minimal clearance of hedgerows required for the installation of the proposed route impacts will be minor and of low significance. The two species highlighted above as being of higher conservation importance the Red Kite and Kingfisher will not be impacted as the proposed route avoids suitable nesting habitat for these species.

#### 5.5 TERRESTRIAL MAMMALS

Rabbit burrows were noted in the earth banks that form the field boundaries for a number of fields along the proposed route.(see Plate 6). No burrows were noted along the path of the proposed UGC route. No badger setts were recorded along the UGC route. The fields and landscape surrounding the proposed route are likely utilised by badgers.



Plate 6: Small mammal holes beneath field boundary hedge.

#### 5.5.1 Evaluation

No habitats of significant value to terrestrial mammals were recorded along the proposed route. The surrounding fields likely provide important habitat for a number of common mammal species.

#### 5.5.2 Potential Impacts

Minor temporary disturbance to terrestrial mammals particularly rabbits and badgers is possible during the construction phase of the project.

### 5.6 BATS

Bats likely utilize the hedgerows along the UGC route for foraging. Trees that could provide suitable roosting habitat for bats are avoided along the UGC route.

#### 5.6.1 Evaluation

The hedgerows crossed by the proposed route are likely of no use to bats as roost habitat as they lack features such as crack holes and dense ivy. The hedgerows are however likely to be of importance as foraging habitat for a number of bat species.

### 5.6.2 Potential Impacts

The construction phase of the proposed project will result in the temporary loss of a small area of foraging / commuting habitat. Hedge cutting and clearance will be minimal and is expected to recover post-construction. Potential impacts on bats are considered temporary, negative, minor impacts of low significance.

## 5.7 NON-NATIVE INVASIVE SPECIES

No non-native invasive species were recorded along the proposed UGC route during the field survey. Three species were recorded in the wider area during the field survey, New Zealand Flax (*Phormium tenax*), Winter Heliotrope (*Petasites pyrenaicus*), and Montbretia (*Crocsmia x crocosmiiflora*). All three species are classified as having a 'Low Impact Risk' by the National Biodiversity Data Centre and are removed from the proposed UGC route and possible access routes for works machinery.

### 5.7.1 Potential Impacts

The potential impact of spread from these species as a result of the proposed development is very low. There is a confirmed absence of sensitive habitats within the site that could be affected by the spread of invasive species.



## 6 MITIGATION

The proposed route occurs within habitats of low ecological interest. Impacts of significance will be avoided through the use of HDD where the UGC route intersects with streams.

The following general measures are proposed to minimise the ecological impact of the proposed development on water quality and flora and fauna:

- Concrete washing of machines will take place off-site at an appropriate dedicated wash facility that will pose no threat to surface waters.
- Re-fueling of machinery will only be carried out in designated areas removed from any watercourses. All fuels used on site will be stored in bunded units. Plant and vehicles will be inspected regularly for leaks. Drip trays will be fitted to all plant machinery.
- Stockpiling of materials during construction will only occur in suitably designated areas away from watercourses with adequate measures taken to prevent any surface water run-off.
- Silt traps and silt curtains will be installed for the duration of works where excavations occur within 15m of watercourses.
- Temporary stockpiling from excavations will be stored away from watercourses. Where an excavation occurs parallel to the watercourse the excavated materials will be stored on the opposite side of the excavation to the watercourse.
- Reception and launch pits for HDD shall not be located within 20m of any watercourse.
- Trenches shall only be excavated to lengths which can be constructed each day.
- If drilling fluids are required, a biodegradable fluid such as Clear Bore™ shall be used.
- HDD operations to be limited to daytime hours and conditions when low levels of rainfall are forecast.
- Pre-construction confirmatory surveys for invasive plant species, birds, and mammals.
- In the event that invasive species are identified during pre-construction surveys then measures will be undertaken to avoid potential spread within the site in line with NRA (2010) guidelines.
- Works will be supervised and monitored by an Ecological Clerk of Works.
- Woody vegetation removal will be kept to a minimum and undertaken outside of the bird breeding season (March to August inclusive). Where woody vegetation clearance is required during the breeding season then checks for nesting birds will be undertaken in advance to ensure no impact on active nest sites.

## **7 RESIDUAL IMPACTS**

The primary ecological concern regarding the proposed project is the potential impact on water quality during the construction phase. Trench excavations near watercourses or larger dig sites, such as HDD pit locations, pose a risk of introducing silt and contaminants into nearby water bodies. However, this issue is addressed sufficiently through the implementation of the mitigation measures outlined in Section 6 above. The utilization of HDD instead of open trenching, where the route intersects with streams minimises the likelihood of adverse effects on downstream water quality.

Considering the nature of the proposed project together with the type and extent of habitat that will be affected it is predicted that, subject to the above mitigation being implemented, there will be no significant adverse direct, indirect, or cumulative impacts on the flora and fauna of the site and its surroundings from the development of the proposed UGC route.

## 8 BIBLIOGRAPHY

- ARUP (2021). Arklow Bank Wind Park Phase 2, Onshore Grid Infrastructure Environmental Impact Assessment Report, Volume II Chapter 12.
- CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. (Chartered Institute of Ecology and Environmental Management).
- Gilbert, G., Stanbury, A., and Lewis, L. (2021). Birds of Conservation Concern in Ireland 2020-2026. Irish Birds 43: 1-22. Curtis, T.G.F. & McGough, N.H. (1988). Irish Red Data Book: Vascular Plants. Wildlife Service, Dublin, Ireland.
- DAHG (2017). Ireland's National Biodiversity Plan: Actions for Biodiversity 2017 – 21.
- EPA (2002). Guidelines on the information to be contained in Environmental Impact Statements.
- EPA (2003). Advice notes on current practice (in the preparation of Environmental Impact Statements).
- Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.
- Kingston, N. (2005). Proposed Red Data List of Vascular Plants Consultation Document. NPWS, DoEHLG, Dublin, Ireland.
- NBDC (2024). [www.biodiversityireland.ie](http://www.biodiversityireland.ie). National Biodiversity Data Centre.
- NPWS (2019) The status of protected EU habitats and species in Ireland.
- NRA (2009). Guidelines for Assessment of Ecological Impacts of National Road Schemes (Revision 2).
- NRA (2010). Guidelines on the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads (Revision 1).
- Smith, G.F., O'Donoghue, P., O'Hara, K., Delaney, E., (2011). Best Practice Guidance for Habitat Survey and Mapping in Ireland.
- WCC (2022). Wicklow County Development Plan 2022-2028.

**Appendix I**  
**NPWS Published Site Description**

**Site Name:** Buckrone-y-Brittass Dunes and Fen SAC

**Site Code:** 000729

Buckrone-y-Brittass Dunes and Fen is a complex of coastal habitats located about 10 km south of Wicklow town. It comprises two main sand dune systems, Brittass Bay and Buckrone-y Dunes, connected on the coast by the rocky headland of Mizen Head. The dunes have cut off the outflow of a small river at Mizen Head and a fen, Buckrone-y Fen, has developed. A further small sand dune system occurs south of Pennycomequick Bridge.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

- [1210] Annual Vegetation of Drift Lines
- [1220] Perennial Vegetation of Stony Banks
- [1410] Mediterranean Salt Meadows
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)\*
- [2150] Decalcified Dune Heath\*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [7230] Alkaline Fens

Along much of the higher parts of the beach at this site, typical annual strandline vegetation occurs. Species such as Sea Rocket (*Cakile maritima*), Prickly Saltwort (*Salsola kali*) and Spear-leaved Orache (*Atriplex prostrata*) are frequent in this zone, with the scarcer Yellow Horned-poppy (*Glaucium flavum*) present in places.

A shingle ridge occurs along the Buckrone-y dune system. The amount of exposed shingle is low, but it is likely that shingle underlies much of the sandy areas also. The vegetation on the shingle is similar in composition to that which occurs as part of the drift line and embryonic dune habitats. Sea Sandwort (*Honkenya peploides*) is characteristic, and other species include Sand Couch (*Elymus farctus*), Sand Sedge (*Carex arenaria*), Sea Rocket and Yellow Horned-Poppy.

An area of saline vegetation which conforms to 'Mediterranean salt meadows' occurs in the Buckrone-y dune system south of the inlet stream to the fen, and possibly in small areas

elsewhere within the site. It is typically dominated by rushes (*Juncus* spp.), and of note is the presence of Sharp Rush (*J. acutus*). Sea Club-rush (*Scirpus maritimus*) also occurs. The area is inundated by the tide only occasionally via the narrow inlet leading to Buckronev Fen.

Embryonic dune development occurs at the southern part of Brittas and more widely at Buckronev and Pennycomequick. Typical species are couch grasses (*Elymus* sp.), Sand Sedge and Sea Sandwort. The main dune ridges are dominated by Marram (*Ammophila arenaria*), with herbaceous species such as Sea Spurge (*Euphorbia paralias*), Sea-holly (*Eryngium maritimum*) and Common Restharrow (*Ononis repens*) occurring throughout. The main dune ridges are well developed, reaching heights of 10 m at Brittas. The northern end of the Brittas system has fine examples of parabolic dunes.

Stable fixed dunes are well developed at Brittas and Buckronev. Marram is less frequent in these areas and is replaced by Red Fescue (*Festuca rubra*) as the most common grass species. A rich flora occurs, especially in the more open areas. Common species include Pyramidal Orchid (*Anacamptis pyramidalis*), Common Milkwort (*Polygala vulgaris*), Wild Pansy (*Viola tricolor* subsp. *curtisii*), Carlina Thistle (*Carlina vulgaris*), Biting Stonecrop (*Sedum acre*), Wild Thyme (*Thymus praecox*) and Common Bird's-foot-trefoil (*Lotus corniculatus*). The mature areas of fixed dune also contain Burnet Rose (*Rosa pimpinellifolia*), Bracken (*Pteridium aquilinum*), Wood Sage (*Teucrium scordonia*) and Common Sorrel (*Rumex acetosa*). Mosses such as *Tortula ruralis* subsp. *ruraliformis*, *Rhytidiadelphus triquetris*, and *Homalothecium lutescens* are frequent, along with lichens (*Cladonia* spp., *Peltigera canina*).

This is one of the few Irish east coast sites to possess good examples of wet dune slacks and dunes with Creeping Willow (*Salix repens*). These areas of the dunes have a rich and varied flora, including species such as Creeping Willow, Water Mint (*Mentha aquatica*), Silverweed (*Potentilla anserina*), Meadowsweet (*Filipendula ulmaria*) and Meadow Thistle (*Cirsium dissectum*). The slacks are notably rich in rushes and sedges. Of particular interest is the presence of Sharp Rush (*Juncus acutus*), a scarce species in eastern Ireland and one that is indicative of a saline influence.

The site is also notable for the presence, at the back of the dunes, of areas of decalcified dune heath, a rare habitat type, and one which is listed with priority status in the E.U. Habitats Directive. Heath species present include Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*) and Gorse (*Ulex europaeus*).

Buckronev Fen lies west of Mizen Head. It is backed to the west by a dense swamp of Common Reed (*Phragmites australis*). The fen is dominated by Tussock Sedge (*Carex paniculata*), with Water Mint, Purple Loosestrife (*Lythrum salicaria*), Marsh Pennywort (*Hydrocotyle vulgaris*), Greater Bird's-foot-trefoil (*Lotus uliginosus*), Water Horsetail (*Equisetum fluviatile*), small sedges

(*Carex* spp.) and other flowering plants. An extensive stand of Blunt-flowered Rush (*Juncus subnodulosus*) is of note. Throughout this area the rare Marsh Fern (*Thelypteris palustris*) is frequent. There are also extensive areas of Rusty Willow (*Salix cinerea* subsp. *oleifolia*) scrub.

This site contains two rare plant species protected under the Flora (Protection) Order, 1999: Wild Asparagus (*Asparagus officinalis* subsp. *prostratus*), in its most northerly Irish station, and Meadow Saxifrage (*Saxifraga granulata*). Other rare species which occur within the site include Green-flowered Helleborine (*Epipactis phyllanthes*), Bird's-foot (*Ornithopus perpusillus*) and Spring Vetch (*Vicia lathyroides*). All of these are Red Data Book species. The rare sedge hybrid *Carex riparia* x *C. vesicaria* (*Carex* x *csomadensis*) is only known from Mizen Head.

The invertebrate fauna of Buckronef fen has been investigated and some notable species have been recorded, including the beetle *Eurynebria complanata* and the following flies: *Machimus cowini*, *Anasimyia lunulata*, *Parhelophilus consimilis* and *Lejogaster splendia*.

Little Tern, a species listed on Annex I of the E.U. Birds Directive, has bred or attempted to breed at Buckronef strand in recent years. In 1992 between 7 and 10 pairs were present and in 1993 up to 8 pairs. Teal are regular in winter (119), as are Curlew (46), Lapwing (515) and Snipe (87). All figures are average peaks for 1994/95 - 1995/96.

The dune systems and beaches are subject to high amenity usage from day-trippers and several areas around the site have been developed as caravan parks, car parks and golf courses. The marginal areas of the fen have been reclaimed, especially at the south end, though these areas still flood in winter and attract waterfowl.

This site is important as an extensive sand dune/fen system with well-developed plant communities. Several coastal habitats listed on the E.U. Habitats Directive, including two priority habitats - fixed dune and decalcified dune heath - are present. The area contains two legally protected plants, as well as a number of other rare or scarce plant species. The site provides habitat for some rare species of invertebrate and for the vulnerable Little Tern. A rich flora and fauna has persisted on this site despite extensive amenity use and adjacent farming. However, future land use practices will need to be managed to ensure the continued survival of this unique mosaic of coastal habitats.

## Appendix II

### Completed Appropriate Screening matrix summarising the outcome of AA Screening process

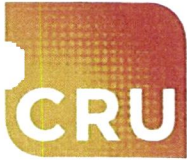
Screening Matrix for the Buckroney - Brittas SAC (Site Code: 000729)

Screening Matrix	
Brief description of the project or the plan	The project under consideration in this assessment is the proposed development of a grid connection in the form of an UGC from the Ballycooleen Solar Farm to the Ballinlea Solar Farm to the Arklow Substation circa 4.5km to the south-east. The route will traverse agricultural lands for the most part aswell as crossing 3 public roads. Further description of the project is presented in Section 3 above.
Brief description of the European site	Buckroney – Brittas Dunes and Fen SAC – see Section 3.4.1 above. Buckroney-Brittas Dunes and Fen is a complex of coastal habitats located about 10 km south of Wicklow town. It comprises two main sand dune systems, Brittas Bay and Buckroney Dunes, connected on the coast by the rocky headland of Mizen Head. The dunes have cut off the outflow of a small river at Mizen Head and a fen, Buckroney Fen, has developed. A further small sand dune system occurs south of Pennycomequick Bridge. This site is important as an extensive sand dune/fen system with well-developed plant communities. Several coastal habitats listed on the E.U. Habitats Directive, including two priority habitats - fixed dune and decalcified dune heath - are present.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in-combination with other plans or projects) on the European site by virtue of: <ul style="list-style-type: none"> <li>• Size and scale;</li> <li>• Land-take;</li> <li>• Distance from the European site or key features of the site;</li> <li>• Resource requirements (water abstraction etc.);</li> <li>• Emissions (disposal to land, water or air);</li> <li>• Excavation requirements</li> <li>• Transportation requirements</li> <li>• Duration of construction, operation, decommissioning etc.;</li> <li>• Other</li> </ul>	<p>The area in which the route occurs largely drains to the east to the Templerainey Stream which discharges to the Irish Sea approximately 1.5km to the southeast of the proposed route.</p> <p>No potential adverse impacts on the SAC are identified, given the distance of the proposed development from the designated European site and lack of ecological connectivity, the nature and scale of the proposed development, and the measures incorporated into the design of the proposed development.</p>

<b>Screening Matrix</b>	
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> <li>• Reduction of habitat area;</li> <li>• Disturbance to key species;</li> <li>• Habitat or species fragmentation;</li> <li>• Reduction in species density;</li> <li>• Changes in key indicators of conservation value (water quality etc.);</li> <li>• Climate change</li> </ul>	No potential impacts have been identified.
<p>Describe any likely impacts on the European site as a whole in terms of:</p> <ul style="list-style-type: none"> <li>• Interference with the key relationships that define the structure of the site;</li> <li>• Interference with key relationships that define the function of the site.</li> </ul>	The Buckronev – Brittas Dunes and Fen SAC is removed from the footprint of the proposed development. There are no hydrological links between the proposed UGC route and the SAC.
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <ul style="list-style-type: none"> <li>• Loss;</li> <li>• Fragmentation;</li> <li>• Disruption;</li> <li>• Disturbance;</li> <li>• Change to key elements of the site (e.g. water quality etc.).</li> </ul>	No potential impacts have been identified.
<p>Describe from above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</p>	No potential impacts have been identified.



# Annex D; CRU Correspondence



16<sup>th</sup> November 2022

Letter Ref. Number: D/22/25571

Mr. John O'Connor  
Director  
Clonswees Limited  
Design Studio 7  
Old Castle View  
Kilgobbin Road  
Dublin 18

Application ref: Auth/Gen 2022/08-02

**Re: Grant of an Authorisation to Construct and Generation Licence under the Electricity Regulation Act, 1999 for North Arklow Solar plus Storage Facility**

Dear Mr. O'Connor,

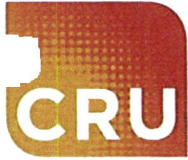
I am pleased to inform you that Clonswees Limited's application for an Authorisation to Construct and Licence to Generate, made to the Commission for Regulation of Utilities (CRU) under Sections 14(1)(a) and 16 of the *Electricity Regulation Act 1999*, has been successful. This relates to the proposed 90.5 MW Generating Station located at Templerainy, Coolboy, Ballinlea, Ballycooleen, Arklow, Co. Wicklow. The Authorisation and Licence come into effect on 16<sup>th</sup> November 2022.

Clonswees Limited's attention is drawn to the following Condition in the Authorisation:

- Under Condition 11 of the Authorisation, the Grantee shall report to the CRU on the progress of the construction or reconstruction of the generating station at three monthly intervals, the first report to be due on the date falling three calendar months after this Authorisation comes into force.

Clonswees Limited's attention is drawn to the following Conditions in the Licence:

- Under Condition 9 of the Licence, the Licensee shall ensure that the Operator of each of its generating stations is a person approved in writing by the CRU.
- Under Condition 12 of the Licence, the Licensee shall furnish to the CRU, in such manner and at such times as the Commission may consider necessary, such information and shall procure and furnish to it such reports as the CRU may consider necessary in the light of the Conditions or as it may require for the purpose of performing the functions assigned or transferred to it by or under the Act.
- Under Condition 13 of the Licence, the Licensee shall pay the CRU any amounts specified in, or determined under a Levy Order, in accordance with the provisions of such Levy Order (copy attached)



An Coimisiún  
um Rialáil Fóntas  
Commission for  
Regulation of Utilities

- Under Condition 14 of the Licence, the Licensee shall be party to, and shall comply with the Trading and Settlement Code insofar as applicable to it
- Under Condition 18, the Licensee shall not, without the prior written consent of the CRU, assign this Licence. Additionally, the Licensee shall not, without the prior written consent of the CRU, transfer to another person all or any part of the Generation Business carried out under this Licence
- Under Condition 19, the Licensee shall notify the CRU of a change in control of the Licensee as soon as is practicable after such a change in control occurs.

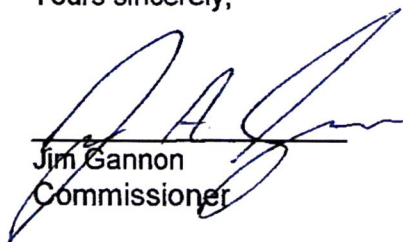
I would also like to bring to your attention the CRU Decision Paper CER/17/277, which sets out the planned modifications to Generation Licences under the I-SEM project. Such modifications consist of changes to existing Licence conditions as well as the introduction of new Licence conditions.

Please note all applicants are advised that in order to trade in the market, in addition to holding the necessary Licences and Authorisations from the CRU, accession to the Trading and Settlement Code is required. Applications for market accession are to be made to Single Electricity Market Operation (SEMO) (Settlement System Administrator – Market Support Division) once the relevant licence from the Commission has issued.

To facilitate timely accession to the market, applications should be made as early as possible. Please contact SEMO on 1800 778111 or [registration@sem-o.com](mailto:registration@sem-o.com) for information on this process.

Please find enclosed the Authorisation and Licence to Generate. In addition please find copies of the associated guidance notes. These will assist in ensuring required submissions are complied with on an ongoing basis. Please retain these Guidance Notes with your Authorisation and Licence to Generate and refer to them as required.

Yours sincerely,



Jim Gannon  
Commissioner