

Appendix 2B: Ornithology Report

Drybridge Solar Farm and BESS – Response to ACP FI

ABP Reference: 322159-25

Planning Authority Reference No: 2460278

19/02/2026



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1. INTRODUCTION

BACKGROUND

- 1.1. Neo Environmental Ltd has been appointed by Elgin Energy ESI Ltd (the “Applicant”) to undertake an Ornithology Report for a proposed solar and BESS development (the “Proposed Development”) on lands at Killineer, Newtown Monasterboice, Silloge, Balgatheran and Coolfore, County Louth (the “Application Site”).

Development Description

- 1.2. The proposed Solar Farm will consist of the construction of PV panels mounted on metal frames, battery storage infrastructure (BESS units, PCS Units, storage and maintenance units), new access tracks, underground cabling, perimeter fencing with CCTV cameras and access gates, temporary construction compounds and all ancillary grid infrastructure and associated works.

Site Description

- 1.3. The Proposed Development area from its nearest point is located in a rural setting approximately 4.83km northwest of the nearest city of Drogheda, County Louth, and c. 0.86m southeast of the nearest town of Newtown Monasterboice. The area of the Proposed Development (the “Application Site”) lies at an elevation of approximately 97- 132m AOD and covers a total area of c. 92.3 hectares. It is centred at approximate Irish National Grid Reference (NGR) E 305261 N 279687 and the R132 is located c. 150m northeast from the closest point.
- 1.4. Access to the Proposed Development will be gained at the northeast section through the existing farm access track travelling southwest from the R132. Access at the southwest section of the site will be from an existing track travelling northwest from an unnamed local road. The M1 separates the west of the site from the east, which will be connected through a HDD connection.
- 1.5. Comprising of 22 fields of agricultural land, the site is currently being used for cattle grazing in some fields and the remainder of the site are generally agricultural in nature used for arable farming. Overhead electrical cables are evident at the centre of the site to the east. The fields are bound by a mixture of trees, mature hedgerows, and post-and-wire fencing. The Barnattin Reservoir is located c.20m south of the site and is surrounded by pockets of woodland which run along the site boundary to the southwest. There is a moderate number of ribbon developments in the surrounding area located along local roads, such as Kearney’s Lane c. 0.68km southeast of the site.

Statement of Authority

- 1.6. Catriona Graham, who completed bird surveys and authored this report, is a Graduate Ecologist with over 2 years of experience in the ecology and conservation sector. Catriona is a Qualifying member of the Chartered Institute for Ecology and Environmental Management (CIEEM). She holds a BSc (Hons) in Biology and completed her MSc in Ecological Management and Conservation Biology at Queen's University Belfast. Catriona has authored ecological reports including Ecological Impact Assessment (EclA), Natura Impact Statement (NIS), shadow Habitats Regulations Assessment (sHRA), Biodiversity Management Plan (BMP), Invasive Species Management Plan (ISMP) and Bat Survey reports. She has experience conducting Fossitt habitat surveys, as well as bird, bat and reptile protected species surveys. Catriona has completed the 'Certificate of Bat Acoustics Analysis' BatAbility course and achieved a Grade B in her Technician Level Assessment.
- 1.7. Samuel O'Hara, who assisted the bird surveys, is a Principal Ecologist at Neo Environmental, who holds a BSc (Hons) in Ecology and has over ten years' experience in ecology consultancy and conservation. He is a protected species licence holder (bats, smooth newt, common lizard) who has extensive experience of habitat and protected species survey work throughout Britain and Ireland with a particular focus on habitat and botanical surveys. Samuel has produced a wide range of documents in support of planning submissions including ecological impact assessment (EclA), Habitats Directive appraisals, protected species surveys reports, condition compliance reports, invasive species management plans and habitat management plans, among others. This includes planning applications across an array of sectors. Samuel is a full member of the CIEEM.
- 1.8. Eiméar Rose Cunningham, who reviewed this report, is a Senior Ecologist at Neo Environmental and is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM), with over 5 years' experience in the environmental/planning sector. She has experience of conducting habitat surveys as well as protected species surveys, including bats, birds and otter. In previous roles Eiméar Rose has experience of GIS map interpretation for large scale infrastructure projects. Furthermore, Eiméar Rose has experience in the completion of ecological report writing having authored and co-authored a number of reports including Ecological Appraisals, Natura Impact Statements, Biodiversity Management Plans and Net Gain Reports, in addition to contributing to Biodiversity Chapters for EIA Developments. Furthermore, Eiméar Rose is a qualified tree climber and aerial rescuer, certified by LANTRA and utilises this qualification for bat survey work.

2. METHODOLOGY

STUDY AREAS

- 2.1. The various areas of study considered during the ornithological assessment of the Proposed Development at the Application Site are outlined within **Table 2-1** below. Due to the scale and nature of the Proposed Development, it is considered that the chosen distances from the Application Site are appropriate for gathering relevant ornithological information for assessment. These distances are collectively known as the Proposed Development's Zones of Influence (Zoi).
- 2.2. In the absence of Irish-specific guidance, current best practice - that is utilised across the United Kingdom and the Republic of Ireland - for determining Zones of Influence is to refer to the NatureScot guidance documents "Assessing Connectivity with Special Protection Areas (SPAs)" and the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance "Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater, Coastal and Marine".
- 2.3. The purpose for reference to these best practice guidance documents is to provide a robust and universal process by which Zones of Influence, study areas and 'connectivity' between development proposals and Special Protection Areas (SPAs) or other important ornithological interests can be determined.
- 2.4. When defining the extent of the Zones of Influence, the SPA connectivity guidance states: "the core range should be used when determining whether there is connectivity between the proposal and the qualifying interests." The 'core range' is a measure of typical bird travel distance for foraging purposes, from its nest site during breeding season, to its chosen foraging locations. The guidance also states: "Maximum ranges are also provided to indicate that birds will, at times, travel further. In exceptional cases distances up to the maximum foraging range may be considered" and that birds flying beyond their core foraging range "may still be connected if there is a lack of other closer foraging sites." Foraging ranges for bird species during the wintering season are also given in the same guidance.
- 2.5. These distances, given in the guidance, were the result of extensive literature reviewing that examined ranging behaviour and produced a list of the 'core foraging range' and 'maximum foraging range' for the dispersal and foraging behaviours of a range of bird species.
- 2.6. All bird species listed as breeding qualifying interests of SPAs will have their nests inside the boundaries of the designated areas but may rely upon grounds outside of the designated areas for sustenance. Similarly, all bird species listed as wintering qualifying interests of SPAs will have their night roosts inside the boundaries of the designated areas but may rely upon grounds outside of the designated areas for sustenance. Safeguarding these dependent

sustenance aspects of qualifying bird's species lifecycles is regarded as maintaining the designated site's 'integrity'.

- 2.1. Therefore, Zones of Influence and potential connectivity to Designated Sites are determined, primarily by an analysis of their qualifying interest's core foraging ranges, with a secondary analysis of maximum foraging ranges and a tertiary analysis of the value of the habitats within and surrounding the Application Site and those between the Application Site and any potentially connected Designated Site.
- 2.2. The majority of named species core foraging ranges are up to 5km from their nest/roost site.
- 2.3. **Table 2-1**, below, lists the various study areas for the differing elements comprising this assessment process.

Table 2-1: Study Areas.

Study Type	Distance
Existing ornithological records obtained from desktop study of data records on NBDC	10km
Statutory Designated Sites for ornithological interest	15km
Breeding and non-breeding bird surveys	Application Site + 50m ("the ESA")

- 2.4. The above study areas have been defined in compliance with the aforementioned guidance documents during the scoping stage (noted in the following sections, where relevant) and in conducting the field surveys, and are considered appropriate for assessing any potential effects on ornithological interests arising from the Proposed Development.

LEGISLATION, POLICY & GUIDANCE

- 2.5. The Proposed Development has been assessed against existing European, national, regional and local policies and guidance. The assessment has been collated and considered based upon the following legislation, planning policy and guidance.

European Legislation

- 2.6. European legislation relevant to the Proposed Development is outlined within **Table 2-2** below.

Table 2-2: Relevant European Legislation

Directive	Main Provisions
EU Birds Directive EC/79/409 (amended by 2009/147/EC)	European Union members meet their obligations for bird species under the Bern Convention and Bonn Convention, and more specifically by the means of the EU Birds Directive. The Birds Directive sets out the criteria for Special Protection Areas including; a list of species requiring protection in Annex 1 of the Directive and mechanisms for protecting wild birds naturally occurring in Europe. This Directive is transposed into national legislation principally by the 'EC (Birds and Natural Habitats) Regulations 2011'¹. The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievement are at the discretion of each Member State.
EU Habitats Directive 92/43/EEC	The EU Habitats Directive sets out the framework for the designation and protection of sites for nature conservation for species and habitats listed in Annex II, IV and V. The directive was adopted in 1992 as a response to the Bern Convention. "The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance." The protection of species outlined in the Habitats Directive is transposed in Ireland by national legislation into the European Communities (Birds and Natural Habitats) Regulations 2011, as amended².
Environmental Liability Directive 2004/35/EC	The Environmental Liability Directive aims to make those causing damage to the environment (water, land and nature) legally and financially responsible for remedying such damage. The Directive applies to all development sizes and values. Species and natural habitats are protected under the 1992 Habitats Directive, the 1979 Wild Birds Directive and its 2009 update.

¹ Office of the Attorney General (2011), European Communities (Birds and Natural Habitats) Regulations 2011, available at www.irishstatutebook.ie

² [Online](https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print), available at: <https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>

Directive	Main Provisions
	Damage to protected species and natural habitats is “any damage that has significant adverse effects on reaching or maintaining the favourable conservation status of such habitats or species”.
Ramsar Convention	The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) came into force in 1975. It is an international treaty for the conservation and wise use of wetlands.
Bern Convention	The Bern Convention came into force in 1982, with the principal aims to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III.
Bonn Convention	The Bonn convention came into force in 1985. Contracting Parties work together to conserve migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix I of the Convention), concluding multilateral Agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix II), and by undertaking cooperative research activities.

National Legislation

2.7. The principal legislative acts and regulations underpinning biodiversity and nature conservation in Ireland are:

- The Wildlife Act 1976
- The Wildlife (Amendment) Act 2000
- The European Communities (Birds and Natural Habitats) Regulations 2011

2.8. The national legislation governing the protection of wildlife and natural resources in Ireland further includes:

- The Irish Wildlife Act 1976 to 2012, as amended- this is the main legislation for the protection of wildlife in Ireland and outlines strict protection for species that have significant conservation value.

- It is an offence to intentionally kill, injure, or take any wild bird or their eggs or nests, with special penalties for Annex 1 species.
- Wildlife (Amendment) Act 2023
- S.I. No. 293/1998 - European Communities (Quality of Salmonid Waters) Regulations, 1988;
- S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011 as amended. These regulations form an Irish law that implements two key European directives:
 - The Birds Directive (2009/147/EC)
 - The Habitats Directive (92/43/EEC);
- Flora Protection Order, 2015;
- Water Framework Directive (2000/60/EC) & the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272 of 2009), as amended;
- Heritage Act 2018 (no. 15 of 2018), Part 3;
- Planning, Heritage and Broadcasting (Amendment) Act 2021 (no.11 of 2021), Chapter 3.

2.9. Policies and Objectives in the following Plans were also considered:

- The National Biodiversity Action Plan 2023-2030 (NBAP);
- Louth County Development Plan 2021-2027.

2.10. In the absence of Irish-specific guidance on bird surveys at solar farms, the NatureScot pre-application guidance for solar farms (June 2025) has been considered³. This document states: *'Bird distribution and abundance surveys will typically be required. The surveys should be tailored and proportionate to the scale and location of the development.'*

DESKTOP STUDY

2.11. A pre-survey data search was conducted in order to collate existing information of ornithological interest from the footprint of the Proposed Development and its surrounding area. The data search utilised the following information sources:

³ Online, Available at: [NatureScot pre-application guidance for solar farms | NatureScot](#)

- Collation of bird atlas data and other known bird records from the National Biodiversity Data Centre (www.biodiversityireland.ie).
- Birdwatch Ireland (BWI) - <https://birdwatchireland.ie/> provides open access data for the Irish Wetland Bird Survey (I-WeBS). I-WeBS is an annual survey of wintering birds undertaken at a national level, focussing on wetland sites utilised by wintering birds. Bird count data for the closest I-WeBS site was accessed and has been presented in this report.
- Conservation objectives of the River Boyne and River Blackwater SPA (004232), Boyne Estuary SPA (004080), North-west Irish Sea SPA (004236), River Nanny Estuary and Shore SPA (004158), Stabannan-Braganstown SPA (004091) and Dundalk Bay SPA (004026) were accessed via - <https://www.npws.ie/>.
- Review of Ordnance Survey mapping and aerial photography of the proposed scheme area and its environs.

FIELD SURVEY

- 2.12. Bird surveys were completed over eight days. Two bird surveys were conducted during the breeding season, on the 1st and 28th August 2025 (See **Figures 2 and 3; Appendix 2B**). Six non-breeding bird surveys were then completed on the following dates: 24th September 2025, 27th October 2025, 17th November 2025, 10th December 2025, 20th January 2026 and 11th February 2026 (See **Figures 4-9; Appendix 2B**).
- 2.13. The wintering and breeding bird surveys consisted of walking transects through each parcel of land within the site boundary (See **Figure 1; Appendix 2B** for the transect route). Breeding bird surveys utilised a walkover methodology based on the British Trust for Ornithology (BTO) Common Bird Census (CBC) methodology^{4,5} and the Bird Survey Guidelines approach⁶. Transects with coverage within 50m of all areas of the ESA were undertaken with all observed species recorded.
- 2.14. Bird surveys also utilised a non-breeding walkover survey methodology⁷. Given that the focus of these surveys is wintering waterfowl and waders and migratory bird populations, greater priority was afforded to visual searches as opposed to auditory records with no requirement

⁴ Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000) Bird Census Techniques. 2nd Edition. Academic Press: London.

⁵ Gilbert, G., Gibbons, D.W. & Evans, J. (1998) Bird Monitoring Methods - a Manual of Techniques for Key UK Species. RSPB: Sandy.

⁶ [Survey methodology | Bird Survey Guidelines](#)

⁷ [Non-breeding Walkover Survey | Bird Survey Guidelines](#)

for transects affording coverage within 50m of all areas of the site. Instead, complete visual searches of individual land parcels were defined as the priority.

- 2.15. During the surveys, all bird species heard or seen within and adjacent to the site were recorded. The surrounding fields were scanned where possible from areas that gave unobstructed views over potentially suitable habitat for notable species. A note was also made of birds flying overhead.
- 2.16. All bird species were recorded using standard British Trust for Ornithology codes (BTO codes)⁸, and a note of the number of birds of each species present was made. As summarised in **Table 2.3**, surveys were undertaken in weather deemed appropriate for carrying out bird survey work, i.e. avoiding periods of heavy rainfall and poor visibility⁹.

Table 2-3: Bird survey details

Date	Survey method	Season	Time of survey	Weather
01/08/2025	Transect	Breeding	06:04-09:15	Temp: 8°C Precipitation: None Wind: 5 mph Cloud cover: 4/8
28/08/2025	Transect	Breeding	06:25-10:10	Temp: 12°C Precipitation: Light rain Wind: 13 mph Cloud cover: 8/8
24/09/2025	Transect	Non-breeding	09:30-12:15	Temp: 12°C Precipitation: None Wind: 13 mph Cloud cover: 1/8
27/10/2025	Transect	Non-breeding	10:45-13:45	Temp: 10°C Precipitation: Light rain Wind: 11 mph Cloud cover: 7/8
17/11/2025	Transect	Non-breeding	09:15-12:00	Temp: 4°C Precipitation: None Wind: 7 mph Cloud cover: 4/8
10/12/2025	Transect	Non-breeding	13:30-16:00	Temp: 11°C Precipitation: None Wind: 22 mph Cloud cover: 8/8

⁸ Available at: <https://www.bto.org/british-list>

⁹ Bibby C.J., Burgess N.D., Hill D.A. & Mustoe S.H. (2000). Bird Census Techniques. Second Edition. Academic Press.

20/01/2026	Transect	Non-breeding	12:10-14:35	Temp: 8°C Precipitation: Light rain Wind: 17-29 mph Cloud cover: 8/8
11/02/2026	Transect	Non-breeding	07:45-10:45	Temp: 7°C Precipitation: Light rain Wind: 4 mph Cloud cover: 8/8

- 2.17. It is noted that the breeding bird surveys were conducted in the latter stage of the breeding bird season, due to the timing of the Further Information request. Whilst it is preferable to conduct breeding bird surveys across the entirety of the breeding bird season, recording species towards the end of the season captures not only a wider scope of species, but also breeding success through the ability to note productivity levels (i.e. the presence of juvenile bird species against adults, indicating breeding success).

Limitations

- 2.18. A small number of surveys were conducted in sub-optimal conditions e.g. strong winds in January 2026. These instances are not expected to have a significant impact on the validity of the results given the extensive overall coverage during suitable weather.
- 2.19. On a limited number of occasions, fields were surveyed from the surrounding area where livestock presented a potential risk to surveyors.
- 2.20. Surveys were otherwise conducted without limitations, and it is not considered that the limitations encountered are sufficient to undermine the validity of the survey findings and associated conclusions.

3. RESULTS

DESK STUDY

Statutory Designated Sites

- 3.1. The Proposed Development is not situated within or adjacent to any statutory or non-statutory designated sites for ornithological interest. Using a Geographic Information System (GIS) and the National Parks and Wildlife Service (NPWS) online map search utility, it was found that there are six European Designated Special Protection Areas (SPAs) within 15km of the Proposed Development: River Boyne and River Blackwater SPA, Boyne Estuary SPA, North-west Irish Sea SPA, River Nanny Estuary and Shore SPA, Stabannan-Braganstown SPA and Dundalk Bay SPA .
- 3.2. River Boyne and River Blackwater SPA (004232) is located 3.0km southwest of the Application Site and is designated for Kingfisher (*Alcedo atthis*) [A229]. It is considered to have potential ornithological connectivity with the Application Site.
- 3.3. Boyne Estuary SPA (004080) is located 6.4km southeast of the Application Site and is designated for a number of important bird species of the E.U. Habitats Directive, as well as wetland habitats (see **Table 2-6** in the **Ecological Appraisal**). It is considered to have potential ornithological connectivity with the Application Site.
- 3.4. North-west Irish Sea SPA (004236) is located 9.6km east of the Application Site and has been designated for a number of important waterbird species of the E.U. Habitats Directive (see **Table 2-6** in the **Ecological Appraisal**). It is considered to have potential limited ornithological connectivity with the Application Site.
- 3.5. River Nanny Estuary and Shore SPA (004158) is located 12.9km southeast of the Application Site. It is designated on account of six populations of important wintering bird species of the E.U. Habitats Directive, as well as wetland habitats (see **Table 2-6** in the **Ecological Appraisal**). It is considered to have potential limited ornithological connectivity with the Application Site.
- 3.6. Stabannan-Braganstown SPA (004091) is located 13.0km north-northwest southeast of the Application Site and is designated for Greylag Goose (*Anser anser*) [A043]. It is considered to have potential ornithological connectivity with the Application Site.
- 3.7. Dundalk Bay SPA (004026) is located 13.3km north-northeast of the Application Site and is designated for a number of important wintering bird species of the E.U. Habitats Directive, as well as wetland habitats (see **Table 2-6** in the **Ecological Appraisal**). It is considered to have potential limited ornithological connectivity with the Application Site.

Biological Records

- 3.8. **Table 3-1** details bird species present in National Biodiversity Data Centre (NBDC) datasets for the two 10km grid squares within which the site is situated: O07 and O08. Records older than 10 years were considered no longer relevant and were not included.
- 3.9. **Table 3-1** also indicates species listed in Annex I of the EU Birds Directive and those listed in the Birds of Conservation Concern in Ireland (BoCCI) Amber or Red List¹⁰. Red-listed species are those of highest conservation priority and Amber-listed species are those which are of secondary priority.

Table 3-1: NBDC records of wildlife act birds for 10km grid squares O07 and O08

Common Name	Scientific Name	Annex I	BoCCI
Barn owl	<i>Tyto alba</i>	No	
Barn swallow	<i>Hirundo rustica</i>	No	
Blackbird	<i>Turdus merula</i>	No	
Blackcap	<i>Sylvia atricapilla</i>	No	
Black-headed gull	<i>Larus ridibundus</i>	No	
Black-tailed godwit	<i>Limosa limosa</i>	No	
Blue tit	<i>Cyanistes caeruleus</i>	No	
Bullfinch	<i>Pyrrhula pyrrhula</i>	No	
Buzzard	<i>Buteo buteo</i>	No	
Brent goose	<i>Branta bernicla</i>	No	
Chaffinch	<i>Fringilla coelebs</i>	No	
Chiffchaff	<i>Phylloscopus collybita</i>	No	
Coal tit	<i>Parus ater</i>	No	
Collared dove	<i>Streptopelia decaocto</i>	No	
Common gull	<i>Larus canus</i>	No	
Common snipe	<i>Gallinago gallinago</i>	No	
Common tern	<i>Sterna hirundo</i>	Yes	
Coot	<i>Fulica atra</i>	No	
Cormorant	<i>Phalacrocorax carbo</i>	No	
Curlew	<i>Numenius arquata</i>	No	

¹⁰ Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 –2026"

Dunnock	<i>Prunella modularis</i>	No	
Eurasian teal	<i>Anas crecca</i>	No	
Fieldfare	<i>Turdus pilaris</i>	No	
Goldcrest	<i>Regulus regulus</i>	No	
Golden plover	<i>Pluvialis apricaria</i>	Yes	
Goldfinch	<i>Carduelis carduelis</i>	No	
Great black-backed gull	<i>Larus marinus</i>	No	
Great-crested grebe	<i>Podiceps cristatus</i>	No	
Great northern diver	<i>Gavia immer</i>	Yes	
Great spotted woodpecker	<i>Dendrocopos major</i>	No	
Great tit	<i>Parus major</i>	No	
Great white egret*	<i>Ardea alba</i>	Yes	N/A
Greater scaup	<i>Aythya marila</i>	No	
Greater yellowlegs*	<i>Tringa melanoleuca</i>	No	N/A
Greenfinch	<i>Carduelis chloris</i>	No	
Grey heron	<i>Ardea cinerea</i>	No	
Grey wagtail	<i>Motacilla cinerea</i>	No	
Hen harrier	<i>Circus cyaneus</i>	Yes	
Herring gull	<i>Larus argentatus</i>	No	
Hooded crow	<i>Corvus cornix</i>	No	
House martin	<i>Delichon urbicum</i>	No	
House sparrow	<i>Passer domesticus</i>	No	
Jackdaw	<i>Corvus monedula</i>	No	
Jay	<i>Garrulus glandarius</i>	No	
Kestrel	<i>Falco tinnunculus</i>	No	
Kingfisher	<i>Alcedo atthis</i>	Yes	
Lapwing	<i>Vanellus vanellus</i>	No	
Lesser black-backed gull	<i>Larus fuscus</i>	No	
Linnet	<i>Carduelis cannabina</i>	No	
Little egret	<i>Egretta garzetta</i>	Yes	

Little grebe	<i>Tachybaptus ruficollis</i>	No	
Little gull	<i>Hydrocoloeus minutus</i>	Yes	
Long-eared owl	<i>Asio otus</i>	No	
Long-tailed duck	<i>Clangula hyemalis</i>	No	
Long-tailed tit	<i>Aegithalos caudatus</i>	No	
Magpie	<i>Pica pica</i>	No	
Mallard	<i>Anas platyrhynchos</i>	No	
Meadow pipit	<i>Anthus pratensis</i>	No	
Mediterranean gull	<i>Larus melanocephalus</i>	Yes	
Merlin	<i>Falco columbarius</i>	Yes	
Mistle thrush	<i>Turdus viscivorus</i>	No	
Moorhen	<i>Gallinula chloropus</i>	No	
Mute swan	<i>Cygnus olor</i>	No	
Northern shoveler	<i>Spatula clypeata</i>	No	
Oystercatcher	<i>Haematopus ostralegus</i>	No	
Peregrine falcon	<i>Falco peregrinus</i>	Yes	
Pheasant	<i>Phasianus colchicus</i>	No	
Pied wagtail	<i>Motacilla alba</i>	No	
Pink-footed goose	<i>Anser brachyrhynchus</i>	No	
Pochard	<i>Aythya ferina</i>	No	
Raven	<i>Corvus corax</i>	No	
Red-breasted merganser	<i>Mergus serrator</i>	No	
Redpoll	<i>Acanthis flammea</i>	No	
Redwing	<i>Turdus iliacus</i>	No	
Reed bunting	<i>Emberiza schoeniclus</i>	No	
Reed warbler	<i>Acrocephalus scirpaceus</i>	No	
Robin	<i>Erithacus rubecula</i>	No	
Rock dove	<i>Columba livia</i>	No	
Rook	<i>Corvus frugilegus</i>	No	
Sand martin	<i>Riparia riparia</i>	No	
Sedge warbler	<i>Acrocephalus schoenobaenus</i>	No	
Shelduck	<i>Tadorna tadorna</i>	No	

Siskin	<i>Carduelis spinus</i>	No	Green
Skylark	<i>Alauda arvensis</i>	No	Yellow
Song thrush	<i>Turdus philomelos</i>	No	Green
Sparrowhawk	<i>Accipiter nisus</i>	No	Green
Spotted flycatcher	<i>Muscicapa striata</i>	No	Yellow
Starling	<i>Sturnus vulgaris</i>	No	Yellow
Stock dove	<i>Columba oenas</i>	No	Red
Stonechat	<i>Saxicola torquata</i>	No	Green
Swift	<i>Apus apus</i>	No	Red
Treecreeper	<i>Certhia familiaris</i>	No	Green
Tree sparrow	<i>Passer montanus</i>	No	Yellow
Tufted duck	<i>Aythya fuligula</i>	No	Yellow
Water rail	<i>Rallus aquaricus</i>	No	Green
Whitethroat	<i>Sylvia communis</i>	No	Green
Whooper swan	<i>Cygnus cygnus</i>	Yes	Yellow
Wigeon	<i>Anas penelope</i>	No	Yellow
Willow warbler	<i>Phylloscopus trochilus</i>	No	Yellow
Woodpigeon	<i>Columba palumbus</i>	No	Green
Wren	<i>Troglodytes troglodytes</i>	No	Green
Yellowhammer	<i>Emberiza citrinella</i>	No	Red

* Annex I or BOCCI status cannot be determined

- 3.10. Each winter, volunteers, NPWS Rangers and BirdWatch Ireland staff monitor wintering waterbird populations at defined wetland sites across the Republic of Ireland to keep track of species trends. The Application Site is not covered by an Irish Wetland Bird Survey (I-WeBS site). **Table 3-2** detailed survey data was available for the nearest I-WeBS site, 3.4km to the south-east of the study area: Killineer Quarry, Drogheda (OZ201). Information is inclusive of survey seasons from 2013/14 to 2021/2022.

Table 3-1: I-WeBS site OZ201 Killineer Quarry, Drogheda survey count information

Common Name	Scientific Name	Recording Wintering	Annex I	BoCCI
Black-headed gull	<i>Chroicocephalus ridibundus</i>	2013/14, 2014/15, 2015/16, 2021/22	No	
Common gull	<i>Fulica atra</i>	2021/22	No	
Coot	<i>Fulica atra</i>	2013/14, 2014/15, 2015/16, 2016/17, 2020/21, 2021/22	No	
Cormorant	<i>Phalacrocorax carbo</i>	2013/14, 2014/15, 2015/16, 2020/21	No	
Great black-backed gull	<i>Larus marinus</i>	2013/14	No	
Great-crested grebe	<i>Podiceps cristatus</i>	2013/14, 2014/15, 2015/16, 2016/17, 2020/21	No	
Grey heron	<i>Ardea cinerea</i>	2013/14, 2014/15, 2015/16, 2016/17, 2021/22	No	
Herring gull	<i>Larus argentatus</i>	2013/14, 2014/15, 2015/16, 2020/21, 2021/22	No	
Lesser black-backed gull	<i>Larus fuscus</i>	2015/16	No	
Little grebe	<i>Tachybaptus ruficollis</i>	2013/14, 2014/15, 2015/16, 2016/17, 2020/21, 2021/22	No	
Mallard	<i>Anas platyrhynchos</i>	2013/14, 2014/15, 2015/16, 2016/17, 2020/21, 2021/22	No	
Mediterranean gull	<i>Larus melanocephalus</i>	2013/14	Yes	
Moorhen	<i>Gallinula chloropus</i>	2014/15, 2015/16	No	
Mute swan	<i>Cygnus olor</i>	2013/14, 2014/15, 2015/16, 2016/17	No	
Pochard	<i>Aythya ferina</i>	2013/14, 2014/15, 2015/16	No	
Shelduck	<i>Tadorna tadorna</i>	2013/14, 2014/15, 2015/16	No	
Tufted duck	<i>Aythya fuligula</i>	2013/14, 2014/15, 2015/16, 2016/17, 2020/21, 2021/22	No	

*Records shown in bold indicate they are Annex 1 listed species

FIELD SURVEY

- 3.11. Within a 50m buffer of the Application Site, a total of 43 species of bird were recorded during the breeding and non-breeding bird surveys. **No Annex 1 listed species were observed.**
- 3.12. Of the species recorded, 5 red and 13 amber species on the BoCCI list were identified, the remaining 25 species are green status. **Table 3-3** summarises the species recorded during the bird surveys, along with their BoCCI and Annex I status. **Figures 2-9; Appendix 2B** illustrate the location and behaviour of all species recorded during individual surveys.

Table 3-3: Bird species recorded during transect surveys

Common Name	Scientific Name	Season recorded	Peak count	Annex I	BoCCI
Barn swallow	<i>Hirundo rustica</i>	Breeding	8	No	Amber
Blackbird	<i>Turdus merula</i>	Both	4	No	Green
Blackcap	<i>Sylvia atricapilla</i>	Non-breeding	1	No	Green
Black-headed gull	<i>Larus ridibundus</i>	Breeding	8	No	Amber
Blue tit	<i>Parus caeruleus</i>	Both	2	No	Green
Bullfinch	<i>Pyrrhula pyrrhula</i>	Breeding	2	No	Green
Buzzard	<i>Buteo buteo</i>	Non-breeding	1	No	Green
Chaffinch	<i>Fringilla coelebs</i>	Both	1	No	Green
Chiffchaff	<i>Phylloscopus collybita</i>	Both	1	No	Green
Coal tit	<i>Periparus ater</i>	Breeding	1	No	Green
Common gull	<i>Larus canus</i>	Both	1	No	Amber
Common snipe	<i>Gallinago gallinago</i>	Non-breeding	1	No	Red
Cormorant	<i>Phalacrocorax carbo</i>	Non-breeding	1	No	Amber
Curlew	<i>Numenius arquata</i>	Both	21	No	Red
Dunnock	<i>Prunella modularis</i>	Both	2	No	Green
Fieldfare	<i>Turdus pilaris</i>	Non-breeding	12	No	Green
Goldcrest	<i>Regulus regulus</i>	Both	1	No	Amber
Goldfinch	<i>Carduelis carduelis</i>	Both	4	No	Green
Great tit	<i>Parus major</i>	Both	3	No	Green

Herring gull	<i>Larus canus</i>	Both	35	No	
Hooded crow	<i>Corvus cornix</i>	Both	9	No	
House martin	<i>Delichon urbicum</i>	Both	6	No	
House sparrow	<i>Passer domesticus</i>	Non-breeding	1	No	
Jackdaw	<i>Corvus monedula</i>	Both	15	No	
Lesser black-backed gull	<i>Larus fuscus</i>	Both	1	No	
Linnet	<i>Linaria cannabina</i>	Both	4	No	
Long-tailed tit	<i>Aegithalos caudatus</i>	Non-breeding	6	No	
Magpie	<i>Pica pica</i>	Both	2	No	
Meadow pipit	<i>Anthus pratensis</i>	Both	11	No	
Pheasant	<i>Phasianus colchicus</i>	Non-breeding	1	No	
Pied wagtail	<i>Motacilla alba</i>	Non-breeding	1	No	
Raven	<i>Corvus corax</i>	Both	2	No	
Redwing	<i>Turdus iliacus</i>	Non-breeding	8	No	
Reed bunting	<i>Emberiza schoeniclus</i>	Breeding	2	No	
Robin	<i>Erithacus rubecula</i>	Both	1	No	
Rook	<i>Corvus frugilegus</i>	Both	22	No	
Skylark	<i>Alauda arvensis</i>	Non-breeding	1	No	
Song thrush	<i>Turdus philomelos</i>	Both	1	No	
Starling	<i>Sturnus vulgaris</i>	Both	12	No	
Willow warbler	<i>Phylloscopus trochilus</i>	Both	2	No	
Woodpigeon	<i>Columba palumbus</i>	Both	17	No	
Wren	<i>Troglodytes troglodytes</i>	Both	3	No	
Yellowhammer	<i>Emberiza citrinella</i>	Breeding	1	No	

- 3.13. Individual common snipe were recorded on site on five occasions. Curlew were observed flying over site and, on one occasion, foraging in field 17. Other red-listed species observed include meadow pipit, yellowhammer and redwing. A single cormorant was observed flying over but not utilising the Application Site. Gull species (herring, common and black-headed) were recorded foraging in fields on site. Lesser black-backed gull was observed flying over site. See **Appendix 2B – Figures 2-9** for further details.

4. DISCUSSION

- 4.1. The construction of the Proposed Development will occur over land which has been identified to contain improved agricultural grassland and wet grassland. Other habitats within the ESA including woodland, spoil and bare ground, and scrub will be retained within the Proposed Development. Hedgerows, treelines and drainage ditches will be subject to buffers and largely retained within the Proposed Development.
- 4.2. The primary objective of the bird surveys was to assess whether the Proposed Development has the potential to support qualifying bird species from the surrounding SPAs, with particular focus on species that are known to occur in grassland habitats.
- 4.3. The Further Information request issued by An Coimisiún Pleanála on 27th June 2025 noted concern for greylag goose, due to the proximity of the Stabannan- Braganstown and Dundalk Bay SPAs for which this species is a Special Conservation Interest (SCI), as well as concern for amber-listed mallard and red-listed snipe, observed during the walkover survey in March 2023. Of these species, only snipe was recorded during the bird surveys. As such, to satisfy ACP's concern for a lack of bird survey effort additional surveys were completed.
- 4.4. A total of 43 species were recorded across all the bird surveys. 32 species were noted across the two breeding bird surveys, undertaken in August 2025. During the six non-breeding surveys, undertaken from September 2025 to February 2026, 27 species were observed.
- 4.5. Lesser black-backed gull and cormorant were only seen in flight commuting over the site; the remaining 41 species were all recorded utilising the site at least once.
- 4.6. An additional two species of bird were observed during the walkover survey of the site in March 2023: collared dove and mallard. Neither of these species were recorded again in any of the 2025/26 bird surveys.
- 4.7. The majority of the species recorded within the Application Site were common, green-listed bird species that are typical of farmland habitats; however, five red and 13 amber-listed species were recorded. Species of conservation concern recorded within the Application Site and wider ESA during the bird surveys are discussed individually below.

RED-LISTED SPECIES

- 4.8. The following red-listed species were noted during the bird surveys: common snipe (*Gallinago gallinago*), curlew (*Numenius arquata*), meadow pipit (*Anthus pratensis*), redwing (*Turdus iliacus*) and yellowhammer (*Emberiza citrinella*).

Common Snipe

- 4.9. Snipe is a common wader typically foraging across a range of wetland and damp habitats, especially on the fringes of lowland lakes¹¹. Snipe breed on the ground, typically in grassy tussock, in or near wet or boggy terrain. The wintering distribution of snipe in Ireland is widespread.
- 4.10. Individual snipe flushed on multiple occasions, predominantly within damp grassland in the east of the site, during the September, October, November, December and January surveys (See **Figures 4-8; Appendix 2B**).
- 4.11. Solar arrays will retain the vast majority of grassland habitats which are likely to function as additional foraging habitat for the species within the Application Site. Mitigation for ground-nesting birds is outlined in the section below. Subject to the implementation of mitigation measures, no significant impacts to the species are considered to arise as a result of the Proposed Development.

Curlew

- 4.12. Curlew winters in a range of wetland and damp habitats throughout Ireland¹². They are ground-nesting birds, breeding in rough pastures, meadows and heather; the breeding population is supplemented by individuals from Scotland and Scandinavia. Numbers of curlew have declined significantly in recent decades.
- 4.13. Curlew was observed on multiple occasions during the late August, September and October bird surveys (See **Figures 3-5; Appendix 2B**). In the late August survey, two individuals and a pair were seen flying over the site at different times, and one individual was observed flying low in the north of the site. In the September survey, a group of 21 curlew were recorded foraging in the largest field (field 17), before flying east.
- 4.14. It is possible this group flew inland from nearby estuarine habitats at high tide; as such, subsequent surveys were conducted around high tide to check for foraging curlew. No repeat observations of curlew utilising the site in this way were recorded. This indicates there are other suitable areas for curlew within the surrounding landscape. In October, only one individual was noted flying over the site. Mitigation for breeding and wintering curlew is outlined in the section below.

Meadow Pipit

¹¹ Snipe. Available at: <https://birdwatchireland.ie/birds/snipe/>

¹² Curlew. Available at: [Curlew - BirdWatch Ireland](#)

- 4.15. Meadow pipits are a common passerine bird in Ireland, seen to use rough pastures, bogs, uplands, scrub and pasture for breeding¹³. They typically move towards lowland areas in the winter, with many European birds arriving in Ireland to winter.
- 4.16. Meadow pipits were observed perching, foraging and calling within the Application Site; they were recorded in all bird surveys conducted with a peak count of 11 individuals noted in late August (See **Figures 2-9; Appendix 2B**).
- 4.17. It is considered that the Proposed Development which will retain and buffer the vast majority of hedgerows and field margins within the Application Site, **will not give rise to the loss of significant habitats for breeding meadow pipit.**

Redwing

- 4.18. Redwing are a widespread winter visitor to Ireland from Iceland and Scandinavia, favouring open fields in lowland areas, and typically avoiding urban regions¹⁴. Redwing do not breed in Ireland.
- 4.19. Redwing were noted calling and foraging within the Application Site during the December, January and February bird surveys, with a peak count of eight individuals (see **Figures 7-9; Appendix 2B**).
- 4.20. The Proposed Development will largely retain habitats within the Application Site including woodland, hedgerows and treelines which are of relatively greater value for redwing. Solar arrays will also retain the vast majority of grassland habitats which are likely to function as additional foraging habitat for the species within the Application Site.

Yellowhammer

- 4.21. Yellowhammer is a resident species, now found predominantly in the east and south of Ireland¹⁵ and are a typical-sized bunting known for their striking yellow summer plumage. They are strongly linked with cereal cultivation and populations have declined in areas where these are no longer grown.
- 4.22. Individual yellowhammer were observed perched, calling and singing within the site during both August breeding bird surveys (See **Figures 2 and 3; Appendix 2B**).
- 4.23. It is considered that the installation of the proposed solar arrays would have potential to give rise to some minimal loss of habitat for yellowhammer, due to the cessation of improved grassland habitat within the Application Site. However, solar farms have been shown to support increased numbers of breeding yellowhammer when subject to management as

¹³ Meadow Pipit. Available at: <https://birdwatchireland.ie/birds/meadow-pipit/>

¹⁴ Redwing. Available at: <https://birdwatchireland.ie/birds/redwing/>

¹⁵ Yellowhammer. Available at: [Yellowhammer - BirdWatch Ireland](https://birdwatchireland.ie/birds/yellowhammer/)

meadows¹⁶. As such, proposed meadow management areas are likely to deliver an enhancement of the site for breeding yellowhammer, with significant arable habitats present in the adjacent and wider areas, and no loss of arable crop as a result of the Proposed Development footprint.

AMBER-LISTED SPECIES

- 4.24. The following amber-listed species were noted during the bird surveys: barn swallow (*Hirundo rustica*), black-headed gull (*Larus ridibundus*), common gull (*Larus canus*), cormorant (*Phalacrocorax carbo*), goldcrest (*Regulus regulus*), herring gull (*Larus argentatus*), house martin (*Delichon urbicum*), house sparrow (*Passer domesticus*), lesser black-backed gull (*Larus fuscus*), linnet (*Linaria cannabina*), skylark (*Alauda arvensis*), starling (*Sturnus vulgaris*) and willow warbler (*Phylloscopus trochilus*).

Barn Swallow

- 4.25. Barn swallows are widespread summer migrants to Ireland, utilising farmland and open pasture habitats from April to October and are usually found near water¹⁷.
- 4.26. Swallows were observed flying and foraging on multiple occasions within the site, during both of the August surveys, with a peak count of eight individuals (See **Figures 2 and 3; Appendix 2B**).
- 4.27. No significant impacts to the species are considered to arise as a result of the Proposed Development.

Black-headed Gull

- 4.28. Black-headed gulls are a resident along all the coasts of Ireland, with significant numbers also arriving from the northern and eastern Europe in winter¹⁸. They breed on the coast as well as inland, although numbers breeding inland have declined.
- 4.29. A group of eight black-headed gulls and an individual gull were observed foraging in fields within the site during the early August survey (See **Figure 2; Appendix 2B**). Solar arrays will retain the vast majority of grassland habitats which are likely to function as additional foraging habitat for the species within the Application Site.
- 4.30. No significant impacts to the species are considered to arise as a result of the Proposed Development.

¹⁶ Copping, J. P. *et al.* (2025) 'Solar farm management influences breeding bird responses in an arable-dominated landscape', *Bird Study*, 72(3), pp. 217–222. doi: 10.1080/00063657.2025.2450392.

¹⁷ Swallow. Available at: <https://birdwatchireland.ie/birds/swallow/>

¹⁸ Black-headed Gull. Available at: [Black-headed Gull - BirdWatch Ireland](#)

Common Gull

- 4.31. Common gulls can be found on farmland and wetland sites when inland, but more often utilise coastal habitats¹⁹. Inland breeding colonies tend to be found in the west of Ireland. In winter, resident common gulls are joined by birds from Scotland, Scandinavia and the Baltic.
- 4.32. Individual common gulls were recorded foraging on and flying over the site during the early August and January surveys (See **Figures 2 and 8; Appendix 2B**). Solar arrays will retain the vast majority of grassland habitats which are likely to function as additional foraging habitat for the species within the Application Site.
- 4.33. No significant impacts to the species are considered to arise as a result of the Proposed Development.

Cormorant

- 4.34. Cormorant is a resident species, wintering both inland and at sea²⁰. They breed in colonies, either on cliffs by the coast or in trees if inland.
- 4.35. An individual cormorant was seen commuting over the site in January (See **Figure 8; Appendix 2B**). No cormorant were observed using the site.
- 4.36. No significant impacts to the species are considered to arise as a result of the Proposed Development.

Goldcrest

- 4.37. Goldcrest are typically found in coniferous forests throughout Ireland²¹. They can breed in broadleaf forests, dense coniferous forests, hedgerows and suburban gardens. Goldcrest are resident wintering birds in Ireland.
- 4.38. Individual goldcrest were noted foraging and calling within the Application Site in late August, September, October, December and February (See **Figures 3-5, 7 and 9; Appendix 2B**).
- 4.39. The Proposed Development will largely retain habitats of value for the species including woodland, hedgerows and treelines. No significant impacts to goldcrest are predicted to arise as a result of the Proposed Development subject to mitigation.

Herring Gull

¹⁹ Common Gull. Available at: <https://birdwatchireland.ie/birds/common-gull/>

²⁰ Cormorant. Available at: [Cormorant - BirdWatch Ireland](https://birdwatchireland.ie/birds/cormorant/)

²¹ Goldcrest. Available at: <https://birdwatchireland.ie/birds/goldcrest/>

- 4.40. Herring gulls are a resident in Ireland, breeding in colonies by the coast or inland in Co. Galway and Co. Donegal²². In winter they are widespread both inland and by the coast.
- 4.41. Herring gulls were recorded during almost all of the transect bird surveys (See **Figures 2-8; Appendix 2B**). They were primarily observed flying over the site, although, in late August a group of 35 herring gulls were recorded foraging in field 17 before flying east. A group of six herring gulls were also observed foraging in a small field on site in December.
- 4.42. However, in January, a group of 16 herring gulls were recorded foraging in a field nearby, outside of the site boundary, indicating they utilise other habitats in the surrounding area and are not reliant on fields within the Application Site. Given the extent of other suitable habitats within the surrounding landscape, no significant impacts to this species are considered to arise as a result of the Proposed Development.

House Martin

- 4.43. House martin is a common summer visitor to Ireland from mid-March to late-September²³. They tend to nest under the eaves of houses or on cliffs and are aerial feeders, catching insects such as aphids and mayflies in flight.
- 4.44. House martins were recorded flying and foraging during both August surveys and in September, with a peak count of six birds (See **Figures 2-4; Appendix 2B**).
- 4.45. No significant impacts to this species are considered to arise as a result of the Proposed Development.

House Sparrow

- 4.46. House sparrow is a resident species in Ireland, breeding around farm buildings and built-up areas²⁴. They breed throughout Ireland, primarily around buildings, nesting in cavities and under eaves. Recent declines may be linked to a reduction of available nesting sites.
- 4.47. An individual house sparrow was observed and heard calling just outside of the Application Site boundary in February (See **Figure 9; Appendix 2B**).
- 4.48. The Proposed Development will largely retain habitats of value for the species including woodland, hedgerows and treelines. No significant impacts to house sparrow are predicted to arise as a result of the Proposed Development subject to mitigation.

Lesser Black-backed gull

²² Herring Gull. Available at: <https://birdwatchireland.ie/birds/herring-gull/>

²³ House Martin. Available at: [House Martin - BirdWatch Ireland](#)

²⁴ House Sparrow. Available at: [House Sparrow - BirdWatch Ireland](#)

- 4.49. Lesser black-backed gulls are a summer visitor to coasts and lakes from March to September as well as a winter visitor in smaller numbers, along the southern and eastern coasts of Ireland²⁵. Most breeding colonies in Ireland are by the coast, where they nest on the ground. Migrating birds pass through in great numbers during autumn.
- 4.50. Individual lesser black-backed gulls were seen flying over the Application Site, but not interacting with it, in early August and October (See **Figures 2 and 4; Appendix 2B**). No significant impacts to this species are considered to arise as a result of the Proposed Development.

Linnet

- 4.51. Linnet is a widespread resident in Ireland, breeding in a variety of habitats including rough grassland, upland areas and coastal areas with gorse present²⁶. In winter they often gather in larger flocks than those seen in breeding season, but they are a social bird year-round²⁷.
- 4.52. Linnet were observed calling and perched within the site during both August surveys, in October and in February, with a peak count of four birds (See **Figures 2, 3, 5 and 9; Appendix 2B**).
- 4.53. No significant impacts to the species are considered to arise as a result of the Proposed Development, subject to mitigation.

Skylark

- 4.54. Skylark are a common resident throughout Ireland in uplands and farmlands, especially where cereal is cultivated. They breed in a variety of habitats including cultivated areas, ungrazed lands and upland heaths. They move away from breeding areas in winter to form flocks in stubble fields, grasslands and coastal areas. Skylark are included in the amber list due to agricultural intensification leading to a loss of suitable nesting habitat and lack of winter and summer food²⁸.
- 4.55. Two individual skylarks were heard calling on site during the February survey (See **Figure 9; Appendix 2B**), as such numbers of birds were significantly low.
- 4.56. There is currently a range of research available across a number of existing solar farms relating to ground nesting bird behaviours, however, this research is equally divided amongst a number of ages of solar farm and design philosophies. The Proposed Development's elements are in line with the principles which have been considered within Peschel et al. 2019²⁹, which has identified that breeding records of skylark within solar parks have been recorded where

²⁵ Lesser Black-backed Gull. Available at: [Lesser Black-backed Gull - BirdWatch Ireland](https://birdwatchireland.ie/birds/lesser-black-backed-gull/)

²⁶ Linnet. Available at: [Linnet - BirdWatch Ireland](https://birdwatchireland.ie/birds/linnet/)

²⁷ Linnet. Available at: <https://birdwatchireland.ie/birds/linnet/>

²⁸ Skylark. Available at: <https://birdwatchireland.ie/birds/skylark/>

²⁹ Peschel, R., Peschel, T., Marchand, M. and Hauke, J., 2019. Solar parks-profits for biodiversity. *Association of Energy Market Innovators: Berlin, Germany*.

panel row spacing exceeds 3m (the Proposed Development typically has a panel spacing of between 2-8m, but is up to 15m in some cases). Additional recent surveys have also found high levels of Skylark nesting within solar farms as found in Weesow-Willmersdorf solar park which provide a proof of concept that with appropriate design and management, nesting Skylark can be found.

- 4.57. It is considered therefore that the Proposed Development which will retain wide buffers around the field margins, significant gaps between arrays and other non-developed areas, will largely preserve nesting opportunities for the species within the Application Site.

Starling

- 4.58. Starling is a common resident species throughout Ireland, breeding in the countryside, woodland and in farmland as well as towns and cities. Starling breed in holes or crevices in buildings and in trees, typically in loose colonies³⁰. Starlings are also a widespread wintering resident, with additional birds joining from the continent in the winter. In winter they roost in urban regions such as old buildings and piers and in the countryside in reed beds, woodland and on the coast.
- 4.59. 12 starlings were noted flying over the Application Site in early August and five were perched within the site in late August (See **Figures 2 and 3; Appendix 2B**). One starling was heard calling in February (See **Figure 9; Appendix 2B**).
- 4.60. No significant impacts to this species are considered to arise as a result of the Proposed Development subject to mitigation.

Willow Warbler

- 4.61. Willow warbler is a summer visitor to Ireland from April to September³¹. They can be found in high densities in stands of willow along bog and marsh boundaries, or in hedgerows and forests.
- 4.62. Willow warbler was observed perched, calling and singing on site during both August surveys and in September, with a peak count of two (See **Figures 2-4; Appendix 2B**).
- 4.63. The Proposed Development will largely retain habitats of value for the species including woodland, hedgerows and treelines. No significant impacts to willow warbler are predicted to arise as a result of the Proposed Development subject to mitigation.

RECOMMENDED MEASURES AND MITIGATION

³⁰ Starling. Available at: <https://birdwatchireland.ie/birds/starling/>

³¹ Willow Warbler. Available at: [Willow Warbler - BirdWatch Ireland](#)

- 4.64. The above red- and amber-listed species are subject to short term disturbance and habitat displacement during the construction period; however, the surrounding area provides ample habitat in the form of arable crop, improved agricultural grassland and wet grassland for these species to be displaced to.
- 4.65. As previously mentioned, red-listed curlew were observed within or flying over the Application Site during the late August, September and October bird surveys, including a group of 21 foraging in September 2025. This group was observed in the largest field, field 17. Large, open areas are favoured by adult curlew as this habitat allows them to be more vigilant and spot potential predators easily. However, no repeat observations of curlew using this field or other areas on site for foraging or resting were recorded.
- 4.66. Following the precautionary rule approach, it is recommended that a dedicated Ecological Clerk of Works (ECoW) or a suitably qualified ornithologist carries out a **pre-commencement wintering bird check**, if works are to take place within the winter period (October to March, with the aim of total site coverage. As the construction of the Proposed Development will follow a phased approach, the pre-commencement wintering bird check shall mirror timing but up to 48 hours before construction activities begin.
- 4.67. While curlew were not considered to be reliant on the Application Site, particular focus will be given to, but not limited to, curlew and large parcels of land. In the event that curlew, or any notable or protected species, are identified on-site, species-specific buffers will be applied³². The dedicated ECoW shall determine the species-specific buffers following this guidance.
- 4.68. If curlew is present during construction, then a suitable buffer distance (outlined in **Table 4-1** below) between the work area and the curlew will need to be established for works to continue. If curlew is present on site, the buffer will remain in place until the species vacates and is no longer present within the Proposed Development Boundary.

Table 4-1: Methodology Requirements where curlew are present

Distance between work area and swans	Type of work that can safely be performed
0 – 200m	No construction or other work
200m – 650m	Small numbers of construction workforce with powered/hand tools. No heavy plant equipment, generators, flashing or static lights.
>650m	No restrictions to works or site personnel

³² [Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance | NatureScot](#)

- 4.69. To prevent an offence under the Wildlife Acts and to minimise potential adverse effects to these species any tree or vegetation removal works that are required as part of this development shall be done outside of the bird nesting season, from March 1st until August 31st inclusive.
- 4.70. This mitigation will effectively address any potential adverse effects upon the vast majority of species recorded within the Application Site.
- 4.71. There is also potential for short-term disturbance to ground nesting species during the construction phase of the Proposed Development. Five ground-nesting species were identified on site: four red-listed species, common snipe, curlew, yellowhammer and meadow pipit, and one amber-listed species, skylark. **Pre-commencement breeding bird ground-nest checks** will be undertaken by a dedicated ECoW or suitably qualified ornithologist before any construction takes place if works are being carried out during the breeding season (March-August).
- 4.72. If ground nesting birds are identified within the site at this time, species-specific buffers will be implemented to protect nesting birds during construction³³. Should a ground nesting species nest or evidence of nest building be recorded during these pre-commencement checks the ECoW will implement an appropriate buffer from construction works, in line with relevant guidance which will remain in place until nesting has completed and the birds have fledged, to be established through monitoring.
- 4.73. The proposed construction of the development would occur in a phased manner, ensuring that substantial portions of the site at any given time would not be subject to live construction works, thus reducing the area which is subject to disturbance and allowing breeding species to establish new territories within the completed parts of the development.
- 4.74. As set out in **Appendix 2D - Biodiversity Management Plan (BMP)**³⁴, the planting of species rich diverse grassland will occur, with the management regime ensuring a varied sward structure. This will benefit local biodiversity by encouraging invertebrate prey which is a key foraging resource; for example, skylark chicks rely solely on invertebrate prey. Areas of wildflower meadow have also been proposed to be planted in replacement of the improved agricultural grassland on site. This will create an insect-rich habitat and support a range of birds and invertebrates.
- 4.75. During the operational phase of the proposed Development, there will be minimal disturbance to local birds. There will be a reduction in disturbance from farming practises and the presence of machinery, and human presence will be minimal.

³³ [Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance | NatureScot](#)

³⁴ Stenson, L. (2026) Biodiversity Management Plan. Drybridge Solar Farm. Neo-Environmental.

- 4.76. These areas of species-rich grassland and wildflower meadow will provide richer heterogenous feeding areas for passerine species such as goldcrest, redwing, starling and skylark. The promotion of habitat suitable for a range of macroinvertebrate species and thus passerine species also increases food abundance for apex predators as a result of the trophic triangle, whereby primary producers provide food for primary and secondary consumers, ultimately benefitting tertiary consumers, such as raptors.
- 4.77. The majority of the other bird species are common generalist species which will adapt to change in the landscape and are seen within grasslands, hedgerows, woodlands and gardens. General good management of hedgerow will benefit all species as the infilling of hedgerow with native species planting and the creation of wildflower rich grassland will improve sheltering and foraging opportunities.
- 4.78. There is potential for short-term disturbance to ground nesting species such as skylark, meadow pipit and snipe. Best-practice construction safeguards will be implemented to ensure disturbance is kept to a minimum and is not expected to result in any reduction in numbers.
- 4.79. With the implementation of habitat enhancement measures it is considered that **the Proposed Development will benefit local populations of birds.**

5. CONCLUSION

- 5.1. The results of the two breeding and six non-breeding bird surveys undertaken between August 2025 and February 2026 indicate that the proposed site predominantly supports common and widespread bird species typical of farmland habitats present.
- 5.2. Results from the monthly bird surveys also conclude that the site has the potential to support wader species such as common snipe and curlew, which were found using improved grassland and wet grassland habitat within the Application Site. In addition, the site supports several gull species (common gull, black-headed gull and herring gull). Red- and amber-listed passerine species were also found calling, singing and foraging within the site boundary.
- 5.3. Best-practice construction safeguards will be implemented to ensure disturbance is kept to a minimum. Pre-commencement breeding bird ground-nest checks and pre-commencement wintering bird check, depending on the timing of the construction period, will be undertaken by a dedicated ECoW or suitably qualified ornithologist. In the event of foraging curlew or breeding ground-nesting birds utilising the site during construction, appropriate disturbance distance buffers will be implemented.
- 5.4. With the implementation of the habitat enhancement measures set out in the Biodiversity Management Plan for locally important bird species and Special Conservation Interests of the surrounding Special Protection Areas, it is considered that the Proposed Development is unlikely have negative effect on local bird species' populations. As the development will improve habitats for local bird species, there will likely be a positive effect on these as a result of the Proposed Development.

6. APPENDIX 2B - FIGURES

- Figure 1 – Transect Route Map
- Figure 2 – Early August 2025 Breeding Bird Survey Map
- Figure 3 – Late August 2025 Breeding Bird Survey Map
- Figure 4 – September 2025 Non-breeding Bird Survey Map
- Figure 5 – October 2025 Non-breeding Bird Survey Map
- Figure 6 – November 2025 Non-breeding Bird Survey Map
- Figure 7 – December 2025 Non-breeding Bird Survey Map
- Figure 8 – January 2026 Non-breeding Bird Survey Map
- Figure 9 – February 2026 Non-breeding Bird Survey Map



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