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Chapter 8: Ecology and Nature Conservation

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INDEX

8 ECOLOGY AND NATURE CONSERVATION

8.1 Introduction

8.1.1.1 This Chapter of the Environmental Impact Assessment (EIA) Report (EIAR) evaluates the potential effects of Bowshiel Solar Farm and Battery Energy Storage System (BESS) (the Proposed Development) on important ecological and ornithological features. This assessment has been undertaken by Environmental Resources Management (ERM).

8.1.1.2 This Chapter of the EIAR is supported by the following figures, provided in **Volume 2: Figures**:

- **Figure 1.1**: Site Location Plan;
- **Figure 1.2**: Development Layout Plan;
- **Figure 8.1a**: Statutory Designated Sites Plan;
- **Figure 8.1b**: Non-Statutory Designated Site Plan; and
- **Figure 8.2**: Ancient Woodland and Habitats of Principal Importance.

8.1.1.3 This Chapter of the EIAR is supported by the following Technical Appendices provided in **Volume 3: Technical Appendices**:

- **Technical Appendix 8.1**: Habitats Survey Report;
- **Technical Appendix 8.2**: Protected Species Survey Report;
- **Technical Appendix 8.3:** Bat Survey Report;
- **Technical Appendix 8.4**: Confidential Badger Annex;
- **Technical Appendix 8.5**: Ornithological Technical Report;
- **Technical Appendix 8.6**: Shadow Habitats Regulations Appraisal (HRA) Report; and
- **Technical Appendix 3.2**: Outline Landscape and Biodiversity Management Plan (oLBMP);

8.1.1.4 The structure of this Chapter is as follows:

- Legislation, Policy and Guidance;
- Consultation;
- Assessment Methodology and Significance Criteria;
- Baseline Conditions;
- Determination of Assessment Scope;
- Scoped into the Assessment of Potential Effects;

- Embedded Mitigation;
- Assessment of Potential Effects;
- Cumulative Effects Assessment;
- Summary of Effects; and
- Statement of Significance.

8.1.1.5 The following terms are used throughout this Chapter:

- The Site: all land within the proposed red line boundary as shown in **Figure 1.1**
- The Proposed Development: the proposed solar photovoltaic (PV) farm and BESS, inclusive of all necessary infrastructure. The Proposed Development layout is shown on **Figure 1.2**.
- Ecology Survey Area (ESA): the land within which protected species could be affected by the Proposed Development, and where ecological surveys were conducted. This includes habitats, protected species and birds. These are shown within the figures within the relevant Technical Appendices.

8.2 Legislation, Policy and Guidance

8.2.1.1 The nature conservation legislation, policy and guidance that is considered relevant to this assessment includes:

- Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive)[1];
- Directive 92/453/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (as amended) (the Habitats Directive)[2];
- Directive 2000/60/EC The Water Framework Directive (WFD)[3];
- Conservation (Natural Habitats, &.c) Regulations 1994 (the Habitat Regulations)[4];
- Conservation of Habitats and Species Regulations[5];

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[1] European Parliament (2009) *Directive 2009/147/EC* [Online] Available at: Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Accessed March 2025)
[2] European Commission (1992) *Council Directive 92/43/EEC the Conservation of Natural habitats and of Wild Fauna and Flora*. Available at: eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN (Accessed March 2025)
[3] European Commission (2000) *Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 Establishing a Framework for Community Action in the Field of Water Policy* [Online] Available at: resource.html (Accessed March 2025)
[4] UK Government (1994) *The Conservation (Natural Habitats , &c.) Regulations 1994*. [Online] Available at: The Conservation (Natural Habitats, &c.) Regulations 1994 (Accessed March 2025)
[5] UK Government (2017) The Conservation of Habitats and Species Regulations 1997. [Online] Available at: The Conservation of Habitats and Species Regulations 2017 (Accessed March 2025)

- Wildlife and Natural Environment (Scotland) Act 2011)[6];
- Protection of Badgers Act 1992[7];
- Nature Conservation (Scotland) Act 2004[8];
- The Wildlife and Countryside Act 1981 (as amended)[9];
- The Environmental Liability (Scotland) Regulations 2009[10];
- Wild Mammals (Protection) Act 1996[11]; and
- Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003[12].

8.2.1.2 The principal biodiversity planning policy framework that is considered relevant to this assessment includes:

- Scotland's Biodiversity Strategy to 2045: Tackling the Nature Emergency[13];
- The Scottish Borders Adopted Local Development Plan 2024[14];
- Scottish Borders Local Biodiversity Action Plan[15];
- National Planning Framework 4 (NPF4)[16]; and

[6] Scottish Government (2011) *Wildlife and Natural Environment (Scotland) Act 2011*. [Online] Available at: Wildlife and Natural Environment (Scotland) Act 2011 (Accessed March 2025)
[7] UK Government (1992) *Protection of Badgers Act 1992*. [Online] Available at: Protection of Badgers Act 1992 (Accessed March 2025)
[8] Scottish Government (2004) *Nature Conservation (Scotland) Act 2004.* Available at: Wildlife and Natural Environment (Scotland) Act 2011 (Accessed March 2025)
[9] UK Government (1981) *Wildlife and Countryside Act 1981, Chapter 69 Part 1*. [Online] Available at: Wildlife and Countryside Act 1981 (Accessed March 2025)
[10] Scottish Government (2009) *The Environmental Liability (Scotland) Regulations 2009.* [Online] Available at: The Environmental Liability (Scotland) Regulations 2009 (Accessed March 2025)
[11] UK Government (1996) *Wild Mammals (Protection) Act 1996*. [Online] Available at: Wild Mammals (Protection) Act 1996 (Accessed March 2025)
[12] Scottish Government (2003) *Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003*. [Online] Available at: Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 (Accessed March 2025)
[13] Scottish Government (2022) *Biodiversity strategy to 2045: tackling the nature emergency – draft* [Online] Available at: Biodiversity strategy to 2045: tackling the nature emergency - draft - gov.scot (Accessed March 2025)
[14] Scottish Borders Council (2024) *Adopted Local Development Plan 2* [Online] Available at: Adopted Local Development Plan 2 | Local development plan | Scottish Borders Council (Accessed March 2025)
[15] Scottish Borders Council (2018) *Scottish Borders Local Biodiversity Action Plan* [Online] Available at: text (Accessed March 2025).
[16] Scottish Government (October 2024) *National Planning Framework 4* [Online] Available at: National Planning Framework 4 - gov.scot (Accessed March 2025)

- Groundwater Protection Policy for Scotland, Version 3[17].

8.2.1.3 Guidance that is considered relevant to this assessment includes:

- Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine[18];
- NatureScot Planning and Development: protected species[19];
- Draft Planning Guidance: Biodiversity[20]; and
- Guidance on Assessing Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems[21].

8.3 Consultation

8.3.1.1 Consultation was undertaken with a number of organisations as part of the EIA process. A summary of key responses relevant for this topic are shown in **Table 8.1**.

[17] Scottish Environment Protection Agency (November 2009) *Groundwater protection policy for Scotland, version 3*. [Online] Available at: Groundwater protection policy for Scotland (Accessed March 2025)
[18] CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3*. Chartered Institute of Ecology and Environmental Management, Winchester, UK. (Accessed March 2025)
[19] NatureScot (2025) *Planning and development: protected species* [Online] Available at: Planning and development: protected species | NatureScot (Accessed March 2025)
[20] Scottish Government (2023) *Biodiversity: draft planning guidance* [Online] Available at: Biodiversity: draft planning guidance - gov.scot (Accessed March 2025)
[21] Scottish Environment Protection Agency (2024) *Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems*. [Online] Available at: guidance-on-assessing-the-impacts-of-developments-on-groundwater-dependent-terrestrial-ecosystems.docx (Accessed March 2025)

TABLE 8.1 CONSULTATION RESPONSES

CONSULTEE	SUMMARY OF CONSULTATION RESPONSE	RESPONSE TO CONSULTEE
NatureScot (NS) Scoping Response 06 December 2024	*"We are content with the proposed approach to the surveys and assessment of impacts.* *We agree that impacts on notified features of nearby Site of Special Scientific Interest (SSSI) designated sites can be scoped out of the assessment.* *We agree that there is no likely significant effect from the proposal on the qualifying interests of nearby Special Protection Areas (SPAs) and Special Area of Conservation (SACs) for the reasons given in the Report. These sites are Outer Firth of Forth and St Andrew's Bay Complex SPA; Firth of Forth SPA; St Abb's Head to Fast Castle SAC and SPA; Berwickshire and North Northumberland Coast SAC; and Greenlaw Moor SPA.* *We support the proposal for the Environmental Impact Assessment Report (EIAR) to include an outline Landscape and Biodiversity Masterplan (oLBMP) that would be worked up and implemented should the proposal be granted permission.*	**Section 8.9** Assessment of Potential Effects details the assessment upon designated sites. A Shadow HRA has been undertaken and can be found in **Volume 3: Technical Appendices**, **Technical Appendix 8.5**.
	We support the proposal for the Environmental Impact Assessment Report (EIAR) to include an outline Landscape and Biodiversity Masterplan (oLBMP) that would be worked up and implemented should the proposal be granted permission.	An oLBMP has been included with this EIAR. This is found in **Volume 3: Technical Appendices**, **Technical Appendix 3.2 oLBMP**.
	We support the proposal for the EIAR to include and outline Construction Environment Management Plan (CEMP)"	The outline CEMP can be found at **Volume 3: Technical Appendices Technical Appendix 3.1 CEMP**.
Scottish Forestry Scoping Response 27 November 2024	*"Looking at the scope of this proposal, there are some areas of existing woodland/trees around the perimeter of the proposed solar farm. Broadly speaking the layout of the solar arrays avoid the areas of woodland and from what is visible in the proposal, there appear to be no plans to remove woodland cover. The only section where there is perhaps some tree felling needed is*	Tree and woodland removal have been avoided by development design. This is discussed **Section 8.8** Embedded Mitigation.

CONSULTEE	SUMMARY OF CONSULTATION RESPONSE	RESPONSE TO CONSULTEE
	around the disused quarry as the aerial photographs show some tree cover albeit minimal. *The first consideration for all woodland removal decisions should be whether the purpose of the proposals can reasonably be met without resorting to woodland removal.* *Scottish Government's Policy on Control of Woodland Removal clearly sets out a strong presumption in favour of protecting Scotland's woodland resources.* *In line with Scottish Government's wider objective to protect and expand Scotland's woodland cover, applicants are expected to develop their proposal with minimal woodland removal. Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits".*	
Scottish Environment Protection Agency Scoping Response 10 December 2024	*"Groundwater Dependent Terrestrial Ecosystems (GWDTE) – a Phase 1 Habitat Survey will be carried out, please note that if the Phase 1 Habitat Survey results indicate that there may be relevant habitats present, a National Vegetation Classification (NVC) should be provided as part of this EIAR."*	A UK Habitat Classification Survey was completed to inform this assessment, the results of these surveys found no habitats that are associated with NVC community's indicative of potential GWTDEs; therefore, an NVC was not required.
Scottish Borders Council Scoping Response 03 April 2025	*"I largely agree with the proposed scope of the EIA, Invertebrate Surveys will be carried out.* *We hold high-level records for small-blue butterflies (Cuipdo minimis) in the area – Butterfly Conservation trust should be consulted for more information.* *In addition, it is advised that;* *There are several records of Brown hare within the Site. This species requires conservation action in accordance with UKBAP and the Scottish Biodiversity List. To protect watercourses and existing woodland, appropriate buffer strips should be accommodated in the Site layout.*	Invertebrate surveys were not required, this is because the habitat within the Site is largely arable and grazing pasture, and therefore unlikely to support protected or priority invertebrate species as detailed in **Table 8.8**.The larval plant of the small blue butterfly is kidney vetch (*Anthyllis vulneraria*), where larvae live on the flower heads. The species is generally found in chalk and limestone grassland, coastal grasslands and sand dunes, and man-made habitats such as quarries, gravel pits road embankments and disused railways. None of these habitats exist

CONSULTEE	SUMMARY OF CONSULTATION RESPONSE	RESPONSE TO CONSULTEE
	As per NPF4 Policy 6, hedgerows ought to be retained, veteran trees and other trees of high biodiversity value need to be retained with a buffer around them so any new planting does not interfere with established root structures and light. *An outline scheme of biodiversity enhancements, including the proposed management and timeframe for implementation, should be submitted with the EIAR to meet the requirements of NPF4 policy 3"*	on Site, and kidney vetch was not recorded; therefore, small blue is unlikely to be present and so further consultation with Butterfly Conservation Trust are not considered necessary. Brown hare has been considered within this assessment and the oLBMP (**Volume 3, Technical Appendix 3.2**) Tree, woodland and hedgerow removal have been avoided by development design. This is discussed **Section 8.8** Embedded Mitigation

8.4 Assessment Methodology and Significance Criteria

8.4.1.1 The following section describes the methodologies undertaken for the Desk Study, Baseline Ecology Surveys and Assessment of Effects.

8.4.2 Desk Study Methodology

8.4.2.1 A Desk Study was conducted in February 2025 to obtain information about relevant designated nature conservation sites and records of protected and / or priority species and habitats. The Desk Study Area (DSA) comprised of a variety of areas surrounding the Site, with radii determined based upon the level of protection and / or ecological range of the different ecological receptors.

8.4.2.2 NS SiteLink[22] was consulted on 27 February 2025 to obtain information regarding the following:

- In line with NatureScot guidance[23], SPAs and Ramsar with geese as a qualifying feature within 20 km of the Site;
- A radius of 5 km from the Site was searched for internationally and nationally designated sites for nature conservation (e.g., SAC or SSSI). The search radius was extended to 10 km for ornithological features[24]; and
- Any areas of woodland on the Ancient Woodland Inventory (AWI) (Scotland) within 500 m of the Site[25].

8.4.2.3 The Wildlife Information Centre (TWIC) was consulted on 21 February 2025 for locally designated sites such as Local Biodiversity Sites (LBS), Local Nature Conservation Sites (LNCS) and Scottish Wildlife Trust (SWT) Reserves, and records of protected and / or priority species within 2 km of the Site.

8.4.2.4 Scotland's Carbon and Peatland Map[26] was consulted on 27 February 2025 to obtain information on nationally important peatlands within 500 m of the Site.

8.4.3 Baseline Survey Methodology

8.4.3.1 The Zone of Influence (ZoI) for ecological features varies depending on their sensitivity to change; as well as the scale, complexity, and duration of potential impacts. Therefore, survey areas have been determined using current best practice guidance and professional judgement.

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[22] NatureScot (2025) *SiteLink* [Online] Available at: SiteLink - Home (Accessed March 2025)
[23] NatureScot (2016) Assessing Connectivity with Special Protection Areas (SPAs)
[24] The larger search area for ornithology is because birds are mobile and can use land to forage far from their breeding sites within designated sites.
[25] 500 m buffer was considered appropriate for ancient woodland, as it is unlikely that ancient woodland would be indirectly affected by the Proposed development beyond this radius.
[26] NatureScot (2016) *Carbon and Peatland 2016 map* [Online] Available at: Carbon and peatland 2016 map | Scotland's soils (Accessed March 2025)

8.4.3.2 Surveys were completed by professional ecologists, who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and of at least a capable level of competence; as per CIEEM's competency framework[27].

8.4.3.3 Fauna and flora that are not considered in this Chapter are not likely to be present based on a lack of suitable habitats within or adjoining the Site, or the Site lies in a geographical area that is beyond the natural range or known distribution for the species concerned.

8.4.3.4 Surveys undertaken to gather baseline data included the following:

- UK Habitat Classification (UKHab) Survey[28];
- Badger Survey [29,30];
- Otter Surveys[31],[32];
- Water Vole Surveys[33],[34],[35];
- Red Squirrel Surveys[36],[37];
- Night-Time Walkover Bats Survey[38];
- Day-time Walkover Bat Survey[38];
- Remote (Static) Monitoring Bat Surveys[38];

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[27] CIEEM (2024) *Competency Framework*. Chartered Institute of Ecology and Environmental Management [Online] Available at: Competency-Framework-2024-V7-Web.pdf (Accessed March 2025)
[28] UKHab LTD (2023) UK Habitat Classification Version 2.0 [Online] Available at: ukhab – UK Habitat Classification (accessed March (2025))
[29] Scottish Badgers (2018) Surveying for Badgers: Good Practice Guidelines (version 1) [Online] Available at: Surveying-for-Badgers-Good-Practice-Guidelines_V1-2020-2455979.pdf (Accessed March 2025).
[30] Harris, S., Cresswell, P and Jefferies, D. (1989) Surveying Badgers Occasional Publication No.9. The Mammal Society, London.
[31] NatureScot (2024) Protected Species Advice for Developer: Otter. [Online] Available at: Standing advice for planning consultations - Otters | NatureScot (Accessed March 2025)
[32] Harris, S., and Yalden, D.W. (2008) Mammals of the British Isles Handbook (4th edition). The Mammal Society, Southampton
[33] NatureScot (2024) Protected Species Advice for Developers: Water Vole [Online] Available at: Standing advice for planning consultations - Water Voles | NatureScot (Accessed March 2025)
[34] [34] Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. Mammal Society, London.
[35] Dean, M. (2021). Water Vole Field Signs and Habitat Assessment. Pelagic Publishing. Exeter, pp 18-19
[36] NatureScot (2024) Standing advice for planning consultation – Red Squirrels [Online] Available at: Standing advice for planning consultations - Red Squirrels | NatureScot (Accessed March 2025).
[37] Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trewhella, W.J., Wells, D. and Wray, S. (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society, Southampton
[38] Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.).* The Bat Conservation Trust, London

- Breeding Bird Surveys[39],[40],[41],[42]; and
- Rare Bird Surveys[43]

8.4.3.5 Information on specific survey methodologies applied as well as survey timings for each of the above surveys is described in the following Technical Appendices:

- **Technical Appendix 8.1**: Habitats Survey Report;
- **Technical Appendix 8.2**: Protected Species Survey Report;
- **Technical Appendix 8.3:** Bat Survey Report;
- **Technical Appendix 8.4**: Confidential Badger Annex; and
- **Technical Appendix 8.5**: Ornithological Technical Report;

8.4.4 Methodology for Assessment of Effects

8.4.4.1 The assessment of impacts and effects of the Proposed Development upon ecological receptors has been completed in accordance with latest guidelines[18]. This sets out the process for assessment broadly following stages, which are described sequentially in the sections below:

- Determining importance of baseline ecological features, including identification of Important Ecological Features (IEFs);
- Identification, assessment and characterisation of ecological effects;
- Incorporation of measures to mitigate identified effects;
- Assessment of significance of residual effects following mitigation;
- Identification of appropriate compensation to offset significant residual effects; and,
- Identification of opportunities for ecological enhancement.

Determination of Importance and Determination of IEFs

8.4.4.2 One of the key challenges for EcIA is to decide which ecological features are sufficiently important to justify a detailed assessment. In EcIA, the 'importance' of a feature is synonymous with 'sensitivity' within a geographical context. Therefore, important features

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[39] Gilbert, G., Gibbons, D.W., and Evans. J. (1998) *Bird Monitoring Methods*. RSPB
[40] Calladine, K., Garner, G., Wernham, C., and Thiel. A. (2009) *The influence of survey frequency on population estimates of moorland breeding birds*. Bird Study, Volume 56, Issue 3
[41] SNH (2017). *Recommended bird survey methods to inform impact assessment of onshore windfarms*. SNH Guidance. SNH, Battleby, Scotland, UK.
[42] Bibby, C., Burgess, N & Mustoe. S. (2007) *Bird Census Techniques*, *2nd edition*. Academic Press, London, UK
[43] Hardey, J., Crick, H., Wernham, C., Riley, H. & Thompson, D. (2009) *raptors: a field guide to survey and monitoring. 2nd edition*. The Stationary Office, Edinburgh, UK.

are those of higher sensitivity and that could be significantly affected by the Proposed Development, both negatively and positively.

8.4.4.3 In accordance with CIEEM guidance[18] the importance of a feature was considered within a defined geographical context from International to Site level as described in **Table 8.2**. In this EcIA expertise, professional judgement and contextual information, such as distribution and abundance of any given features as well as population and conservation status (identified through relevant legislation and policies) has been applied to identify Important Ecological Features (IEFs).

8.4.4.4 Any ecological feature of local importance and above was determined to be IEF and taken forward for assessment if it could be affected by the Proposed Development and / or if impacts could lead to legal offences. Expertise and professional judgement are also applied to consider the potential for impacts on features. For example, a SSSI, due to its protection would be considered of National importance; however, if the SSSI and the features for which it is designated, are unlikely to be impacted by the Proposed Development, then this would not be considered an IEF and would not be taken forward for assessment.

8.4.4.5 The protection of flora and fauna through international or national legislation does not mean that the species concerned is important within that geographic scale (i.e., a badger sett is protected by national legislation, The Protection of Badgers Act 1992, but the presence of a badger sett is not of National importance). Where mitigation is required to avoid legal breaches, this is included in **Sections 8.8 and 8.9**.

8.4.4.6 Expertise, professional judgement and contextual information, such as distribution and abundance of any given features, as well as population and conservation status (identified through relevant legislation and policies) has been applied to identify important features.

TABLE 8.2 GEOGRAPHIC SCALES OF IMPORTANCE

IMPORTANCE	CRITERIA
International	The population has little or no ability to absorb change without fundamentally altering its present character (i.e., the population of a rare and sensitive species in significant decline). An internationally designated site (e.g., an SAC, SPA or Ramsar), or a site meeting criterion for international designation. Species present in internationally important numbers (>1 % of international population)
National (Scotland)	The population has a low ability to absorb change without fundamentally altering its present character (i.e., the population of an uncommon or rare species in decline). A nationally designated site (e.g., SSSI) or a site meeting criterion for national designation. Species present in nationally important numbers (>1 % of Scottish population)
Regional (Southeast Scotland)	The population has moderate capacity to absorb change without significantly altering its present character (i.e., an uncommon or rare, but stable species, or a common / widespread but declining species).

IMPORTANCE	CRITERIA
	Species present within important numbers for southeast Scotland (> 5 % of the population of southeast Scotland). Sites do not meet criteria for SSSI selection, but are greater than county criteria below e.g., a National Nature Reserve (NNR).
County (Scottish Borders)	The population has moderate capacity to absorb change without significantly altering its present character (i.e., an uncommon or rare, but stable species, or a common / widespread but declining species). Species present within important numbers within the Scottish Borders (i.e., > 5 % of the population of Scottish Borders). Priorities within the Local Biodiversity Action Plan (LBAP) where the species occurs within sufficient abundance to maintain local resource. Sites meet criteria for Local Nature Conservation Sites (LNCS), Scottish Wildlife Trust (SWT), Local Nature Reserves (LNR) and Sites of Importance for Nature Conservation (SINC).
Local	The population is tolerant of change without detriment to its character (a common / widespread species that is stable, or uncommon species that is improving). Sites where there is no significant connectivity to International, National, Regional or County designations or a site not meeting criterion for such a designation. A species or habitat of low conservation value with very limited presence Priorities within the LBAP, where they occur in low abundance. Areas of habitat or species considered to appreciably enrich the ecological resource within the area local to the Site.
Less than Local (Site)	The population is resistant to change (any population that is improving its range and abundance). Population of little conservation value, or of local conservation value but with very limited presence. Usually widespread and common habitats and species. Loss of such species from the Site would not be detrimental to the ecology of the local area.

8.4.4.7 Following the identification of IEFs, the IEFs are taken forward for an assessment of effects. The following sections describe how the assessment of effects is undertaken.

Characterising Potential Effects

8.4.4.8 In line with current guidelines[18] the assessment describes the relevant characteristics required to identify potential effects:

- Beneficial or adverse: These are determined according to whether the change is in accordance with nature conservation objectives and policy. A positive impact is a change that improves the quality of the environment and may include halting or slowing an existing decline in the quality of the environment;

- Extent: a spatial or geographical area over which the impact may occur;
- Magnitude: the size, amount, intensity and volume of the impact, which should be quantified if possible (as described in **Table 8.3**) and expressed in absolute or relative terms (e.g., the amount of habitat lost, percentage change to habitat area, percentage decline in a species population);
- Duration: this is defined in relation to ecological characteristics in addition to human timeframes. Impacts may be described as short, medium, long-term, permanent, or temporary;
- Frequency and timing: this will consider the number of times an activity will occur in a limited period that may influence the resulting impact. The timing and frequency of an activity or change may result in an impact if it coincides with seasonal ecological elements (such as protected species' breeding season); and,
- Reversibility: an irreversible impact is one from which recovery is not possible within a reasonable timescale, or there is no reasonable chance of action being taken to reverse it. A reversible impact is one from which spontaneous recovery is possible or which may be counteracted by mitigation.

TABLE 8.3 MAGNITUDE OF IMPACTS

MAGNITUDE	CRITERIA
High	A fundamental change to the baseline condition, leading to a total loss or major alteration of baseline condition.
Medium	A material, partial loss, or alteration of baseline condition.
Low	A slight, detectable alteration of the baseline condition.
Negligible	A barely distinguishable change from baseline condition.

Significant Effects

8.4.4.9 CIEEM discourages the use of the matrix approaches where value, importance and magnitude of impact are combined to determine significance; and recommends describing effects as either 'significant' or 'not significant' underpinned by evidence-based judgements.

8.4.4.10 Therefore, for the purpose of this EcIA, a 'significant effect' is defined as:

- An effect that either supports or undermines the conservation objectives relating to a defined site or ecosystem, or positively or negatively affect the conservation status of species or habitats for which a defined site or ecosystem is designated, or may have positive or negative effects on the condition of the defined site or ecosystem and / or its qualifying interest features;
- An effect on the conservation status that is determined by the sum of the influences acting on the habitat concerned that may affect its extent, structure and functions and its distribution and its typical species within a given geographical area; and,

- An effect on the conservation status that is determined by the sum of the influences acting on the species concerned that may affect its abundance and its distribution within a given geographical area.

Cumulative Effects

8.4.4.11 Cumulative effects can result from individually insignificant, but collectively significant actions, taking place over a period of time or concentrated in a location. It is recognised that cumulative effects correspond to two types:

- Type 1 – These effects are the additive result of multiple effects from the Proposed Development on the same receptor. These potential effects are accessing in Chapter 16: In-combination Effects of this EIAR; and,

- Type 2 – These potential effects are in-combination effects of the Proposed Development with other nearby developments. These potential effects are assessed within **Section 8.10** of this Chapter.

8.4.4.12 The Energy Consents Unit, The Scottish Borders Council Planning Portal and East Lothian Council Planning portal have been searched for any applications for consent within 5 km of the Site which may act cumulatively with the Proposed Development. A 5 km buffer has been employed because it is unlikely that there will be any impacts resulting from the Proposed Development, in which it could act cumulatively with another project. These potential effects are assessed within **Section 8.10**.

Residual Effects

8.4.4.13 Where significant effects are identified through the assessment process, the mitigation hierarchy will be applied to identify specific avoidance, mitigation and compensation measures relating to negative impacts and effects, as well as potential legal breaches relating to protected species.

8.4.4.14 Opportunities to enhance to create new benefits for biodiversity were also be considered and, where achievable, incorporated into the Proposed Development as 'embedded mitigation.' 'Embedded mitigation' is included as part of the assessment.

8.4.4.15 Effects considered to be 'not significant' are expected to be further avoided and / or reduced through the application of good practice during the design, construction, operation and decommissioning phases (e.g., Environmental Management System, Construction Environmental Management Plan (CEMP), Species Protection Plans (SPPs), etc). Where this is not the case specific mitigation measures will be considered to avoid or reduce effects upon IEFs.

8.4.4.16 The residual effects are presented to make it clear to the decision make and stakeholders the likely significance of effects that will result from the Proposed Development upon IEFs, with all mitigation measures in place.

8.4.5 Assessment Limitations

8.4.5.1 Minor survey limitations were identified; however, all baseline data is considered sufficiently robust to inform the EcIA process. Further details can be found in:

- **Technical Appendix 8.1**: Habitats Survey Report;
- **Technical Appendix 8.2**: Protected Species Survey Report;
- **Technical Appendix 8.3:** Bat Survey Report;
- **Technical Appendix 8.4**: Confidential Badger Annex; and
- **Technical Appendix 8.5**: Ornithological Technical Report.

8.4.5.2 The Scoping Report[44] advised that a Phase 1 Habitat Survey and a National Vegetation Classification (NVC) of accessible areas within, and up to 250 m from the Site would be completed. However, the survey undertaken was a UKHab Survey of the Site with a 100 m buffer. A 100 m buffer was considered appropriate because impacts and effects on habitats are limited to the Site boundary only. Furthermore, a UKHab Survey was completed instead of a Phase 1 Habitat Survey as the UKHab Survey has generally replaced Phase 1 Habitat Survey as the main habitat survey within the UK. The UKHab Survey identified that habitats within the Site were mostly farmland and not indicative of NVC communities or potential GWDTEs; therefore, an NVC was considered not required. Considering these factors, the habitat surveys are considered robust to support the EcIA process.

8.5 Baseline Conditions

8.5.1 Desktop Study

Designated Sites

8.5.1.1 **Table 8.4** below summarises the designated sites within the following buffers:

- SPA and Ramsar with geese as a qualifying feature within 20 km of the Site;
- Internationally and nationally designated sites for nature conservation (e.g., SAC or SSSI) within 5 km of the Site, extended to 10 km for ornithological features; and
- Locally designated sites such as LBS, LNCS and SWT Reserves within 2 km of the Site.

8.5.1.2 **Table 8.4** describes the designated sites in the order given above, with the nearest site within each category described first. Distance is measured from the Site boundary.

[44] ERM (2024) *Bowshiel Solar Farm, and Battery Energy Storage System (BESS) EIA Scoping Report*. ERM, Edinburgh, UK.

TABLE 8.4 DESIGNATED SITES WITHIN PROXIMITY OF THE SITE

NAME	DESIGNATION	DISTANCE AND DIRECTION FROM SITE	QUALIFYING FEATURES
SPA and Ramsar Sites with Geese as a Qualifying Feature within 20 km of the Site			
Firth of Forth	Ramsar	14.72 km northwest	**Ramsar Criterion 2** Supporting red throated diver (*Gavia stellata*) and Golden plover (*Pluvialis apricaria*) **Ramsar Criterion 4** Supports the following waterbird species at a critical stage in their life cycles: • Scaup (*Ayhya marila*); • Great crested grebe (*Podiceps cristatus*); • Cormorant (*Phalacrocorax carbo*); • Curlew (*Numenius arquata*); • Eider (*Somateria mollissima*); • Long-tailed duck (*Langula hyemalis*); • Common scoter (*Melanitta fusca*); • Red-breasted merganser (*Mergus serrator*); • Osytercatcher (*Haematopus ostralegus*); • Ringed plover (*Charadrius hiaticula*); • Grey plover (*Pluvialis squatarola*); and • Dunlin (*Calidris alpina alpina*). The assemblage also includes nationally important populations greater than 2,000 individuals of mallard (*Anas platyrhynchos*), lapwing (*Vanellus vanellus*) and Wigeon (*Anas penelope*) **Ramsar Criterion 5** Regularly supports waterbirds in numbers of 20,000 individuals or more. **Ramsar Criterion 6** Regularly supports 1 % or more of the individuals in a population of waterbirds: • Slavonian grebe (*Podiceps auritus*); • Pink-footed goose (*Anser brachyrhynchus*); • Shelduck (*Tadora tadorna*); • Knot (*Calidris canutus*); • Redshank (*Tringa totanus*); • Turnstone (*Arenaria interpres*); • Goldeneye (*Bucephala clangula*); • Bar-tailed godwit (*Limosa lapponica*); and • Sandwich tern (*Sterna sandivensis*).
Firth of Forth	SPA	14.72 km northwest	Qualifies under **Article 4.1** by regularly supporting populations of European importance of red-throated diver, Slavonian grebe, golden plover and bar-tailed godwit. Qualifies under **Article 4.1** by regularly supporting a population of European importance of the Annex I species: sandwich tern during the passage period.

NAME	DESIGNATION	DISTANCE AND DIRECTION FROM SITE	QUALIFYING FEATURES
			Qualifies under **Article 4.2** by regularly supporting populations of European importance of the migratory species pink-footed goose, shelduck, knot, redshank and turnstone. Qualifies under **Article 4.2** by regularly supporting more than 20,000 individual waterfowl, including nationally important populations of the following species: • Scaup; • Slavonian grebe; • Golden plover; • Bar-tailed godwit; • Pink-footed goose; • Shelduck; • Knot; • Redshank; • Turnstone; • Great crested grebe; • Cormorant; • Red-throated diver; • Curlew; • Eider; • Long-tailed duck; • Common scoter; • Velvet scoter (*Melannita fusca*); • Goldeneye; • Red-breasted merganser; • Oystercatcher; • Ringed plover; • Grey plover; and • Dunlin.
Greenlaw Moor	Ramsar	18.72 km southwest of the Site	**Ramsar criterion 6** Regularly supports 1 % or more of the individuals of a population of pink-footed goose.
Greenlaw Moor	SPA	18.72 km southwest	Qualifies under **Article 4.2** by regularly supporting, in winter, an internationally important population of pink-footed goose.
SPA and Ramsar with Ornithological Features within 10 km of the Site			
Outer Firth of Forth and St. Andrew's Bay Complex	SPA	4.47 km north	Qualifies under **Article 4.1** by regularly supporting a non-breeding population of European importance of the following Annex I species: red-throated diver, Slavonian grebe, little gull (*Larus minutus*), common tern (*Sterna Hirundo*) and Arctic tern (*Sterna paradisaea*). Qualifies under **Article 4.2** by regularly supporting populations of European importance of the following migratory waterfowl species: common eider, and by regularly supporting in excess of 20,000 individual waterfowl including nationally important populations of the following species: long-tailed duck, common scoter, velvet scoter, common goldeneye, red-breasted merganser. Qualifies under **Article 4.2** by regularly supporting populations of European importance of the following migratory species of seabird: European shag (*Phalacrocorax aristotelis*) and northern gannet (*Morus bassanus*). Qualifies under **Article 4.2** by regularly supporting in excess of 20,000 individual seabirds during the breeding season, including nationally important populations of the following species: • Atlantic puffin (*Fratercula arctica*); • Black-legged kittiwake (*Rissa tridactyla*); • Manx shearwater (*Puffinus puffinus*); • Common guillemot (*Uria aalge*); and • Herring gull (*Largus argentatus*).

NAME	DESIGNATION	DISTANCE AND DIRECTION FROM SITE	QUALIFYING FEATURES
			• Qualifies under **Article 4.2** by regularly supporting in excess of 20,000 individual seabirds during the non-breeding season including nationally important populations of the following species: • Black-headed gull (*Chroicocephalus ridibundus*); • Common gull (*Larus canus*); • Herring gull; • Common guillemot; • European shag; • Black-legged kittiwake; and, • Razorbill (*Alca torda*).
St. Abb's Head to Fast Castle	SPA	4.47 km north	Qualifies under **Article 4.2** by regularly supporting more than 20,000 seabirds, including nationally important populations of the following species: • Razorbill; • Common guillemot; • Black-legged kittiwake; • Herring gull; and • European shag.
SACs and SSSIs within 5 km of the Site			
Pease Bridge Glen	SSSI	0.89 km north	Pease Bridge Glen SSSI is notified for its diverse intact ancient woodlands and its nationally important bryophyte flora.
Pease Bay Coast	SSSI	2.43 km north	The Site is designated for its range of para-maritime cliff-slope grassland communities and saltmarsh.
St. Abb's Head to Fast Castle	SAC	4.42 km north	The Site is designated for vegetated sea cliff habitats.
St. Abb's Head to Fast Castle	SSSI	4.42 km north	St. Abb's Head and Fast Castle SSSI is designated for the following biological features: • Coastlands: Maritime cliff; • Birds: Seabird colony, breeding; • Birds: Guillemot, breeding; and, • Kittiwake
Berwickshire Coast (Intertidal)	SSSI	4.50 km northeast	The Site is designated for reefs and sea caves.
Drone Moss	SSSI	4.54 km east	Drone Moss SSSI is designated for raised bog.
Locally Designated Sites (such as LBS, LNCS and SWT) within 2 km of the Site			
Bowshiel Dean and Edmund's Dean	Scottish Borders Local Biodiversity Site (LBS)	Immediately adjacent to the Site to the south.	The Site is notified for the following notable habitats and species: • Semi-natural broadleaved woodland; • Semi-natural coniferous woodland; • Standing water; • Wood melick (*Melica uniflora*); • Corn spurrey (*Spergula arvensis*); • Adder (*Vipera berus*); and. • Smooth stonewort (*Nitella flexilis*)
Penmanshiel Wood	Scottish Borders LBS site	72 m north	Is notified for its broadleaved semi-natural woodland, unimproved neutral grassland and associated locally rare plants, bryophytes and insects, breeding birds and mammals.

NAME	DESIGNATION	DISTANCE AND DIRECTION FROM SITE	QUALIFYING FEATURES
Tower Dean and Pease Burn	Scottish Borders LBS	500 m north	Is designated for its broadleaved semi-natural woodland, and the following associated species: intermediate polypody (*Polypodium interjectum*), bluebell (*Hyacinthoides non-scripta*), compact feather moss (*Conardia compacta*), common pipistrelle (*Pipistrellus pipistrellus*).
Penmanshiel Moor Complex	Scottish Borders Scottish Wildlife Trust (SWT) Site	919 m east	No information provided by TWIC.
Old Townhead Pond	Scottish Borders LBS	1.08 km northeast	Is notified for is pond and fen (basin mire) habitats and associated flora and fauna.

Habitats

8.5.1.3 The data search returned four areas of ancient woodland listed on the Ancient Woodland Inventory AWI (Scotland), which are present within 500 m of the Site. One of these woodland parcels is defined as long-established (of plantation origin), with the other three defined as ancient (of semi-natural origin). The nearest of these is Penmanshiel Wood, which is separated from the Site by the A1 Road. The areas of ancient woodland are listed below, with the position of these woodland parcels relative to the Site shown on **Figure 8.2:**

- Penmanshiel Wood Ancient (of semi-natural origin), which lies approximately 72 m east of the Site;
- Glen Fin, which is approximately 160 m north of the Site;
- Penmanshiel Wood Long established (of plantation origin) is approximately 460m northeast of the Site; and
- Tower Dean and Pease Burn Ancient Woodland, which lies approximately 500 m north of the Site;

8.5.1.4 According to the NatureScot Carbon and Peatland Map 2016[26] there is no Class 1 or Class 2 peatland within 500 m of the Site, with the Site itself being mineral soil.

8.5.1.5 The desk study returned the following Habitats of Principal Importance (HPI) as listed on the Scottish Biodiversity List (SBL) within 2 km of the Site:

- Lowland deciduous woodland (nearest of these lies immediately adjacent to the south of the Site); and
- Rivers – the nearest of these is Pease Burn, which lies immediately adjacent to the south of the Site at its nearest point.

Protected Species

8.5.1.6 **Table 8.5** details the protected and priority species records provided by TWIC within a 2 km radius of the Site from the last ten years. There is a key at the end of the table to explain acronyms.

8.5.1.7 **Table 8.6** details the protected and priority bird species provided by TWIC within a 2 km radius of the Site from the last ten years. There is a key at the end of the table to explain acronyms.

TABLE 8.5 PROTECTED AND PRIORITY SPECIES RECORDS WITHIN 2 KM OF THE SITE WITHIN THE LAST TEN YEARS

TAXONOMIC GROUP	SPECIES	CONSERVATION PRIORITY / LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD (S)
Insect – butterfly	Small heath (*Coenonymphia pamphilus*)	SBL	1 (2016)

TAXONOMIC GROUP	SPECIES	CONSERVATION PRIORITY / LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD (S)
	Wall (*Lasiommata megera*)	SBL	4 (2016 – 2019)
Insect – moth	Grey dagger (*Acronicta psi*)	SBL	2 (2017 & 2021)
	Small phoenix (*Ecliptoptera silaceata*)	SBL	2 (2017)
	Golden-rod pug (*Eupithecia virgaureata*)	LBAP	2 (2021)
	White ermine (*Spilosoma lubricipe*)	SBL	5 (2017)
Terrestrial Mammal	Brown hare (*Lepus europaeus*)	SBL	44 (2015 – 2019)
	Badger	LBAP, PBA	14 (2015 – 2021)
Flowering plant	Common cudweed (*Filago vulgaris*)	LBAP, SBL	5 (2019)
	Corn spurrey (*Spergula arvensis*)	LBAP	1 (2019)

Key

HR: The Conservation (Natural Habitats, &c.) Regulations 1994 (European Protected Species)

WCA: Wildlife and Countryside Act 1981 (as amended)

SBL: Scottish Biodiversity List

PBA: The Protection of Badgers Act 1992.

LBAP: Scottish Borders Local Biodiversity Action Plan

TABLE 8.6 PROTECTED AND PRIORITY BIRD RECORDS WITHIN 2 KM OF THE SITE WITHIN THE LAST TEN YEARS

SPECIES	CONSERVATION PRIORITY / OF LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD(S)
Black-headed gull (*Choicocephalus ridibundus*)	SBL, BoCC AMBER	5 (2015 – 2018)
Black-throated diver	SBL, BoCC AMBER, WCA Sch1	3 (2015 – 2017)
Brambling (*Fringilla montifringilla*)	SBL, WCA Sch1	1 (2016)

SPECIES	CONSERVATION PRIORITY / OF LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD(S)
Bullfinch (*Pyrrhula pyrrhula*)	LBAP, BoCC Amber, SBL	8 (2015 – 2016)
Common guillemot	LBAP, BoCC AMBER	3 (2016 – 2018)
Common gull	LBAP, BoCC AMBER	1 (2016)
Common scoter	LBAP, SBL, BoCC RED, WCA Sch1	3 (2015 – 2016)
Cormorant	LBAP	9 (2015 – 2019)
Curlew	BoCC RED, SBL	8 (2015 – 2019)
Curlew sandpiper (*Calidris ferruginea*)	BoCC AMBER	1 (2019)
Dipper (*Cinclus cinclus*)	LBAP, BoCC AMBER	14 (2014 – 2019)
Dunlin	LBAP, BoCC RED, SBL	1 (2015)
Dunnock (*Prunella modularis*)	LBAP, BoCC AMBER	14 (2015 – 2021)
Eider	LBAP, BoCC AMBER	4 (2016)
Fulmar (*Fulmarus glacialis*)	LBAP, BoCC AMBER	7 (2015 – 2016)
Gannet (*Morus bassanus*)	BoCC AMBER	7 (2015 – 2019)
Goldcrest (*Regulus regulus*)	LBAP	6 (2015)
Golden plover	LBAP, SBL	1 (2016)
Goldeneye	LBAP, BoCC RED, WCA Sch1	3 (2015 - 2018)
Great black-backed gull (*Larus marinus*)	BoCC AMBER	4 (2015 – 2018)
Great northern diver (*Gavia immer*)	LBAP, BoCC AMBER, SBL, WCA Sch1	4 (2016 – 2018)
Grey partridge (*Perdix perdix*)	LBAP, BoCC RED, SBL	2 (2015 & 2019)
Grey plover	LBAP, BoCC AMBER	16 (2015 – 2018)
Grey wagtail (*Motacilla cinerea*)	LBAP, BoCC AMBER	7 (2015 – 2021)
Herring gull	LBAP, BoCC RED, SBL	22 (2015 – 2021)
House martin (*Delichon urbicum*)	BoCC RED	11 (2015 – 2021)

SPECIES	CONSERVATION PRIORITY / OF LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD(S)
House sparrow (*Passer domesticus*)	LBAP, BoCC RED, SBL	14 (2014 – 2019)
Iceland gull (*Larus glaucoides*)	BoCC AMBER	2 (2017)
Kestrel (*Falco tinnunculus*)	LBAP, BoCC AMBER, SBL	4 (2015 – 2021)
Kittiwake	LBAP, BoCC RED	2 (2016 & 2018)
Lapwing	LBAP, BoCC RED, SBL	5 (2016 – 2021)
Lesser black-backed gull	LBAP, BoCC AMBER	1 (2015)
Linnet (*Linnaria cannabina*)	BoCC RED, SBL	11 (2015 – 2021)
Long-tailed duck	LBAP, BoCC RED, WCA Sch1	13 (2015 – 2018)
Mallard	BoCC AMBER	8 (2015 – 2019)
Marsh tit	BoCC RED	1 (2015)
Meadow pipit (*Anthus pratensis*)	LBAP, BoCC AMBER	16 (2015 – 2021)
Mediterranean gull (*Ichthyaetus melanocephalus*)	BoCC AMBER	1 (2018)
Mistle thrush (*Turdus viscivorus*)	LBAP, BoCC RED	6 (2015)
Osytercatcher	LBAP, BoCC AMBER	13 (2015 – 2019)
Pink-footed goose	BoCC AMBER	2 (2015 & 2016)
Puffin	LBAP, BoCC RED	1 (2016)
Purple sandpiper (*Calidris maritima*)	LBAP, BoCC RED, SBL, WCA Sch1	6 (2016 – 2018)
Raven (*Corvus corax*)	LBAP	10 (2015 & 2018)
Razorbill	LBAP, BoCC AMBER	3 (2016 & 2018)
Red-breasted merganser	BoCC AMBER	12 (2015 – 2018)
Redshank (*Tringa tetanus*)	LBAP, BoCC AMBER	6 (2015 – 2018)
Redstart (*Phoenicurus phoenicurus*)	LBAP	1 (2018)
Red-throated diver	LBAP, SBL, WCA Sch1	20 (2015 – 2018)

SPECIES	CONSERVATION PRIORITY / OF LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD(S)
Reed bunting (*Emberiza schoeniclus*)	LBAP, BoCC AMBER	7 (2018 & 2019)
Ringed plover	LBAP, BoCC RED	3 (2018)
Rook (*Corvus frugilegus*)	BoCC AMBER	6 (2015 – 2018)
Sand martin (*Riparia riparia*)	LBAP	1 (206)
Sanderling (*Calidris alba*)	LBAP, BoCC AMBER	1 (2015)
Sandwich tern	BoCC AMBER, SBL,	4 (2016 – 2019)
Sedge warbler (*Acrocephalus schoenobaenus*)	BoCC AMBER	1 (2019)
Shag	BoCC RED	7 (2016 – 2018)
Shelduck	LBAP, BoCC AMBER	4 (2015 – 2018)
Siskin	SBL	3 (2015)
Skylark (*Aluada arvensis*)	LBAP, BoCC RED, SBL	24 (2015 – 2021)
Slavonian grebe	LBAP, BoCC AMBER, SBL	1 (2015)
Song thrush (*Turdus philomelos*)	LBAP, BoCC AMBER, SBL	13 (2015 – 2021)
Sparrowhark (*Accipter nisus*)	BoCC AMBER	3 (2015 – 2019)
Spotted flycatcher (*Muscicapa striata*)	LBAP, BoCC RED, SBL	1 (2019)
Starling (*Strunus vulgaris*)	LBAP, BoCC RED	4 (2015 – 2021)
Swallow (*Hirundo rustica*)	LBAP	20 (2015 – 2021)
Tree sparrow (*Passer montanus*)	LBAP, BoCC RED, SBL	2 (2015 & 2018)
Turnstone (*Arenaria interpres*)	LBAP, BoCC AMBER	1 (2016)
Velvet scoter	LBAP, BoCC RED	1 (2018)
Water pipit (*Anthus spinoletta*)	BoCC AMBER	6 (2015 & 2016)
Wheatear (*Oenanthe Oenanthe*)	BoCC AMBER	8 (2017 – 2019)
Whimbrel (*Numenius phaeopus*)	LBAP, BoCC RED, WCA Sch1	1 (2018)

SPECIES	CONSERVATION PRIORITY / OF LEGAL STATUS	NUMBER OF RECORD(S) & YEAR(S) OF RECORD(S)
Whitethroat (*Curruca communis*)	BoCC AMBER	8 (2015 – 2021)
Willow warbler (*Phylloscopus trochilus*)	LBAP, BoCC AMBER	17 (2015 – 2021)
Woodpigeon (*Columba palumbus*)	BoCC AMBER	37 (2015 – 2021)
Wren (*Troglodytes troglodytes*)	BoCC AMBER	33 (2015 – 2021)
Yellow wagtail (*Motacilla flava*)	LBAP, BoCC RED, SBL	1 (2018)
Yellow-browed warbler (*Phylloscopus inornatus*)	BoCC AMBER	1 (2015)
Yellowhammer (*Emberiza citronella*)	LBAP, BoCC RED, SBL	16 (2015 – 2021)

Key

WCA Sch1: Listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)

SBL: Scottish Biodiversity List

BoCC AMBER: Amber-listed species on the UK BoCC

BoCC RED: Red-listed species on the UK BoCC

LBAP: Scottish Borders Local Biodiversity Action Plan

8.5.2 Baseline Survey Findings

8.5.2.1 A summary of the results of the habitat and protected species surveys are provided in this Section. Full survey results are presented in **Volume 3: Technical Appendices** of this EIAR, **Technical Appendix 8.1: Habitats Survey Report**, **Technical Appendix 8.2: Protected Species Survey Report**, **Technical Appendix 8.3: Bat Survey Report**, **Technical Appendix 8.4**: **Confidential Badger Annex**, and **Technical Appendix 8.5: Ornithological Technical Report**.

8.5.2.2 The following habitats were recorded within the Site:

- Grassland (bracken, other neutral grassland and modified grassland);
- Woodland (broadleaved, mixed and yew woodland, other broadleaved woodland, other woodland mixed, and coniferous woodland);
- Hedgerows and scrub (native hedgerow, species-rich native hedgerows, blackthorn scrub and gorse scrub);
- Arable (winter stubble and non-cereal crops); and

- Urban and Suburban (Developed sealed surface, buildings, artificial unvegetated, sealed surface and sparsely vegetated urban land).

8.5.2.3 **Table 8.7** details what habitat will be lost to facilitate the Proposed Development.

TABLE 8.7 HABITAT LOST TO FACILITATE THE PROPOSED DEVELOPMENT

UKHAB COMMUNITY	APPROXIMATE AREA OF HABITAT WITHIN HABITAT SURVEY AREA (HA) / LENGTH (M)	APPROXIMATE AREA OF HABITAT LOSS (HA) / (M)	APPROXIMATE % AGE OF HABITAT COMMUNITY LOST
c1c5 – Winter stubble	41.01 ha	24.01 ha	58.55 %
c1d – Non-cereal crops	10.72 ha	3.68 ha	34.33 %
g1c - Bracken	1.99 ha	0 ha	0
g3c – Other neutral grassland	11.55 ha	0 ha	0
g4 – Modified grassland	143.31 ha	52.62 ha	36.71 %
h3a - Blackthorn scrub	0.75 ha	0 ha	0
h3a – Gorse scrub	7.99 ha	0 ha	0
r1a – Eutrophic standing water	0.11 ha	0 ha	0
u1b – Developed sealed surface	8.31 ha	0.37 ha	4.45 %
u1b5 – Buildings	0.34 ha	0 ha	0
u1c – Artificial unvegetated, unsealed surface	0.50 ha	0 ha	0
u1f – Sparsely vegetated urban land	0.21 ha	0 ha	0
w1 – Broadleaved, mixed and yew woodland	0.57 ha	0 ha	0
w1g – Other broadleaved woodland	3.7 ha	0 ha	0
w1h – Other woodland; mixed	16.81 ha	0 ha	0

UKHAB COMMUNITY	APPROXIMATE AREA OF HABITAT WITHIN HABITAT SURVEY AREA (HA) / LENGTH (M)	APPROXIMATE AREA OF HABITAT LOSS (HA) / (M)	APPROXIMATE % AGE OF HABITAT COMMUNITY LOST
w2 – Coniferous woodland	2.58 ha	0 ha	0
w2c – Other coniferous woodland	2.98 ha	0 ha	0
u1e – Built linear features	3171 m	0 m	0
h2a – Native hedgerow	2369.50 m	0 m	0
h2a5 – Species-rich native hedgerow	617.73 m	0 m	0

8.5.2.4 The following species were recorded within the Site:

- Badger;
- Bats (Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bats (BLE) (*Plecotus auritus*), *Myotis spp., and Nyctalus spp*;
- Breeding birds (11 target species including skylark, wren, willow warbler and quail (*Coturnix coturnix*); and
- Brown hare.

8.6 Determination of Assessment Scope

8.6.1 Determination of Importance

8.6.1.1 **Table 8.8** assigns a level of importance in accordance with the geographical scale described in **Table 8.2** based on, professional judgement and contextual information, such as distribution and abundance of any given features as well as population and conservation status. Following determination of importance, an assessment on whether the feature is an IEF has been undertaken. Features that are IEFs are those which are of greater than Less than Local importance and subject to potential effects from the Proposed Development. As an example, a SSSI will be considered of 'National' importance due to its legal protection; however, if the feature has no ecological connectivity to the Site, and no impacts are anticipated, the feature is not considered an IEF.

TABLE 8.8 DETERMINATION OF IMPORTANCE

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
Firth of Forth SPA / Ramsar; Greenlaw Moor SPA / Ramsar; Outer Firth of Forth and St. Andrews Bay Complex SPA; and St.Abb's Head to Fast Castle SPA/SAC	The Firth of Forth SPA / Ramsar, Greenlaw Moor SPA / Ramsar, Outer Firth of Forth and St. Andrews Bay Complex SPA and St. Abb's Head to Fast Castle SPA are all afforded protection through European legislation and are therefore of international importance.	Significant effects to these sites are unlikely, and as per the Scoping Response received from the ECU, NatureScot agreed with the Scoping Report[44] , which states that impacts on nearby SAC/SPA and Ramsar are unlikely. Therefore, as impacts and effects to these sites are unlikely, these sites are not IEFs and scoped out of the assessment. Assessment of European Sites (and associated Ramsar sites) is presented within **Technical Appendix 8.6: Shadow HRA Report** and therefore are discussed no further within this Chapter.	Not an IEF and scoped out of the assessment.
Pease Bridge Glen SSSI; Pease Bay Coast SSSI; St. Abb's Head to Fast Castle SSSI; Berwickshire Coast (Intertidal) SSSI; and Drone Moss SSSI	Pease Bridge Glen SSSI, Pease Bay SSSI, St. Abb's Head to Fast Castle SSSI, Berwickshire Coast (Intertidal) SSSI, and Drone Moss SSSI are afforded protection through National legislation and are therefore of National importance	Significant effects to these SSSIs are unlikely, and as per the Scoping response received from NatureScot via the ECU, NatureScot agreed with the Scoping Report[44], which states that impacts on nearby SSSI designated sites are unlikely. Therefore, as impacts and effects to these SSSIs are unlikely, the SSSIs are not IEFs and scoped out of the assessment.	Not an IEF and scoped out of the assessment.
Bowshiel Dean and Edmund's Dean LBS	Bowshiel Dean and Edmund's Dean LBS is designated for its woodland habitat and associated flora and fauna. Bowshiel Dean and Edmund's Dean is an LBS and the habitats and species which it supports appreciably enrich the local area, as such	Bowshiel Dean and Edmund's Dean LBS lies immediately adjacent to the Site and is an area of woodland. This Site and its woodland will be avoided by the Proposed Development and infrastructure and as such the designated site will not be impacted by	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	Bowshiel Dean and Edmund's Dean LBS is of Local importance.	the Proposed Development. Therefore, as Bowshiel Dean and Edmund's Dean LBS will not be impacted by the Proposed Development it is not an IEF and is scoped out of the assessment.	
Penmanshiel Wood LBS	Penmanshiel Wood LBS is designated for its broadleaved woodland, unimproved neutral grassland and associated locally rare plants, bryophytes and insects, breeding birds and mammals. Penmanshiel Wood is an LBS and the habitats and species which it supports appreciably enrich the local area; therefore, Penmanshiel Wood is of Local importance.	Although the Site lies only 72 m from Penmanshiel Wood LBS at its nearest point it is separated from Penmanshiel Wood LBS by the A1 and so there is no ecological connection between the Site and Penmanshiel Wood LBS, as such Penmanshiel Wood LBS is not an IEF and is scoped out of the assessment	Not an IEF and scoped out of the assessment.
Tower Dean and Pease Burn LBS	Tower Dean and Pease Burn LBS is designated for its broadleaved semi-natural woodland and associated flora and common pipistrelle. Tower Dean and Pease Burn is an LBS and the habitats and species which it supports appreciably enrich the local area; therefore, Tower Dean and Pease Burn is of Local importance	Tower Dean and Pease Burn LBS is approximately 500 m north of the Site at its nearest point. Due to distance between the designated site and the Site, direct and indirect effects are not anticipated, as such Tower Dean and Pease Burn LBS is not an IEF and is scoped out of the assessment.	Not an IEF and scoped out of the assessment
Penmanshiel Moor Complex SWT	Penmanshiel Moor is an SWT, and as the Site satisfies the criteria for an SWT site, as per **Table 8.2**, Penmanshiel Moor is of County importance.	Penmanshiel Moor Complex SWT is approximately 919 m east from the Site, though its designation information was not provided by TWIC. Due to distance from the Site and the fact the Site is separated from Penmanshiel	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
		Moor by Complex SWT by the A1, impacts and effects are not anticipated. Therefore, Penmanshiel Moor Complex SWT is not an IEF and is scoped out the assessment.	
Old Townhead Pond LBS	Old Townhead Pond LBS is notified for its pond and fen habitats and associated flora and fauna, which enrich the local area. Old Townhead Pond is of Local importance.	Old Townhead Pond LBS lies approximately 1.08 km northeast of the Site and is separated from the Site by the A1 and thus impacts and effects because of the Proposed Development are unlikely. Therefore, Old Townhead Pond LBS is not an IEF and is scoped out of the assessment.	Not an IEF and scoped out of the assessment.
Grassland (Bracken (g1c), Other neutral grassland (g3c), Modified grassland (g4))	As per the UK Habitat Classification Version 2.0[28] these habitats are widespread and commonly encountered grasslands that occur on farmland and in built up areas. These grassland habitats are not protected and are not listed on the SBL as a priority habitat for conservation in Scotland. The grassland habitats are unlikely to support large populations of protected and /or priority species. As such the habitat is of Less than Local importance.	Grassland habitats are common and widespread and unlikely to support large populations of protected and or priority species. In addition, though the habitats will be affected by the Proposed Development they are of Less than Local importance, easily replaced and will be compensated through the oLBMP (**Technical Appendix 3.2 oLBMP)**. Therefore, grassland habitats are not IEFs and are scoped out of the assessment.	Not an IEF and scoped out of the assessment.
Woodland (Broadleaved, mixed and yew woodland (w1), Other broadleaved	The woodland habitats within, and adjacent to the Site may conform to those listed on the SBL and therefore would be conservation priority in Scotland.	The design of the Proposed Development has taken into consideration the presence of woodland, and as such all woodland will be avoided by the Proposed Development infrastructure. Furthermore, indirect impacts	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
woodland, (w1g), Other woodland mixed; (w1h) and coniferous woodland (w2))	Therefore, the habitat is of National importance. Woodland habitat can support a variety of fauna including badgers, bats and breeding and foraging birds.	are avoided as a 15 m buffer will be employed between Proposed Development infrastructure and any areas of woodland listed on the AWI (Scotland), and the (Root Protection Zone) RPZ of trees and woodland will also be avoided. This has been included in the design of the Proposed Development and will be secured by appropriate measures within the CEMP, (**Technical Appendix 3.1 oCEMP).** Therefore, woodland habitats will not be affected by the Proposed Development and as such are not an IEF and are scoped out of the assessment.	
Hedgerows (Native hedgerow (h2a), species-rich native hedgerow (h2a5))	Native hedgerows are widespread in the UK, with around half a million miles of hedgerow present within the UK[45]. The native hedgerows within the Site contain at least one woody UK native species, are listed on the SBL and as such are a conservation priority in Scotland. Hedgerows can support a variety of protected and / or priority species such as badger, breeding birds and bats. Though native hedgerow is an SBL, as it is so widespread throughout the UK, the hedgerows within the Site are of Local importance.	Hedgerow habitats will be retained, and a buffer 5 m will be employed between hedgerows and the infrastructure of the Proposed Development. Therefore, hedgerows will not be affected by the Proposed Development and as such are not considered an IEF and scoped out of the assessment.	Not an IEF and scoped out of the assessment.

[45] Woodland Trust (2025) *Hedgerows*

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
Scrub (Gorse scrub (h3e), blackthorn scrub (h3e))	Gorse scrub can be seen from heaths and coastal grasslands to towns and gardens and is considered common within the UK[46], and blackthorn is widespread[47]. Scrub can support several protected and priority species including invertebrates, breeding and foraging birds and badger. This habitat is therefore considered to enrich the ecological resource within the area local to the Site, and as such is of Local importance.	Scrub habitats are common and widespread and unlikely to support large populations of protected and or priority species. In addition, though the habitats will be affected by the Proposed Development they are of Local importance, easily replaced and will be compensated through the oLBMP (**Technical Appendix 3.2 oLBMP)**. Therefore, scrub habitats are not IEFs and are scoped out of the assessment.	Not an IEF and scoped out of the assessment.
Arable (Cereal crops (c1c), Winter stubble (c1c5) and Non-cereal crops (c1d)).	Cereal crops, winter stubble and non-cereal crops are farmland, and the utilised agricultural area within the UK is 16.8 million hectares as of 2024 and accounts for 64% of the total land area of the UK[48]; therefore, all these habitats are common and widespread within the UK. Cereal crops, winter stubble and non-cereal crops lack floral diversity and are unlikely to house large populations of protected and / or priority species. Furthermore, they are not protected and not listed on the SBL.	Arable habitats are common and widespread and unlikely to support large populations of protected and or priority species. In addition, though the habitats will be affected by the Proposed Development they are of Less than Local importance, easily replaced and will be compensated through the oLBMP (**Technical Appendix 3.2 oLBMP)**. Therefore, grassland habitats are not IEFs and are scoped out of the assessment.	Not an IEF and scoped out of the assessment.

[46] Wildlife Trusts (2025) *Common gorse*. [Online] Available at: Common gorse | The Wildlife Trusts (Accessed March 2025).
[47] Wildlife Trusts (2025) *Blackthorn*. [Online] Available at: Blackthorn | The Wildlife Trusts (Accessed March 2025).
[48] UK Government (2025) *Agricultural land use in United Kingdom at 1 June 2024*. [Online] Available at: Agricultural Land Use in United Kingdom at 1 June 2024 - GOV.UK (Accessed March 2025)

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	Considering the above cereal crops, winter stubble and non-cereal crops are of Less than Local importance.		
Urban (Developed sealed surface (u1b), Buildings (u1b5) Artificial unvegetated sealed surface (u1c), Sparsely vegetated urban land)	Urban habitats (developed sealed surface, buildings, artificial unvegetated sealed surface and sparsely vegetated urban land) (are ubiquitous within the UK, are not protected and are unlikely to support large populations of protected and / or priority species. Considering the above urban habitats are of Less than Local importance.	Urban habitats are of Less than Local importance, and although these habitats will be affected by the Proposed Development, the loss of these habitats would not be detrimental to the ecology of the local area, and they are easily compensated. Therefore, grassland habitats are not IEFs and are scoped out of the assessment.	Not an IEF and scoped out of the assessment.
Badger	Badger is present within the Site and is protected by the Protection of Badgers Act 1992. In Scotland, badger has been recorded throughout the mainland, and on the islands of Arran and Skye, with an estimated population of between 7300 and 11200 individuals[49]. Therefore, badger is considered common and widespread, and stable, in Scotland, thus any population using the Site is of Local importance.	Due to badger and their setts being present within the Site, the species may be subject to impacts and effects because of the Proposed Development. Therefore, badger is an IEF and scoped into the assessment.	Badger is an IEF and scoped into the assessment.

[49] Mitchell – Jones, A.J. (2020) *Badger impacts on biodiversity and agriculture in Scotland: a literature review*. *NatureScot Research Report No. 1205.*

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
Common and soprano pipistrelle	Common and soprano pipistrelle were recorded throughout the NBW and static monitoring, and account for more than 90% of bat activity recorded in the static detectors. Activity was highest close to the pond in the middle of the Site, and in the peripheries of the Site close to woodland areas. Both these species are afforded protection under Annex II of the Habitats Directive and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are listed on the SBL. According to the Bat Mitigation Guidelines[50] common and soprano pipistrelle are widespread and common throughout southern Scotland where the Site is located. Therefore, the population of common and soprano pipistrelle within southern Scotland is considered common and widespread and tolerant of changer, thus common and soprano pipistrelle are of Local importance.	Common and soprano pipistrelle are present within the Site; however, no roosts have been recorded, and no trees or buildings will be affected by the Proposed Development. Therefore, no bat roosts will be affected. Furthermore, with embedded mitigation in place, it is unlikely that common and soprano pipistrelle will be impacted by the Proposed Development, and there is negligible risk of a breach of the legislation afforded to protect common and soprano pipistrelle. Therefore, common and soprano pipistrelle are not IEFs and scoped out of the assessment	Not an IEF and scoped out of the assessment.
Myotis spp.	*Myotis spp.*, are afforded protection under Annex II of the Habitats Directive and Schedule 5 of the Wildlife and Countryside	No roosts have been recorded, however, trees and woodland within the Site have been recorded and these are habitats which can contain bat roosts; however, no trees or	Not an IEF and scoped out of the assessment.

[50] Reason, P.F. and Wray, S. (2023) *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management , Ampfield, UK.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	Act 1981 (as amended) and are listed on the SBL. *Myotis spp.,* accounted for 8.08 % of bat calls within the static monitoring and were recorded throughout the monitoring period. According to the Bat Mitigation Guidelines[50], there are four species of *Myotis spp.,* which are resident within southern Scotland where the Site is located. Natterer's (*Myotis nattereri*) and Daubenton's bat (*Myotis daubentonii*) are widespread in many geographies but not abundant in all in southern Scotland, with whiskered bat (*Myotis mystacinus*) having a rare or restricted distribution and Brandt's bat (*Myotis brandtii*) being of very rare distribution. As *Myotis spp.,* were not speciated during analysis, it is assumed all four *Myotis spp.,* are present. Therefore, Brandt's bats, which have a very rare distribution are assumed present within the Site, As Brandt's bats, have a very rare distribution in southern Scotland, it is likely that the presence of this species within the Site would mean that the population is of importance for southern Scotland, and therefore *Myotis spp.,* are of Regional importance.	buildings will be affected by the Proposed Development. Therefore, no bat roosts will be affected. In addition, with embedded mitigation in place the risk of direct and indirect impact to *Myotis spp*., and a breach of legislation afforded to protect *Myotis spp.,* is negligible; therefore, *Myotis spp.,* are of not an IEF and scoped out of the assessment	
BLE	BLE is afforded protection under Annex II of the Habitats Directive and Schedule 5 of	No BLE roosts have been recorded, however, trees and woodland are present within the	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	the Wildlife and Countryside Act 1981 (as amended) and are listed on the SBL. BLE accounted for 0.02 % of bat calls within the static monitoring. BLE are widespread in many geographies but not abundant in southern Scotland according to the Bat Mitigation Guidelines[50]. As BLE in southern Scotland are widespread in many geographies but not abundant in all, the BLE population using the Site is part of a common and widespread species that is stable, therefore BLE is of Local importance.	Site and these are habitats which can contain bat roosts; however, no trees or buildings will be affected by the Proposed Development. Therefore, no bat roosts will be affected. Furthermore, with embedded mitigation in place the risk of direct and indirect impacts to BLE because of the Proposed Development are unlikely, and the risk of a breach of the legislation afforded to protect BLE is negligible. Therefore, BLE are not an IEF and scoped out of the assessment.	
Nyctalus spp.,	*Nyctalus spp*., are afforded protection under Annex II of the Habitats Directive and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are listed on the SBL. *Nyctalus spp.,* was recorded once during the NBW in September and accounted for 1.79 % of bat calls within the static monitoring, though they were recorded throughout the monitoring period, with the highest levels of activity recorded in August. There are two species of *Nyctalus* found in southern Scotland, Noctule (*Nyctalus noctule*), and Leisler's bat (*Nyctalus leisleril*), both species, according to the Bat Mitigation Guidelines[50] , have a rare or	No *Nyctlaus spp*., roosts have been recorded, however trees and woodland are present within the Site and these are habitats which can contain bat roosts. However, no trees or buildings will be affected by the Proposed Development. Therefore, no bat roosts will be affected. Furthermore, with the embedded mitigation measures as described in **Section 8.8**, direct and indirect impacts to *Nyctlaus spp.,* because of the Proposed Development are not anticipated, and the risk of a breach of the legislation afforded to protect *Nyctalus spp.,* is negligible. Therefore, *Nyctaus spp.,* are not an IEF and scoped out of the assessment.	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	restricted distribution in southern Scotland., the population *Nyctalus spp.,* is likely to contain numbers of *Nyctalus spp*., that are important within East Lothian; therefore *Nyctalus spp* are of County importance.		
Breeding Bird assemblage	All breeding birds are afforded protection under the Wildlife and Countryside Act 1981 (as amended) The breeding bird assemblage within and surrounding the Site was typical of the lowland farmland habitats present, with 12 target species recorded. Skylark was the most frequently encountered species. No Schedule 1 raptor species were recorded nesting within the Site or a 2 km buffer.	The breeding bird assemblage within the Site and immediate surrounds may be affected by the Proposed Development and is therefore assessed as an IEF.	Breeding birds are an IEF and scoped into the assessment.
Quail	Quail is listed on Schedule 1 of the Wildlife and Countryside Act 1984 and is therefore afforded additional protection from disturbance when nesting. Three territories were recorded during the breeding bird surveys, including two within the Site.	The UK population of breeding quail varies between years, but three territories are likely to be important at a National level. Due to the potential for effects and breach of legislation, quail is assessed as an IEF.	Quail is an IEF and scoped into the assessment.
Wintering Bird assemblage	Winter bird surveys have not been completed but based on a review of desk study data and habitats, the Site is likely to support a typical range of species for the geographic area. There are no habitat features within the Site that are likely to	Due to the low value of the habitats in the context of the wider landscape, the winter bird assemblage is not assessed as an IEF	Not an IEF and scoped out of the assessment.

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	support any notable numbers of wintering birds or make the Site any more important that surrounding farmland.		
Otter	Otter is afforded protection by Schedule 5 of the Wildlife and Countryside Act and Annex IV of the Habitats Directive; Otter is also listed on the SBL. This means the species is a conservation priority for Scotland. Otter is widespread across Scotland and the population is estimated to be around 8,000 individuals[51]; therefore, Otter is of County importance.	Otter is not an IEF as they are considered absent from the Site and as such will not be impacted by the Proposed Development.	Not an IEF and scoped out of the assessment.
Red squirrel	Red squirrel is afforded protection by Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and by the Nature Conservation Act 2004. Red squirrel is also listed on the SBL, and as such is a conservation priority in Scotland. Due to the fact that recent recordings of red squirrel as per the squirrel sightings map[52], if red squirrel were confirmed the population would likely be in numbers that	Red squirrel is not an IEF as they are considered absent from the Site and as such will not be impacted by the Proposed Development.	Not an IEF and scoped out of the assessment.

[51] NatureScot (2025) Otter [Online] Available at: Otter | NatureScot (Accessed March 2025)
[52] Scottish Wildlife Trust (2025) *Red Squirrels Sighting Map* [Online] Available at: Saving Scotland's Red Squirrels – Transforming hope for Scotland's red squirrels (Accessed March 2025)

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
	were important within East Lothian, and therefore, red squirrel is of County importance		
Water vole	Water vole is protected by the Wildlife and Countryside Act 1981 (as amended) in Scotland this is restricted to the water vole's place of shelter. Water vole is listed on the SBL. The population of water vole in Great Britain is estimated at 132,000, and they are widespread but patchily distributed in Britain[53]. Therefore, water vole is of County importance.	Water vole is not an IEF as they are considered absent from the Site and as such will not be impacted by the Proposed Development.	Not an IEF and scoped out of the assessment.
Brown hare	Brown hare is listed on the SBL and is a conservation priority for Scotland; however, it lacks any legislative protection. Brown hare was recorded during the protected species surveys. Brown hare is widespread throughout England, Wales and Scotland[54], therefore, brown hare population is considered to be resistant to change, thus brown hare is of Less than Local importance	Brown hare will be safeguarded by best practice measures detailed within the CEMP and the Embedded Mitigation detailed in **Section 8.8.** Therefore, brown hare is not an IEF and scoped out of the assessment.	Not an IEF and scoped out of the assessment.

[53] People's Trust for Endangered Species (2025) Water vole. [Online] Available at: Water vole - People's Trust for Endangered Species (Accessed March 2025)
[54] The Mammal Society (2025) *Brown hare* [Online] Available at: Brown hare — Mammal Society (Accessed March 2025)

ECOLOGICAL FEATURE	RATIONALE	DETERMINATION – IS THE ECOLOGICAL FEATURE CONSIDERED AN IEF?	IS FEATURE AN IEF AND SCOPED INTO THE ASSESSMENT.
Invertebrates	The following invertebrate species were returned within the data search but not recorded within the Site. These species are listed on the SBL, and as such are a conservation priority for Scotland: • Small heath; • Wall; • Grey dagger; • Small phoenix; and, • White ermine. The Site is largely agricultural and is likely to support common and widespread invertebrate species typical of an agricultural environment, and consequently priority species, such as those listed above are unlikely to be present. Therefore, the invertebrate assemblage is considered to be of little conservation value as it contains common and widespread species; therefore, invertebrates are of Less than Local importance.	Invertebrates will be safeguarded by best practice measures detailed within the CEMP and the Embedded Mitigation detailed in **Section 8.8**. Therefore, invertebrates are not an IEF and scoped out of the assessment.	Not an IEF and scoped out of the assessment.

8.7 Scoped into Assessment of Potential Effects

8.7.1.1 Following a systematic evaluation of the ecological importance outlined in **Table 8.2** the following ecological features are of regional importance or above, or there is a risk of a breach of environmental legislation if they suffer impacts, and in accordance with CIEEM guidelines[18] are considered IEFs and scoped into the assessment of effects:

- Badger;
- Breeding Birds; and
- Quail.

8.8 Embedded Mitigation

8.8.1.1 During design of the Proposed Development, ecological survey results were provided to the design team to ensure that, where possible, effects on protected species are avoided and where they cannot be avoided measures have been implemented to reduce the negative impact upon biodiversity in line with the mitigation hierarchy. The following section details the application of embedded mitigation both by design and mitigation by practice, which includes those measures implemented before and during construction.

Mitigation by Design

8.8.1.2 The following measures have been included within the design to avoid impacts to protected and / or priority species and habitats and species:

- Proposed Development infrastructure will avoid all woodland areas, and a RPZ will be applied to trees within and adjoining the Site;
- Proposed Development infrastructure has been designed to be more than 5 m from hedgerows;
- In accordance with the SEPA Riparian Corridor dataset, which indicates all watercourses within the Site should have a 10 m buffer where no development takes place, there will be no development within 10 m of watercourses; and,
- Mammal gates will be added to the periphery fence line during construction and maintained throughout the operational period of the Proposed Development to maintain badger passage within the Site.

Lighting Proposals

8.8.1.3 In line with good practice,[55] any permanent and temporary lighting will be designed with input from the Project Ecologist to minimise disruption to nocturnal and crepuscular animals that may be present in the locality (e.g., owls, bats, badger, and otter), with any

[55] Bat Conservation Trust and Institute of Lighting Professionals (ILP) (2023) *Guidance Note 08/23: Bats and Artificial Lighting at Night.* ILP, Rugby, UK.

lighting design requiring agreement with Planning Authority prior to commencement of construction.

Mitigation by Practice: Construction

Ecological Clerk of Works (ECoW)

8.8.1.4 A suitably qualified and experienced Ecological Clerk of Works (ECoW) will be appointed by the Applicant to provide ecological advice and support to the Principal Contractor during construction, including monitoring of compliance with the recommendations of this EcIA, and subsequent planning conditions.

Pre-construction Surveys

8.8.1.5 Pre-construction surveys will be undertaken within the working areas and appropriate buffers to identify changes in the distribution and abundance of protected species from baseline conditions. Updated ecological information gathered from these surveys will inform the scope of any supporting SPPs or Precautionary Methods of Works (PMoW) that will form part of a CEMP and / or mitigation licencing. The following protected species surveys will be required pre-construction:

- A suitably experienced ecologist will undertake a badger survey of the Site and a 30 m buffer around it, to ascertain if new setts have been established;
- An otter survey will be required of all watercourses within the Site and a 200 m buffer prior to commencement of the works; and
- Should any trees require removal, or any works such as cutting or coppicing, then the trees will require further surveys for bats, in accordance with the latest guidance[38] prior to any works occurring.

Avoidance Measures Within CEMP

8.8.1.6 During the construction phase, avoidance and mitigation measures for IEFs will be implemented via a CEMP, which will be developed by the Principal Contractor. The CEMP will follow good practice measures to avoid / minimise harm to ecological features (**Technical Appendix 3.1: oCEMP**), including for example the application of a Root Protection Zone (RPZ) to trees within and adjoining the Site. The RPZ will be specified by a competent arborist or landscape professional. No works or vehicle movements will be permitted within the RPZ without written permission from the arborist or landscape professional.

Mitigation by Practice: Operation

8.8.1.7 Maintenance activities (including routine maintenance of vegetation) are anticipated extremely localised in scale, complexity, and duration. The embedded mitigation measures detailed above are considered appropriate for safeguarding ecological features during the operational phase.

8.8.1.8 In addition to the above, the following measures are recommended to both compensate for habitat loss required to facilitate the Proposed Development and provide enhancement measures for ecology and ornithology, these are included within the oLBMP (**Technical Appendix 3.2**):

- The oLBMP, which incorporates 129.80 ha of shade tolerant wildflower meadow underneath panels, 37.52 ha of wildflower meadow between panels and in areas of the Site which do not have any infrastructure, enhancement of existing hedgerows, and the addition of 4860 m of new hedgerows. This will increase the floral diversity, pollen sources and foraging and resting habitat for variety of species including; badger, bats, birds and invertebrates.

Mitigation by Practice: Decommissioning

8.8.1.9 Decommissioning activities are anticipated to be of a similar nature to the construction phase in terms of scale and duration. Although proposed biodiversity enhancements may mean that the importance of some ecological features may have changed from current levels. The embedded mitigation measures described above are considered appropriate for safeguarding ecological features during the decommissioning phase. However, pre-decommissioning surveys will be required to determine any change in baseline and ascertain if any additional mitigation is required.

8.9 Assessment of Potential Effects

8.9.1.1 This assessment considers effects from the Proposed Development, both within the Site and the ZoI of the IEFs. Examples of the potential effects considered, which can be positive or negative, are listed below:

- Loss of habitat or species of flora and fauna from permanent and temporary land take;
- Disturbance to, or displacement of, a species from the Site because of permanent or temporary land take;
- Impacts to adjacent habitats (and the species that use them) that are not directly required for construction or operation (e.g., through movements of vehicles and site personnel, lighting, dust, noise and vibration, discharges to water, alteration to drainage regimes);
- Fragmentation of habitat or severance of ecological corridors (such as watercourses, hedgerows, and flyways); and
- Creation of new habitat and the introduction of species because of the reinstatement works and landscaping.

8.9.1.2 The following Sections present an assessment of the significance of the residual effects that takes account of the design and good practice measures committed to by the Proposed Development, as detailed in **Section 8.8**

8.9.2 Protected Species

Badger

Construction

8.9.2.1 The Badger Surveys identified four outlier setts (two active and two disused), and a badger was seen using the Site during the Spring Nighttime Bat Walkover (NBW); therefore, there is potential for badgers to be harmed or killed, and their setts to be damaged or destroyed.

However, the Proposed Development has been designed to take account of any known badger setts, and where necessary a 30 m buffer has been employed between the setts and any infrastructure. Therefore, effects are considered to be of negligible magnitude and not significant at the Local level.

8.9.2.2 There is potential for badgers to be disturbed, and consequently displaced from their setts during construction, due to the increase in noise traffic and vibration and the presence of people, machinery and materials during the construction period, (anticipated to be 18 months). However, with the 30 m buffer between the identified setts and any Proposed Development infrastructure it is anticipated that disturbance would be short lived and would be unlikely to displace any badger; therefore, this is considered to be temporary, reversible effect of negligible magnitude and not significant at the Local level.

8.9.2.3 The construction of the Proposed Development will result in an increase in noise, vibration, traffic and the presence of people, machinery and materials; therefore, as badger is known to use the Site for both commuting and foraging, there is potential for disturbance to badgers during these activities. The local environment includes many arable fields and grazing pasture, which are linked to the Site and so there is ample habitat close by which is connected to the Site for badgers to use for commuting and foraging. Therefore, the potential for disturbance to badger from the construction of the Proposed Development is temporary, reversible of low magnitude and not significant at the Local level.

8.9.2.4 In addition to construction phase disturbance, the increase in vehicle movements from Proposed Development construction may also result in a temporary increase in the risk of traffic collisions and accidental badger fatality, particularly if construction works occur in winter when the light levels are lower. However, due to the temporary nature of construction, and the fact that speed limits will be limited to reduce the risk of traffic incidents as part of the embedded mitigation, this is considered an impact of low risk, unlikely to affect more than a small number of badgers, if any. Therefore, any effect is considered temporary, reversible of low magnitude and not significant at the Local level.

8.9.2.5 The Proposed Development will lead to a loss of 80.30 ha farmland habitat, (24.01 winter stubble, 3.67 non-cereal crop and 52.62 ha modified grassland) see **Table 8.7**. This habitat is used by badgers for foraging and commuting and has the potential to reduce the number and distribution of foraging badger within the Site. However, this habitat will be compensated for through the oLBMP (**Technical Appendix 3.2)**, and so any habitat loss is temporary for the period of construction (anticipated to be 18 months). Furthermore, the Site lies in an agricultural landscape, so there is ample habitat close to the Site for badgers to use for foraging. Therefore, the effects of habitat loss are temporary, reversible of low magnitude and not significant at the Local level.

8.9.2.6 Woodland and hedgerow habitat will not be lost to facilitate the Proposed Development, and thus, there will be no loss of habitat that could be used for sett construction because of the Proposed Development. Therefore, effects are of negligible magnitude and not significant at the Local level.

Operation

8.9.2.7 Development maintenance is likely to result in occasional vehicle movements and personnel presence throughout the lifecycle of the Proposed Development; however, this activity will be limited to the Proposed Development infrastructure with no disturbance of the

surrounding environment expected. Therefore, due to the infrequent and localised nature of these activities, effects are considered temporary, reversible of negligible magnitude and not significant at the local level.

8.9.2.8 The perimeter fence has been designed to include badger gates in locations close to existing pathways to ensure badger passage is maintained. Therefore, effects of the fencing is considered negligible and not significant at the local level.

8.9.2.9 Habitat loss that occurs during the construction phase will be compensated during the operational phase through the planting proposed by the oLBMP, (**Technical Appendix 3.2**) which is as follows:

- 128.80 ha of shade tolerant wildflower meadow beneath the panels;
- 37.52 ha of wildflower meadows between panels and in areas of the Site which do not have any solar panels; and,
- The addition of 4860 m new hedgerows.

8.9.2.10 These habitats will provide greater ecological diversity and species diversity than the existing habitat, which will provide an increase in the number of fruiting flora and niches for invertebrates to exploit, which should increase the number of invertebrates and fruits and seeds on which badger can feed. This represents an increase in foraging habitat for badgers within the Site, which in turn provides an increase in the number and distribution of badgers within the Site. This represents a permanent positive effect of low magnitude at the Site level. Though this effect is not significant in terms of the EIA Regulations.

Decommissioning

8.9.2.11 Impacts from decommissioning works are anticipated to be of a similar nature to the construction phase impacts, with impacts limited to potential harm to badgers or their setts. However, with the adoption of relevant good practice and legal requirements, broadly following the mitigation measures detailed within **Section 8.8**, any effect is likely to be temporary, reversible and of negligible magnitude and not significant at the Local level.

Breeding Birds

Construction

8.9.2.12 The bird surveys found that the breeding bird assemblage within and surrounding the Site is typical of the lowland farmland habitats, with a total of 11 target species recorded holding territory within the Site and surrounding area. The most frequently encountered species was skylark with a total of 31 territories recorded, of which 30 were within the Site. Other frequently recorded target species were wren (11 territories) and willow warbler (14 territories).

8.9.2.13 The loss of grassland, scrub and arable crop required to facilitate the Proposed Development, represents a loss of suitable habitat for nesting and foraging birds that are typical of lowland farmland habitat. Many species that are associated with boundary habitats, which will be retained, and any minor loss will be compensated through the proposed habitat creation and enhancements. Research has shown that solar developments with well-managed habitats can support a greater richness and abundance

of breeding bird species[56,57]. Some species nest within fields, where the panels will be placed, and therefore more likely to be displaced by the Proposed Development. Based on current knowledge, skylark are unlikely to nest between arrays, although solar developments can offer foraging resources for birds nesting in the surrounding area. Farmland is generally a suboptimal habitat for skylark, but, due to the vast area in the UK, it plays an important role for the skylark breeding population[58]. Grazing pressure and hay/silage cuts reduce suitability and breeding success and autumn/winter-sown crops (rather than spring-sown) mature sooner and limit foraging resources, therefore reducing breeding productivity[58,59]. The introduction of diverse, well-managed grassland habitats beneath and between the panels provide enhanced foraging opportunities, allowing adjacent arable/farmland habitats to support a higher number of territories/nests, even if birds will not breed directly in fields with panels. The likely reduction in the local skylark population would be of medium magnitude but not significant.

8.9.2.14 Skylark nests are difficult to find and, if construction is planned in the spring or summer, it is recommended that skylark breeding habitats, including arable crops and grassland, is cut or cleared prior to the breeding season and maintained at a height of no more than 15 cm to prevent birds from returning to nest. This would reduce the potential risk of loss or harm of active nests, which would be an offence under the Wildlife and Countryside Act 1981. This would also reduce the risk potentially significant delays to the construction programme, if skylark were to nest within areas with planned works.

8.9.2.15 If occurring in the breeding season, construction activities may cause some disturbance to breeding birds within the Site. There is limited research on the impacts of construction disturbance on passerine species in farmland, but due to the typically small numbers of breeding birds present, of widespread species, and the localised and temporary nature of the works, these are not considered significant, and any effects would be offset long-term, through the improved habitats and resources for nesting birds throughout the lifetime of the Development. Disturbance effects are considered to be temporary, reversible, of negligible magnitude and not significant at the Local level.

Operation

8.9.2.16 The changes to habitats and the effects (both positive and negative) are assessed under construction effects, but with sensitive management the proposed habitat creation and enhancements are expected to deliver benefits for the breeding bird assemblage throughout the lifetime of the Proposed Development. This positive effect is likely to be significant.

8.9.2.17 As an enhancement, bird boxes will be installed at the Site. These will be targeted towards tree sparrow, a species of conservation importance, and therefore should have 28 mm holes

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[56] Jarčuška, B., Gálffyová, M., Schnürmacher, R., Baláž, M., Mišík, M., Repel, M., Fulín, M., Kerestúr, D., Lackovičová, D., Mojžiš, M., Zámečník, M., Kaňuch, P., Krištín, A. (2024) *Solar parks can enhance bird diversity in agricultural landscape*. Journal of Environmental Management, Volume 351. https://doi.org/10.1016/j.jenvman.2023.119902.
[57] Montag, H., Parker, G., Clarkson, T. (2016) The Effects of Solar Farms on Local Biodiversity: A Comparative Study. Clarkson & Woods and Wychwood Biodiversity, Somerset
[58] Donald, P. (2004) The Skylark. T & A D Poyser, London.
[59] https://www.bto.org/understanding-birds/birdfacts/skylark#:~:text=Further%20information%20on%20causes%20of%20change

and be placed in clusters, in accordance with guidance[60]. Twenty boxes will be installed, in two clusters of 10 boxes, with the location to be dictated by a suitably experienced ECoW or ecologist.

Decommissioning

8.9.2.18 Impacts to birds from decommissioning of the Proposed Development are anticipated to be similar to construction phase impacts. However, with the adoption of relevant good practice measures and legal requirements and following the avoidance and mitigation measures detailed within **Section 8.8**, any effect is considered to be temporary, reversible of negligible magnitude and not significant at the Local level.

Quail

Construction

8.9.2.19 Quail is a migratory and partly nomadic species, and the UK breeding population and distribution varies annually due to environmental conditions. Their secretive behaviour makes evidencing breeding very difficult but, as a species listed on Schedule 1 of the Wildlife and Countryside Act 1981, they are protected from disturbance when nesting.

8.9.2.20 Three territories were identified during the baseline surveys, including two in grassland in the southwest of the Site. In 2021 there were 81 calling males in Scotland and 510 across the UK, which was considered a typical year[61].

8.9.2.21 While the habitat beneath and between the panels may be suitable, a literature search returned no research or guidance on whether quail would nest among solar arrays, and it is therefore assumed they would not. Quail numbers vary greatly each year, and they are typically not site faithful, as their nomadism means they are opportunistic in their movements and breeding attempts. As such, the Site itself if not considered an important location for the species and potential habitat loss would be of negligible magnitude and not significant.

8.9.2.22 If construction of the Proposed Development is to take place between May and August, grassland should be cut or grazed to a level of no more than 15 cm so as to be unsuitable for quail to breed and therefore avoid potential direct harm or disturbance to nesting quail which may constitute an offence under the Wildlife and Countryside Act 1981 (as amended).

8.10 Cumulative Effects Assessment

8.10.1.1 Developments within 5 km of the Proposed Development have been considered for cumulative effects, as 5 km is considered an appropriate buffer of the Proposed Development within which cumulative impacts and effects are likely to occur within same ZoI and where there may be potential for ecological connectivity. The following development has been considered:

[60] https://www.rspb.org.uk/helping-nature/what-we-do/influence-government-and-business/farming/advice-for-farmers-helping-bird-species/tree-sparrow-advice-for-farmers
[61] Eaton, M., *et al.* (2023) *Rare breeding birds in the UK in 2021.* British Birds 116, 615 – 676

- Springfield Solar Farm and BESS (application under review) – within 4.5 km of the Site.

8.10.2 Springfield Solar Farm and BESS

8.10.2.1 Springfield Farm Solar and BESS is an application, which has been scoped but not yet approved, for the construction and operation of a solar farm with accompanying BESS, associated infrastructure and landscaping. The application is a similar to the Proposed Development, and it is anticipated that impacts would be similar and limited to the vicinity of the development site. Both proposed solar farms are sited within farmland, and so it would be expected that habitats and species within both sites would be of a similar nature. The two sites are separated by Dunglass Dean / Oldhamstocks Burn this provides a barrier for most terrestrial species.

8.10.2.2 With respect to bats, each species has a Core Sustenance Zone (CSZ), which is an area surrounding a bat roost, within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost. With regard to species recording using the Site, Noctule and Natterer's bats have the largest CSZ at a radius of 4 km. This is less than the distance between the Proposed Development and Springfield Farm, thus cumulative effects on bat species using both sites are unlikely as bats using these sites likely come from different roosts.

8.10.2.3 In addition, recent research, (Jarcuska *et al* 2024)[62] found that solar farms supported higher total species richness and diversity compared to agricultural landscapes with respect to birds; therefore, it would be expected that with regard to breeding birds, the addition of these solar farms will provide an increase in the number and diversity of bird species locally. Considering these factors, cumulative effects to IEFs except for birds are considered unlikely, of negligible magnitude and not significant. For breeding birds, cumulative effects are considered permanent, positive of low magnitude and not significant the Local level.

8.10.3 Summary of Cumulative Effects Assessment

8.10.3.1 An assessment of potential for cumulative effects has considered relevant developments together with the Proposed Development, and whether there is potential for cumulative effects to IEFs within the same ZoI. Application of the CIEEM guidelines and professional judgement has identified no significant adverse cumulative effects between the Proposed Development and other developments. It can therefore be concluded that cumulative effects to IEFs are considered unlikely, of negligible magnitude and not significant.

8.11 Summary of Effects

8.11.1.1 The Proposed Development will result in a loss of 80.68 ha of habitats, that are common and widespread, and which support largely common and widespread species. Some protected species, including badger, bats, birds (nesting and foraging), and potentially otter,

[62] Benjamín Jarčuška, Monika Gálffyová, Richard Schnürmacher, Michal Baláž, Miloslav Mišík, Matej Repel, Miroslav Fulín, Dušan Kerestúr, Zuzana Lackovičová, Marian Mojžiš, Matej Zámečník, Peter Kaňuch, Anton Krištín, (2024) *Solar parks can enhance bird diversity in agricultural landscape,* Journal of Environmental Management, Volume 351

are supported by these habitats; however, no significant residual effects on any IEF is predicted.

8.11.1.2 No residual effects to any statutory designated sites are predicted.

8.11.1.3 Habitats lost will be compensated through the planting being undertaken within the oLBMP; therefore, the Proposed Development will provide habitats of higher value than the baseline agricultural scenario. This will provide a significant, permanent, beneficial effect of low magnitude at the Site level for the following IEFs:

- Badger; and
- Breeding birds.

8.12 Statement of Significance

8.12.1.1 No significant effects have been identified for the construction, operation and decommissioning phases of the Proposed Development. Furthermore, opportunities for biodiversity enhancement are described within the oLBMP (**Technical Appendix 3.2)**, which will improve biodiversity in the locality of the Proposed Development. Therefore, potential effects of the Proposed Development are **Not Significant** in the context of the EIA Regulations.