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Bishops Dal BESS

Ecological Impact Assessment

July 2025

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	Name	**Position**	**Date**
Originated	Harry Glass	Ecologist	08 July 2025
Reviewed	Claire Dewson	Associate Director	22 July 2025
Approved for issue to client	Claire Dewson	Associate Director	22 July 2025
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Contents

1 Introduction

Background to commission

1.1 BSG Ecology was commissioned by Renewable Energy Systems Ltd. in January 2025 to undertake an Ecological Impact Assessment (EcIA) at farmland at Bishops Dal, near Coldstream, Scottish Borders ('the Site').

1.2 A Preliminary Ecological Appraisal (PEA) of the Site, comprising desk study and extended Phase 1 habitat assessment was undertaken by BSG Ecology in 2024 (BSG Ecology, 2025a), which recommended a suite of wintering and breeding bird surveys at the Site to ascertain its importance for birds dependent upon farmland habitats, alongside full ecological impact assessment to evaluate the impacts of the proposals and a biodiversity gain assessment. These were subsequently commissioned and the results can be found in standalone wintering bird survey and breeding bird survey reports (BSG Ecology, 2025b & 2025c) and biodiversity gain assessment report (BSG Ecology, 2025d).

Site description

1.3 The Site is approximately 13.2 hectares (ha) in size and is situated at central ordnance survey grid reference NT 79154 41293. The location of the Site is shown on Figure 1, Section 8. The Site slopes gently to the north east and is dominated by agricultural land, consisting of cereal crops, delineated by hedgerows and ditches, with blocks of woodland along the southern boundary. The Site is approximately 5.25 km north west of Coldstream.

1.4 The wider landscape is dominated by agricultural land, largely arable but isolated pasture fields are present. Discreet blocks of plantation woodland (mostly conifer) are present to the south and east of the Site. Eccles substation is to the immediate north of the Site, separated by the A697.

Description of project

1.5 The client proposes to construct a battery energy storage system (BESS) and associated infrastructure on the Site, including two access points from the A697 immediately north of the Site, as well as soft landscaping as illustrated in the current landscape masterplan by Pegasus Group (Drawing Number: P24-0160_EN_08_E, Appendix 1).

1.6 At this stage there is insufficient detail to comment on construction methods, but it is likely to include general mobilisation and site preparation, earth works, piling, road works and battery installation. A detailed construction programme is not yet available.

Planning policy and legislation

1.7 Summaries of Scottish Planning policy along with relevant legislation provided in Appendix 3. The following are considered relevant to this assessment.

- Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Wildlife and Countryside Act 1981 (as amended)
- Nature Conservation (Scotland) Act 2004 (as amended)
- The Protection of Badgers Act 1992
- National Planning Framework 4

1.8 Relevant local planning policies and Supplementary Planning Guidance (SPG) are listed below:

- Scottish Borders Local Development Plan
- Scottish Borders SPG for Biodiversity

- Scottish Borders Local Biodiversity Action Plan
- Scottish Borders SPG for Development Contributions (Appendix I: Miscellaneous)
- Scottish Borders SPG for Renewable Energy
- Scottish Borders SPG for Trees and Development
- Scottish Borders Woodland Creation Advice Note

Personnel

1.9 The extended Phase 1 habitat survey was completed by Adam Murphy, Ecologist at BSG Ecology. Adam has over five years' experience working as a professional ecological consultant. In that time, he has completed numerous ecological appraisals and assessments in Scotland, England and Wales.

1.10 Bird surveys were completed by Tom Cadwallender, a freelance ornithologist. Tom is an experienced bird surveyor who has been undertaking wintering and breeding bird surveys in England and Scotland for nearly 40 years, for both professional consultancies and volunteer organisations such as the British Trust for Ornithology (BTO).

1.11 This report was prepared by Harry Glass BSc (Hons) MSc, Ecologist at BSG Ecology. Harry has worked as an ecological consultant for three years, and has authored several ecological assessments in arable settings throughout the UK.

1.12 Claire Dewson MSc (Hons) ACIEEM, Associate Director at BSG Ecology reviewed the report. Claire has worked in nature conservation for over 20 years including time as a Local Planning Authority Ecologist and as an ecological consultant and has extensive experience undertaken ecological appraisals and ecological impact assessments for a wide range of sites and projects across the UK..

1.13 Further details of experience and qualifications can be found at http://www.bsg-ecology.com/people

2 Methods

Zones of Influence

2.1 When defining a Zone of Influence, it is important that it considers all relevant impacts and effects arising from activities associated with the proposed development. The desk study data boundaries do not necessarily coincide with the Zone of Influence set out for each receptor. This is because the Zones of Influence relate to the potential for an impact to occur whereas the desk study data search radii are used to inform the scope of survey requirements. Relevant Zones of Influence for the Site are set out below in **Table 1**.

Table 1: *Zones of Influence*

Receptor	Zone of Influence	Rationale
Internationally designated sites	10 km	Proposals have a potential for loss of suitable foraging and roosting habitats for designated species, particularly wintering waders and geese.
Nationally designated sites	10 km	In accordance with Natural England designated site impact risk zones (IRZ).
Locally designated sites	2 km	Potential for indirect impacts and/or loss of connectivity at a local scale.
Habitats	50 m	Potential for indirect and direct impacts and losses, (accounting for root protection zones).
Badger *Meles meles*	30 m	Sufficient standoff distance to mitigate impacts to a sett (if present). Records within 2 km also informed assessment.
Bats	2 km	Sufficient standoff to mitigate impacts to offsite roosts and core sustenance zones (considering the lack of woodland onsite). Records within 2 km also informed rationale and assessment.
Birds	50 m	Greatest direct onsite disturbance is anticipated in the construction phase. No impacts are anticipated during operation.
Red squirrel *Sciurus vulgaris*	50 m	Precautionary distance based on disturbance to squirrel dreys that may be present in the adjacent woodland caused during the construction phase (NatureScot, 2024a). No impacts anticipated during operational phase.
Otter *Lutra lutra*	2 km	Potential for watercourse habitat on Site to form part of wider habitat network for otter. Although otter ranges can be as large as 32 km (NatureScot, 2024b), a 2 km desk study radius is considered sufficient given potential impacts do not exceed the Site level. Records within 2 km also informed rationale and assessment.
Water vole *Arvicola amphibius*	300 m	Based on the typical maximum ranges of activity by water vole males (Mammal Society, 2024). Records within 2 km also informed assessment.

Desk study

2.2 A desk study was undertaken to gather existing ecological data in relation to the Site and the surrounding area, and to provide contextual ecological information.

2.3 Records of protected, notable, and invasive species and information on locally designated sites within 2 km of the Site were obtained from The Wildlife Information Centre (TWIC) in February 2024.

2 km is considered sufficient to encompass the potential for indirect impacts and loss of connectivity on a local scale. Only records less than 10 years old (upon receipt of data) have been considered.

2.4 The Multi-Agency Geographic Information for the Countryside (MAGIC) was consulted (last accessed 1 July 2025) for the presence of international and national statutory designated sites (as well as their associated Impact Risk Zones (IRZ)) within a 10 km search buffer of the Site, and the presence of priority habitats within a 2 km search buffer.

2.5 Ordnance Survey mapping, Scottish Ancient Woodland Inventory, DEFRA's Magic Map (https://magic.defra.gov.uk/MagicMap.aspx) and publicly available aerial photography were also used to assess habitats and check for any features of potential interest.

Field survey

Extended Phase 1 habitat survey

2.6 A Phase 1 habitat survey within the Site boundary was undertaken on 28 February 2024. Weather conditions are summarised in Appendix 2.

2.7 Habitats were mapped in accordance with the Phase 1 habitat survey methodology (JNCC 2016). Botanical species lists for each habitat were gathered and photographs taken of features of interest.

2.8 The survey was 'extended' to make an assessment of the Site's potential to support protected/notable species likely to be associated with the habitats present.

2.9 The Site was also searched for the presence of non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Wintering and breeding bird surveys

2.10 Four wintering bird survey visits were completed between November 2024 to and February 2025, at a rate of one survey per month, in line with current survey guidance (Bird Survey and Assessment Steering Group, 2024). Surveys were conducted during the diurnal period (adjusted accordingly for daylight changes), in suitable weather conditions.

2.11 Six breeding bird surveys of the Site were completed between March through June 2025 conducted in suitable weather conditions. Five diurnal surveys and one crepuscular survey was undertaken, per current survey guidance (Bird Survey and Assessment Steering Group, 2024). Diurnal surveys were timed to coincide with the peak period of bird activity, commencing within 30 minutes either side of sunrise and concluding before mid-morning. The crepuscular survey commenced approximately one hour before sunset and concluded approximately 15 minutes after sunset (see Consideration of potential limitations, below).

2.12 Bird survey details including timings and weather conditions are summarised in Appendix 2.

2.13 Surveyors employed the 'look-see' methodology (Gilbert *et. al.*, 1998) involving the observation of habitats along a pre-determined survey transect route and stopping at intervals to scan the Survey Area for birds using binoculars. All species heard and/or observed using or flying over the Site were recorded onto base maps using standard British Trust for Ornithology Species Codes, in accordance with standard practice (Bibby, *et al*., 2000; Gilbert, *et al*., 1998).

2.14 Where observed, the following breeding activities were noted to aid determination of breeding status during the survey of breeding birds:

- Singing male in suitable habitat;
- Adult visiting probable nest Survey Area;
- Nest building (including excavating nest hole);
- Distraction display or injury feigning;

- Used nest found;
- Recently fledged young;
- Adult carrying faecal sac or food;
- Adult entering or leaving nest Survey Area in circumstances indicating occupied nest;
- Nest with eggs found, or bird sitting but not disturbed, or eggshells found near nest; and
- Nest with young.

2.15 Bird species were also recorded during the survey visits for which no evidence of breeding was noted. This included:

- Individuals flying over the Survey Area;
- Species which may breed locally but for which suitable nesting habitat does not occur within the Survey Area;
- Species where no behaviour was observed that suggested breeding was taking place.

Breeding bird territory mapping

2.16 The bird survey data collected was used to estimate the number and approximate locations of each territory recorded within the Survey Area, as well as the habitats they were using, with putative territory centres mapped where appropriate. Registrations for each species from each survey visit were mapped and used to identify territory clusters.

2.17 Breeding bird territories were assigned the following categories: confirmed (direct evidence of breeding, as listed above, recorded); probable (bird holding territory and recorded in suitable nesting habitat on at least two occasions); possible (bird recorded in suitable nesting habitat on one occasion). Non-breeding i.e. birds flying over (but not using) the Survey Area were recorded but not included in the breeding bird assemblage.

2.18 For the purposes of this assessment, birds that were considered to be 'probable' breeders have been treated as 'confirmed' territories and have not been differentiated between within this report or the Figures presented in Section 8. This is a precautionary approach but reflects the likelihood of the birds holding 'probable territories' to have at least attempted to breed, even if unsuccessfully during the survey period. Birds that were recorded as possible breeding are considered to be non-breeders within this report as they did not show sufficient evidence to indicate a breeding territory.

2.19 All territories falling at least partly inside the Survey Area were included in the area totals, even when some of the registrations forming the territory cluster fell outside the Survey Area[1].

Consideration of potential limitations

2.20 The Phase 1 habitat survey was undertaken in February 2024, outside of the optimal botanical survey period (recognised as May – August). This is not considered to be a significant limitation as the habitats found on Site (arable land in cereal crop rotation) were easily identifiable, and it is considered that sufficient botanical information was collected to accurately identify the habitats present.

2.21 During the December wintering bird survey, it was noted that tree felling had occurred in the north east corner of the Survey Area since the November site visit. During the February survey the surveyor noted ground levelling using heavy plant had taken place in the same area. There is potential for the wintering bird assemblage to have been locally impacted through disturbance and loss of habitat. However, the activities were localised to the north east of the Survey Area and where no activity with potential to cause disturbance was noted during the surveys themselves, therefore this is not considered to be a significant limitation to the data collected.

[1] Survey Area is 50 m from the red line boundary

2.22 The crepuscular breeding bird survey visit was concluded approximately 15 minutes after sunset. Current guidance recommends that the survey is undertaken for a minimum of one hour after sunset. The guidance was deviated from due to the overall lack of suitable habitat on Site and in the Survey Area for nocturnal and crepuscular birds such as barn owl *Tyto alba* and woodcock *Scolopax rusticola*. This is supported by the lack of observations of these birds during the crepuscular survey. As such, this is not considered to be a significant limitation to the survey effort.

3 Assessment Methodology

EcIA Assessment Process

3.1 The evaluation and assessment within this chapter has been undertaken with reference to relevant parts of the 2016 Guidelines for Ecological Impact Assessment in the United Kingdom developed by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2024). Although this is recognised as current best practice for ecological assessment, the guidance itself recognises that it is not a prescription about exactly how to undertake an ecological impact assessment (EcIA); rather, it aims to "provide guidance to practitioners for refining their own methodologies".

Important ecological features

3.2 A first step in EcIA is determination of which ecological features (habitats, species, ecosystems and their functions/processes) are important. Important features should then be subject to detailed assessment if they are likely to be effected by the Proposed Development. It is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project effects, such that there is no risk to their viability.

3.3 Ecological features can be important for a variety of reasons and the rationale used to identify these is explained below. Importance may relate, for example, to the quality or extent of designated sites or habitats, to habitat/species rarity, to the extent to which they are threatened throughout their range, or to their rate of decline.

Determining importance

3.4 The importance of an ecological feature should be considered within a defined geographical context. The following frame of reference has been used in this case:

- International (Europe)
- National (Scotland and UK)
- County (Scottish Borders)
- Local (Coldstream)
- Site (Site boundary and immediate surrounds)

3.5 Taking into account the CIEEM guidance, features of less than Local importance are generally considered unlikely to trigger a mitigation or policy response in EcIA terms. However, where it is helpful to characterise and evaluate features within the Site boundary and immediate surrounds, this assessment also uses the term "site importance". This includes features which are assessed to be of value only in the context of the Site itself (and its immediate zone of influence). Features of Site importance are typically unlikely to require further assessment for the reasons set out above.

Characterising and quantifying effects and assessing their significance

3.6 The CIEEM guidance sets out information in paragraphs 5.25 through to 5.29 about the concept of ecological significance and how it relates to the ability to deliver biodiversity conservation objectives for a given feature.

3.7 Significant effects are qualified with reference to an appropriate geographic scale, and the scale of significance of an effect may or may not be the same as the geographic context in which the feature is considered important.

3.8 The nature of the identified significant effects on each assessed feature is characterised. This is considered, along with available research, professional judgement about the sensitivity of the feature affected, and professional judgement about how the significant effect is likely to affect the site, habitat, or population's structure and continued function. Where it is concluded that an effect would

be likely to reduce the importance of an assessed feature, it is described as significant. The degree of significance of the effect takes into account the geographic context of the feature's importance and the degree to which its interest is judged to be affected.

3.9 CIEEM best practice encourages the expression of significance of ecological effects with reference to a geographic frame of reference, as described above. However, other disciplines within this Environmental Statement use criteria based on an expression of severity of significance to describe the significance of environmental effects.

Main phases of works

3.10 The potential impacts of proposals are considered in relation to two phases as appropriate to each ecological feature: (1) Construction Phase and (2) Operational Phase.

4 Results and Evaluation

4.1 This section sets out the summary findings of the baseline ecological survey work and desk study. It then goes on to evaluate the interest of the identified ecological resources, potential impacts in the absence of mitigation, required mitigation and other measures. Finally, it sets out the significance of any residual effects.

4.2 Ecological receptors are considered in the following order:

- Protected sites – both statutory (e.g. SSSI) and non-statutory designated sites (e.g. LWS);
- Habitats; and
- Species.

4.3 Certain species and habitats have been scoped out of the assessment on the basis that they are unlikely to be significantly affected by the development. This is either by virtue of the design or proposed operation of the development; or because they are very commonplace and/or of very low conservation value (unless there are other reasons to consider them further, for example, they may be legally protected or require special care and therefore require precautionary measures to be adopted). Where it has been possible to scope out an ecological feature, the rationale for doing so is provided in the text below.

4.4 A summary of the legislation and policy that are relevant to this assessment is presented in Appendix 3 of this report.

Desk Study

Statutory designated sites

4.5 The desk study revealed 17 statutory designated sites within 10 km of the Site. These include six sites of international importance, comprising two Ramsar sites, two special areas of conservation (SAC), and two special protection areas (SPA), as well as 11 nationally important sites of special scientific interest (SSSI). These sites, a summary of the reasons for their designation, and rationale for their scoping for further consideration, are presented in Table 2 and shown in Figure 1. Sites are given in order of proximity to the development Site, closest first.

Table 2: *Statutory sites within 10 km of the Site*

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
The Hirsel SSSI (Scotland)	Large area of mixed plantation woodland, open water and riparian habitats along the Leet Water with some permanent grassland, located 1 km west of Coldstream. The SSSI supports an outstanding assemblage of breeding and passage/wintering bird species. Breeding birds include kingfisher *Alcedo atthis*, yellow wagtail *Motacilla flava*, hawfinch *Coccothraustes coccothraustes*, goosander *Mergus merganser*, dipper *Cinclus cinclus*, sand martin *Riparia riparia*, water rail *Rallus aquaticus*, lesser whitethroat *Sylvia curruca*, pied flycatcher *Ficedula hypoleuca*, willow tit *Poecile montanus* and marsh tit *Poecile palustris*. Wintering bird species of note include goosander and whooper swan *Cygnus cygnus*, but also mallard *Anas platyrhynchos*, shoveller *Anas clypeata* and mute swan *Cygnus olor*.	1.9 km east	Potential for pollution events during the construction phase to indirectly impact riparian habitats (and dependent qualifying bird species) hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures. Potential for direct impacts on qualifying geese species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
River Tweed SSSI (Scotland)	The Tweed and its tributaries are clean river systems of high conservation and ecological value, designated for the diversity of its aquatic flora.	2.2 km south	Potential for pollution events during the construction phase to indirectly impact riparian habitats and aquatic vegetation hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures.

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
			Scoped in for further consideration.
River Tweed SAC (Scotland)	This SAC is designated for its river lamprey *Lampetra fluviatilis*, brook lamprey *Lampetra planeri*, sea lamprey *Petromyzon marinus*, otter, and Atlantic salmon *Salmo salar* populations and for its diverse riparian and aquatic vegetation.	2.3 km south	Potential for pollution events during the construction phase to indirectly impact riparian habitats (and dependent qualifying species) hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures. **Scoped in for further consideration.**
Tweed Catchment Rivers – England: Lower Tweed and Whiteadder SSSI (England)	The lower reaches of the Tweed and Whiteadder are nationally important examples of lowland rivers on rich geological strata in Scotland and northern England. The exposed river sediments are nationally important for their invertebrate assemblage. The site holds nationally important populations of wintering *goldeneye Bucephala clangula* and moulting mute swans.	2.4 km south	Potential for pollution events during the construction phase to indirectly impact riparian habitats (and dependent qualifying invertebrate and bird species) hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures. The Site falls within the SSSI Impact Risk Zone (IRZ)[2] for Tweed Catchment Rivers – England: Lower Tweed and Whiteadder SSSI. The proposed development does not fall into the categories set out by Natural England that are considered to present a potential risk to the SSSI. Consultation with Natural England is not required. **Scoped in for further consideration.**

[2] The Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They are available for SSSIs in England only. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on European /Ramsar sites. (https://magic.defra.gov.uk/MagicMap.aspx).

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
Redden Bank Lime Works SSSI (Scotland)	Redden Bank Lime Works SSSI is situated alongside, and includes, an old disused railway and adjacent disused lime works quarry, which have re-vegetated with neutral and calcareous grassland communities. The calcareous grassland supports an excellent range of locally rare or uncommon plants.	4.1 km south	Impacts on the grassland as a result of elevated pollution are not anticipated on the basis of distance and the scope of the proposals. **Scoped out of further consideration.**
River Tweed SAC (England)	The site is of international importance for its estuary, intertidal mud and sandflats and its riverine floating vegetation communities. It also supports internationally important populations of river lamprey, sea lamprey, Atlantic salmon and otter. Shares nationally important qualifying features with the Tweed Catchment Rivers – England: Lower Tweed and Whiteadder SSSI.	5.2 km east	Potential for pollution events during the construction phase to indirectly impact riparian habitats (and dependent qualifying species) hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures. **Scoped in for further consideration.**
Lennel, Charley's Brae SSSI (Scotland)	The site is designated for its geological interest only.	5.8 km east	Impacts not anticipated on the basis of distance and the scope of the proposals. **Scoped out of further consideration.**
Campfield Kettle Hole SSSI (England)	Campfield Bog is designated for its carr woodland on deep peat soils, supporting a sparse ground cover of bog-mosses *Sphagnum spp*., and hare's-tail cotton grass *Eriophorum vaginatum* with numerous tussocks of purple moor-grass *Molinia caerulea* and wavy hair-grass *Deschampsia flexuosa*.	7.3 km southeast	Impacts on the woodland and peat as a result of elevated pollution are not anticipated on the basis of a lack of hydrological connectivity, distance and the scope of the proposals. **Scoped out of further consideration.**
Lintmill Railway Cutting SSSI (Scotland)	The site is designated for its geological interest only.	7.5 km northwest	Impacts not anticipated on the basis of distance and the scope of the proposals. **Scoped out of further consideration.**

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
Barelees Pond SSSI (England)	Barelees Pond is designated for its carr woodland on deep peat soils. Its ground flora communities closely resemble those of Campfield Kettle Hole SSSI.	8.2 km east	Impacts on the woodland and peat as a result of elevated pollution are not anticipated on the basis of a lack of hydrological connectivity, distance and the scope of the proposals. **Scoped out of further consideration.**
Din Moss – Hoselaw Loch Ramsar (Scotland)	Din Moss – Hoselaw Loch Ramsar site is located on the northern slopes of the Cheviot Hills in southern Scotland. Hoselaw Loch is a mid-altitude loch that is surrounded by Din Moss, an area of raised bog with associated lagg fens. It is one of the most complete examples of raised mire in this area of Scotland. Din Moss – Hoselaw Loch Ramsar site qualifies under Ramsar Criterion 6 by regularly supporting 1% or more of the individuals in a population of waterbirds: Pink-footed goose *Anser brachyrhynchus* (an average of 1,650 individuals, over 1% of the Eastern Greenland/Iceland/UK biogeographic population), and Greylag goose *Anser anser* (an average of 3,500 individuals, over 3% of the Iceland/UK/Ireland biogeographic population).	9.2 km south	Impacts on the open water and bog habitats as a result of elevated pollution are not anticipated on the basis of a lack of hydrological connectivity, distance and the scope of the proposals. Potential for direct impacts on qualifying geese species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
Din Moss – Hoselaw Loch SPA (Scotland)	This site qualifies under Article 4(2) as a wetland of international importance for migratory species. It provides a roost for an average of 1,650 pink-footed geese (over 1% of the Icelandic breeding population) and 3,500 greylag geese (over 3% of the Icelandic-breeding population).	9.2 km south	Potential for direct impacts on qualifying geese species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
Din Moss - Hoselaw Loch SSSI (Scotland)	The south-west part of the SSSI, Din Moss, is one of the largest and most intact areas of raised bog in the Scottish Borders. The central expanse of the raised bog is dominated by heather and *Sphagnum* species, surrounded on two sides by vestiges of a lagg-fen and burn with associated alder, birch and willow carr.	9.2 km south	Impacts on the open water, carr woodland and bog habitats as a result of elevated pollution are not anticipated on the basis of a lack of hydrological connectivity, distance and the scope of the proposals.

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
	The remaining area of the SSSI, Hoselaw Loch, is a shallow, eutrophic loch lying at mid altitude, designated for its open water habitat and aquatic vegetation communities.		**Scoped out of further consideration.**
Greenlaw Moor Ramsar (Scotland)	Greenlaw Moor Ramsar site qualifies under Ramsar Criterion 6 by regularly supporting 1% or more of the individuals in a population of waterbirds: Pink-footed goose (1987/1988 to 1991/1992, an average peak of 14,200 individuals, 7% of the Eastern Greenland/Iceland/UK biogeographic population).	9.9 km north west	Potential for direct impacts on qualifying geese species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
Greenlaw Moor SPA (Scotland)	Greenlaw Moor qualifies under Article 4.2 by regularly supporting, in winter, an internationally important population of pink-footed goose, with an average peak count of 14,200 individuals between 1987 - 1992 (7% of the British wintering population and total Icelandic/Greenlandic breeding population). As well as its importance for pink-footed goose, the site is also of interest for its overall assemblage of wintering waterfowl including the Annex 1 species whooper swan and barnacle goose *Branta leucopsis* as well as greylag goose, wigeon *Anas strepera*, teal *Anas crecca*, mallard, shoveler, pochard *Aythya ferina*, tufted duck *Aythya fuligula*, goldeneye and goosander. The site is also of interest, in summer, for its diverse assemblage of breeding waterfowl, including the Annex 1 species golden plover *Pluvialis apricaria* as well as teal, mallard, shoveler, tufted duck, ruddy duck *Oxyura jamaicensis*, redshank *Tringa totanus*, curlew *Numenius arquata* and snipe *Gallinago gallinago*. The Annex 1 species merlin *Falco columbarius* and short-eared owl *Asio flammeus* breed on the site, and the Annex 1 species peregrine *Falco peregrinus* regularly occurs in winter.	9.9 km north west	Potential for direct impacts on qualifying geese and wader species through loss of suitable roosting and foraging resource availability. Potential for direct impacts on qualifying Annex 1 bird species through loss of suitable foraging resource availability: particularly golden plover, merlin and peregrine, which may utilise the Site as part of wider foraging resource. The Site is considered unsuitable to support other qualifying Annex 1 species. **Scoped in for further consideration.**

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
Greenlaw Moor SSSI (Scotland)	The site is designated for its combination of raised bog habitats, breeding bird assemblage and wintering pink-footed goose population (between 3-6% of the British wintering population) as well as its geological interest. Its breeding bird assemblage includes waders and other species such as golden plover, red grouse *Lagopus lagopus*, short eared owl and black grouse *Lyrurus tetrix,* all of which are partly dependent on the moorland habtiat.	10 km northwest	Impacts on the open water, carr woodland and bog habitats as a result of elevated pollution are not anticipated on the basis of a lack of hydrological connectivity, distance and the scope of the proposals. Potential for direct impacts on qualifying geese and wader species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
Hareheugh Craigs SSSI (Scotland)	The site is designated for its geological interest only.	10 km west	Impacts not anticipated on the basis of distance and the scope of the proposals. **Scoped out of further consideration.**

Non-statutory designated sites

4.6 TWIC returned information on five non-statutory designated sites within 2 km of the Site, including five Scottish Borders Local Biodiversity Sites (LBS). The location of one proposed LBS was also provided by TWIC, however, no citation was provided as the site was not designated as of February 2024; it has therefore been scoped out of further consideration. The designated sites, a summary of the reasons for their designation, and rationale for their scoping for further consideration, are presented in Table 3 and shown in Figure 2. Sites are given in order of proximity to the development Site, closest first.

Table 3: *Non-statutory sites within 2 km of the Site*

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
Bishops Bog LBS	Designated for its semi-natural broadleaved woodland, bog habitats and breeding bird assemblage. Qualifying species include lapwing *Vanellus Vanellus*, yellowhammer *Emberiza citrinella,* swallow *Hirundo rustica*, grasshopper warbler *Locustellas naevia*, and spotted flycatcher *Muscicapa striata*.	0.5 km south east	Site is not hydrologically connected to the LBS; impacts on the woodland and bog habitats are not anticipated based on distance and the scope of the proposals. Potential for direct impacts on qualifying wader species through loss of suitable roosting and foraging resource availability. **Scoped in for further consideration.**
Birgham Wood LBS	Designated for its mixed woodland, fen and pond habitats on former sandy moorland. Notable species include barn owl *Tyto alba* and red squirrel.	1 km south	Site is not hydrologically connected to the LBS; impacts on the woodland fen and pond habitats are not anticipated based on distance and the scope of the proposals. Impacts on barn owl through loss of foraging resource availability are not anticipated due to overall poor habitat quality on Site. **Scoped out of further consideration.**
Leet Water – Leitholm to Chaterpath LBS	Designated for its semi natural broadleaved woodland, poor semi-improved grassland, rivers and burns. These habitats host lapwing, European eel *Anguilla anguilla*, brown trout, badger and red squirrel.	1 km north east	Potential for pollution events during the construction phase to indirectly impact riparian habitats (and dependent qualifying species) hydrologically connected to the Site via the unnamed watercourse and Leet Water, in the absence of pollution control measures. **Scoped in for further consideration.**

Site name	Reason for designation	Distance from Site (closest point)	Scoped in or out of further consideration
Hirsel Woods LBS	Designated for its mature woodland habitat.	1.1 km east	Impacts on the woodland habitats are not anticipated based on distance and the scope of the proposals. **Scoped out of further consideration.**
Eccles Pools LBS	Designated for its mature woodland and pond habitats.	1.8 km west	Impacts on the woodland and pond habitats are not anticipated based on distance and the scope of the proposals. **Scoped out of further consideration.**

Evaluation of designated sites

4.7 SACs, SPAs and Ramsar sites are evaluated as having **international importance.**

4.8 SSSIs are evaluated as having **national importance.**

4.9 LBSs are evaluated as having **local importance.**

Priority Habitats

4.10 Four areas of Ancient Woodland were found within 2 km of the Site using the Scottish Ancient Woodland Inventory. These areas, their character, and rationale for their scoping for further consideration are described below in Table 4, below.

Table 4: *Ancient woodland parcels within 2 km of the Site*

Site name	Description	Distance from Site (closest point)	Scoped in or out of further consideration
Wylie Cleugh	Ancient woodland of semi-natural origin	1.1 km north east	Impacts on the woodland as a result of increased air pollution are not anticipated based on distance and the scope of the proposals. Construction traffic will not pass the area, instead utilise the A697. **Scoped out of further consideration.**
Unnamed woodland 1 (adjacent Leet Water)	Ancient woodland of semi-natural origin	1.4 km north east	Impacts on the woodland as a result of increased air pollution are not anticipated based on distance and the scope of the proposals. Construction traffic will not pass the area, instead utilise the A697. **Scoped out of further consideration.**
Unnamed woodland 2 (adjacent Leet Water)	Long-established of plantation origin	1.5 km north east	Impacts on the woodland as a result of increased air pollution are not anticipated based on distance and the scope of the proposals. Construction traffic will not pass the area, instead utilise the A697. **Scoped out of further consideration.**
Unnamed woodland 3 (adjacent Leet Water)	Long-established of plantation origin	1.9 km east	Impacts on the woodland as a result of increased air pollution are not anticipated based on distance and the scope of the proposals. Construction traffic will not pass the area, instead utilise the A697. **Scoped out of further consideration.**

4.11 No other mapped priority habitats within 2 km of the Site were identified during the desk study. Priority habitats are therefore **scoped out of further consideration.**

Habitats within the Site and Survey Area

4.12 Phase 1 Habitats within the Site boundary are shown on Figure 3, as mapped during the Extended Phase 1 Habitat survey. The Site comprises two arable fields in cereal crop production, bound by intact species-poor hedgerows and divided from each other by a central drainage ditch, which continues down the Site's western boundary, between the Site and the area of woodland to the west called Egerton Covert.

Cultivated / disturbed land – Arable

4.13 Both fields were found to be in arable production (Photographs 1 and 2, Section 9). At the time of the habitat survey, both fields were bare, suggesting recent cropping of winter cereals. Neither field had any discernible field margin and appeared to be cultivated up to the boundary.

Evaluation

4.14 The arable fields are of low ecological value, and lack field margins which would provide structure, diversity and connectivity. The habitat is widely present in the immediate area in all directions surrounding the Site. The habitat is assessed as being of **negligible importance and scoped out of further consideration**.

Bare ground

4.15 Bare ground was present at the existing farm track access points in the northernmost areas of Site adjacent the A697. The bare ground was likely caused by high levels of vehicle access. No plants were noted in these areas.

Evaluation

4.16 The bare ground habitats are of negligible ecological value and are **scoped out of further consideration.**

Intact species-poor hedgerow

4.17 Eight distinct hedgerows were found on Site (see Figure 3, Section 8 and Photographs 3 and 4, Section 9). All hedgerows were found to be species poor and dominated by hawthorn *Crataegus monogyna.* Hedgerows 4 and 5 contained occasional elder *Sambucus nigra,* ash *Fraxinius excelsior*, silver birch *Betula pendula*, gorse *Ulex europaeus* and oak *Quercus robur,* though these did not occur frequently enough to improve the hedgerow beyond species-poor classification. All hedgerows were heavily managed, generally kept below 3 m high and wide, but were free of gaps and therefore considered intact.

Evaluation

4.18 All hedgerows on Site fit the definition of priority habitat as defined under Section 41 of the NERC Act 2006. However, the hedgerows are heavily managed and species diversity in the hedge is poor, suggesting that the hedgerows will produce limited amounts of berries and seeds that can be used as foraging resource for other species (hawthorn typically produce berries on the previous year's growth). The hedgerows are not considered to contribute significantly to ecological connectivity, owing to the lack of adjacent field margins, the fact that no hedgerows are present between fields, and the presence of higher value connective habitat immediately adjacent the Site in the form of Egerton Covert and Crown Gorse. Similar quality habitat is widely available surrounding other arable fields in the wider area. The hedgerows are assessed as being of **Site level importance.**

Ditches

4.19 Two ditches were found on Site. Ditch 1 (Photograph 5) divided the two arable fields and Ditch 2 (Photograph 6) divided the southern field from Egerton Covert to the west of Site. Water levels in both ditches were ditches were low at the time of survey, with little aquatic vegetation noted. Both

ditches were choked with tall vegetation growing from the steep banks, including rough meadow grass *Poa trivialis,* cock's-foot *Dactylis glomerata*, broad-leaved dock *Rumex obtusifolius*, bramble *Rubus fruticosus agg.* and spear thistle *Cirsuim arvense*.

Evaluation

4.20 At the time of the survey the ditches held little water and were choked with terrestrial vegetation. Ditch 1 provides some ecological connectivity between Egerton Covert and other woodland habitats immediately north of Site but this is limited by the presence of the A697 as there is no culvert below the road. Both ditches are subject to high levels of nutrient input as a result of runoff from the arable fields. Other drainage ditches are present in the wider area throughout the arable landscape. The ditches are assessed as being of **Site level importance**.

Invasive non-native plant species

4.21 No records of invasive non-native plant species were returned by TWIC.

4.22 No invasive non-native plant species were recorded during the habitat survey.

4.23 Invasive non-native plant species are not considered further in this assessment.

Protected and notable species

Badger

Desk study

4.24 Five records of badger were returned by TWIC within 2 km of the Site. The closest record is of a road casualty on the A697 approximately 700 m north west of Site, dated 2015.

4.25 Three of the records were of badger setts, though given the sensitive nature of the species, the location of these records is not disclosed in this assessment. None of the sett records have immediate connectivity to the Site.

Extended Phase 1 habitat survey results

4.26 No evidence of badger was recorded during the Extended Phase 1 survey.

Evaluation

4.27 The linear habitats on Site are suitable for badger foraging and commuting only. The hedgerows and ditches may provide connectivity for badger, though much of the higher quality badger habitat is available to the south of the Site and connectivity to other suitable habitat to the north of the Site is limited by the A697.

4.28 The arable habitats are considered unsuitable for badger foraging and commuting owing to the lack of field margin. The background levels of agricultural disturbance also render all habitats on Site unsuitable for sett creation.

4.29 Higher quality foraging, commuting and sett creation habitat is available in the immediate area surrounding the Site at Egerton Covert and Crown Gorse woodlands. These have connectivity to other similar-quality resource in the wider area to the south of Site. Desk study records indicate that badger are present with active setts in the surrounding area. Consequently, it cannot be ruled out that badger will move across or utilise the Site on occasion. Habitats on Site are considered to be of **Site level importance to badger.**

Bats

Desk study

4.30 12 records of bats were returned by TWIC, comprising three records of common pipistrelle *Pipistrellus pipistrellus,* two records of soprano pipistrelle *Pipistrellus pygmaeus,* one record of brown long-eared bat *Plecotus auritus*, one record of noctule *Nyctalus noctula*, three records of myotis species *Myotis sp.,* and two records of unidentified pipistrelle species *Pipistrellus sp.* The closest record to Site is of brown long-eared bat located approximately 800 m south of Site.

Extended Phase 1 habitat survey results

4.31 No structures or mature trees are present on the Site and no features suitable for bat roosting were found on or immediately adjacent the Site. Roosting bats are therefore **scoped out of further assessment.**

4.32 The arable farmland on Site is of limited value to foraging bats due to its low structural and species diversity, and which are typically subjected to agricultural management likely to limit the abundance of invertebrate prey. The fields are suitable for commuting bats to fly over whilst moving to higher value foraging habitat. The hedgerows and ditches on Site provide linear corridors for bat foraging and commuting, and form connective commuting paths between the higher value bat habitats at Egerton Covert and Crown Gorse. Habitats on Site are considered to be of **Site level importance to foraging and commuting bats.**

Birds

Desk study

4.33 TWIC returned 759 records of birds within 2 km of the Site. Of these, 65 records relate to birds listed on Schedule 1 of the Wildlife and Countryside Act (1981) including records of barn owl *Tyto alba,* fieldfare *Turdus piliaris,* goldeneye, green sandpiper *Tringa ochropus*, greenshank *Tringa nebularia*, greylag goose *Anser anser,* hobby *Falco subbuteo*, kingfisher *Alcedo atthis*, osprey *Pandion haliaetus*, redwing *Turdus iliacus* and whooper swan *Cygnus cygnus*. None of these species are considered likely to breed in the Site or Survey Area due to the lack of suitable breeding habitat.

4.34 The data set included 156 records of birds listed on the Birds of Conservation Concern (BoCC) Red list, 355 records of BoCC Amber listed species, and 197 records of species listed on the Scottish Biodiversity List (SBL)[3]. Species that could possibly utilise the Site are described below.

4.35 Red listed species include fieldfare, greenfinch *Carduelis chloris*, grey partridge *Perdix perdix,* herring gull *Larus argentatus,* house sparrow *Passer domesticus,* lapwing, linnet *Linaria cannabina*, mistle thrush *Turdus viscivorus,* ringed plover *Charadrius hiaticula,* skylark *Alauda arvensis,* starling *Sturnus vulgaris,* tree sparrow *Passer montanus* and yellowhammer *Emberiza citrinella*.

4.36 Amber listed species include barnacle goose, black-headed gull *Chroicocephalus ridibundus,* bullfinch *Pyrrhula pyrrhula,* common gull *Larus canus,* dunnock *Prunella modularis,* greylag goose, kestrel *Falco tinnunculus,* meadow pipit *Anthus pratensis*, pink-footed goose, redstart *Phoenicurus phoenicurus,* redwing, reed bunting *Emberiza schoeniclus,* sedge warbler *Acrocephalus schoenobaenus,* song thrush *Turdus philomelos,* sparrowhawk *Accipiter nisus,* willow warbler *Phylloscopus trochilus,* woodpigeon *Columba palumbus* and wren *Troglodytes troglodytes*.

4.37 SBL species included barnacle goose, black-headed gull, bullfinch, golden plover, grey partridge, herring gull, house sparrow, kestrel, lapwing, linnet, redwing, reed bunting, siskin *Spinus spinus,* skylark, song thrush, sparrowhawk, tree sparrow and yellowhammer.

[3] As listed in https://www.nature.scot/scotlands-biodiversity/scottish-biodiversity-strategy/scottish-biodiversity-list

Non-breeding bird survey results

4.38 A total of 23 species were recorded during the wintering bird surveys, including five BoCC Red-listed, seven Amber-listed, and ten Green-listed species. Six of these species are listed on the SBL. One species not assigned a BoCC status was also recorded. These are summarised below in Table 5 and displayed in Figures 4a – 4d, Section 8. Full details can be found in the separate wintering bird survey report (BSG Ecology, 2025b).

Table 5: *Summary list of species recorded during wintering bird surveys and their classification.*

BTO code	Common name	Scientific name	BoCC status	Other classifications
FF	Fieldfare	*Turdus pilaris*	Red	Schedule 1
P.	Grey partridge	*Perdix perdix*	Red	SBL
M.	Mistle thrush	*Turdus viscivorus*	Red	
S.	Skylark	*Alauda arvensis*	Red	SBL
Y.	Yellowhammer	*Emberiza citrinella*	Red	SBL
BF	Bulfinch	*Pyrrhula pyrrhula*	Amber	SBL
D.	Dunnock	*Prunella modularis*	Amber	
RE	Redwing	*Turdus iliacus*	Amber	Schedule 1, SBL
RB	Reed bunting	*Emberiza schoeniclus*	Amber	SBL
SH	Sparrowhawk	*Accipiter nisus*	Amber	SBL
WP	Woodpigeon	*Columba palumbus*	Amber	
WR	Wren	*Troglodytes troglodytes*	Amber	
B.	Blackbird	*Turdus merula*	Green	
BT	Blue tit	*Cyanistes caeruleus*	Green	
BZ	Buzzard	*Buteo buteo*	Green	
C.	Carrion crow	*Corvus corone*	Green	
CH	Chaffinch	*Fringilla coelebs*	Green	
CT	Coal tit	*Periparus ater*	Green	
GO	Goldfinch	*Carduelis carduelis*	Green	
J.	Jay	*Garrulus glandarius*	Green	
R.	Robin	*Erithacus rubecula*	Green	
SK	Siskin	*Carduelis spinus*	Green	SBL
PH	Pheasant	*Phasianus colchicus*	Not assessed	

Species accounts – wintering birds

4.39 Species accounts of notable species (BoCC Red and Amber listed species as well as Green listed species on the SBL) are provided below.

4.40 Green list species not listed on the SBL are considered to be of low conservation concern being common, widespread and supported by a wide range of habitats. Woodpigeon, an Amber-listed species, were regularly recorded but is Amber listed due to the UK supporting over 25% of the European population. Woodpigeon are a common and widespread species in the UK and ubiquitous in farmland environments. As such woodpigeon is not considered to be a species of conservation concern. Pheasant are introduced and also not of conservation concern. These species are therefore **scoped out of further consideration**.

4.41 Flocks of fieldfare were recorded on three occasions (see Figures 4a, 4b & 4d, Section 8) with a peak count of 66. Once during November a flock of 15 were recorded in the centre of the Site within the eastern arable field. A flock of 66 were recorded in the same location during December. In February, a flock of 18 were recorded in the south east corner of the Survey Area.

4.42 Grey partridge were recorded on a single occasion in February. Two birds were recorded within the Survey Area, adjacent to the ditch dividing the two fields (see Figure 4d).

4.43 A single mistle thrush individual was recorded on one occasion during December (see Figure 4b), flying over the Survey Area.

4.44 Two skylarks were recorded on a single occasion during February, within the north western corner of the Survey Area in an arable field (see Figure 4d).

4.45 Yellowhammer were recorded on three occasions within the Site during December (see Figure 4b) with a peak count of eight. Two separate flocks of eight individuals were recorded along the western boundary of the Site (one flock in each arable field). Two individuals were also recorded along the northern boundary of the Site within the north west arable field.

4.46 Individual bullfinch were recorded during the November and December visits (see Figures 4a & 4b). On both occasions the species was outside of the Site boundary, being recorded in woodland habitat within the Survey Area. In November the species was recorded in Egerton Covert, and in December north of the A697.

4.47 Individual dunnock were recorded on two occasions in December (see Figure 4b). Once within the Site along the northern boundary of the eastern arable field, and once within the Survey Area in the south along the edge of woodland habitat.

4.48 Flocks of redwing were recorded on three occasions (see Figures 4a - 4c) with a peak count of 38. During November, a flock of 4 was recorded within the Survey Area in Crown Gorse directly south of the Site. During December of flock of 38 were recorded in the central arable habitats on Site. In February, a flock of 35 were recorded again in Crown Gorse.

4.49 Two reed bunting were recorded on two occasions during the month of December (see Figure 4b). One registration was recorded in the central ditch on Site. The other registration was recorded within Egerton Covert in the Survey Area immediately west of Site.

4.50 A single sparrowhawk was recorded on one occasion during the February survey in the Survey Area within the arable field adjacent Site to the west (see Figure 4d).

4.51 Individual wrens were recorded during all survey visits (see Figures 4a – 4d). During November four individuals were recorded, one was recorded within the Site near woodland habitat along the northern boundary of the Site. The other records are from within the Survey Area just beyond the eastern and southern boundaries of the Site. During December three individuals were recorded along the western section of the survey buffer. During January three individuals were recorded in woodland in the western survey buffer. In February, a single individual was recorded within southern section of the survey buffer.

4.52 A single siskin was recorded within the Survey Area, in Egerton Covert immediately west of the Site during the December survey (see Figure 4b). No other registrations of siskin were recorded during the other surveys.

Evaluation – wintering birds

4.53 Recorded species of conservation concern are predominantly passerines dependent on the woodland and hedgerow habitats off-Site, which occasionally use the hedgerow habitats on Site. Fieldfare and redwing were recorded in the arable fields on Site and in the Survey Area in small flocks, as well as in the woodland habitats within the Survey Area. Skylark and grey partridge were not recorded on the Site itself during the wintering bird surveys (and only in small numbers), but considering their habitat preferences and proximity to the Site, it is considered likely that the on-Site arable habitats form part of their wider foraging resource. Habitats on Site are therefore considered to be of **Site level importance to wintering birds.**

Breeding bird survey results

4.54 In total, 37 species were recorded within the Site and Survey Area. Of which, six were BoCC Red List species, 11 were BoCC Amber List species, and 20 were BoCC Green List species.

4.55 A total of 19 species were considered to be confirmed breeding within the Site and Survey Area. Of these, 3 were Red-listed species: skylark, tree sparrow and yellowhammer.

4.56 Additionally, seven Amber-listed species were considered to be breeding: dunnock, common whitethroat, reed bunting, sedge warbler, song thrush, willow warbler and wren.

4.57 The remaining nine confirmed breeding species were all Green-listed species and are of low conservation concern. These species are therefore **scoped out of further consideration**.

4.58 A total of 11 additional species were observed but not considered to have established a territory, either due to unsuitable breeding habitat, or insufficient breeding evidence over the survey period. These species are therefore **scoped out of further consideration**.

4.59 Breeding territories are shown in Figure 5, Section 8. The Figure includes information on the conservation status of birds with reference to the Birds of Conservation Concern (BoCC) (Stanbury *et. al.*, 2021). Results are summarised in Table 6 below, along with BTO code, number of territories, and BoCC status. Full details can be found in the separate breeding bird survey report (BSG Ecology, 2025c)

Table 6: *Classification of birds recorded during the surveys of breeding birds..*

BTO code	Common name	Scientific name	Confirmed breeding territories	Non-breeding	BoCC status	Other classifications
FF	Fieldfare	*Turdus pilaris*	-	✓	Red	Schedule 1
P.	Grey partridge	*Perdix perdix*	-	✓	Red	SBL
LI	Linnet	*Linaria cannabina*	-	✓	Red	SBL
S.	Skylark	*Alauda arvensis*	2		Red	SBL
TS	Tree sparrow	*Passer montanus*	1		Red	SBL
Y.	Yellowhammer	*Emberiza citrinella*	2		Red	SBL
BF	Bullfinch	*Pyrrhula pyrrhula*	-	✓	Amber	SBL
D.	Dunnock	*Prunella modularis*	1		Amber	

K.	Kestrel	*Falco tinnunculus*	-	✓	Amber	SBL
RT	Redstart	*Phoenicurus phoenicurus*	-	✓	Amber	
RB	Reed bunting	*Emberiza schoeniclus*	1		Amber	SBL
SW	Sedge warbler	*Acrocephalus schoenobaenus*	1		Amber	
ST	Song thrush	*Turdus philomelos*	4		Amber	SBL
WH	Common whitethroat	*Curruca communis*	1		Amber	
WW	Willow warbler	*Phylloscopus trochilus*	4		Amber	
WP	Woodpigeon	*Columba palumbus*	-	✓	Amber	
WR	Wren	*Troglodytes troglodytes*	8		Amber	
B.	Blackbird	*Turdus merula*	5		Green	
BC	Blackcap	*Sylvia atricapilla*	-	✓	Green	
BT	Blue tit	*Cyanistes caeruleus*	1		Green	
BZ	Buzzard	*Buteo buteo*	1		Green	
C.	Carrion crow	*Corvus corone*	-	✓	Green	
CH	Chaffinch	*Fringilla coelebs*	3		Green	
CC	Chiffchaff	*Phylloscopus collybita*	9		Green	
CT	Coal tit	*Periparus ater*	1		Green	
CD	Collared dove	*Streptopelia decaocto*	-	✓	Green	
GW	Garden warbler	*Sylvia borin*	-	✓	Green	
GC	Goldcrest	*Regulus regulus*	-	✓	Green	
GO	Goldfinch	*Carduelis carduelis*	-	✓	Green	
GS	Great spotted woodpecker	*Dendrocopos major*	1		Green	
GT	Great tit	*Parus major*	-	✓	Green	
JD	Jackdaw	*Coloeus monedula*	-	✓	Green	
J.	Jay	*Garrulus glandarius*	-	✓	Green	
LT	Long-tailed tit	*Aegithalos caudatus*	1		Green	
PW	Pied wagtail	*Motacilla alba*	-	✓	Green	

R.	Robin	*Erithacus rubecula*	6		Green	
SK	Siskin	*Spinus spinus*	-	✓	Green	SBL

4.60 Fieldfare are listed on Schedule 1 of the Wildlife and Countryside Act 1981, which affords protection to their nests from disturbance. A flock of 275 fieldfare were recorded in the Survey Area at Crown Gorse woodland, immediately south of the Site. Fieldfare were observed only during the March survey and were not recorded subsequently. The UK breeding distribution of fieldfare is restricted to the far north of Scotland in habitats that are not present in the vicinity of the Site. It is considered that these birds were on passage before migrating north, and are not nesting on or near the Site.

Species accounts – breeding birds

4.61 Accounts of the territories of BoCC Red- and Amber-listed species considered to be breeding on the Site and in the Survey Area are provided below.

4.62 Two skylark territories were recorded. One territory is found off-Site in the adjacent field to the north-west, near the western proposed access point. The second territory was found in the central area of Site at the proposed footprint of the BESS and adjacent landscaping (see Appendix 1).

4.63 One tree sparrow territory found off-Site in the trees immediately adjacent the proposed western access point at the A697. No territories directly on-Site.

4.64 Two yellowhammer territories were recorded in the Survey Area. One territory was found off-Site, in a hedgerow immediately north of the proposed western access route, separated from Site via the existing farm track. The second territory was found on-Site at the existing hedgerow immediately north of Egerton Covert.

4.65 One dunnock territory on Site in the hedgerow at the Site's north-western boundary, along the proposed western access route.

4.66 One reed bunting territory recorded in the Survey Area, within the drainage ditch running between the northern and central field. No territories were found on Site.

4.67 – One sedge warbler territory recorded in the Survey Area, within the drainage ditch running between the northern and central field. No territories were found on Site.

4.68 Four song thrush territories recorded in the Survey Area, in the woodland to the south and east. No territories were found on Site.

4.69 One common whitethroat territory was found in the Survey Area, in woodland adjacent the A697 to the north-east of Site. No territories recorded on Site.

4.70 Four willow warbler territories were found in the Survey Area, in the woodland and hedgerows fringing the Site. No territories recorded on Site.

4.71 Eight wren territories found in the Survey Area, evenly distributed in the woodland and hedgerows fringing the Site. No territories recorded on Site.

Evaluation – breeding birds

4.72 Overall, breeding bird interest of the Site is considered to be low. Confirmed territories located on-Site were limited to one skylark, one yellowhammer and one dunnock territory (other species with territories on Site are of low conservation concern). Territories recorded in the Survey Area adjacent to the Site are predominantly passerine species, dependant on hedgerow and woodland habitats fringing the Site, which are to be retained and protected during construction and operational phases. Habitats on Site are therefore considered to be of **Site level importance to breeding birds.**

Red squirrel

Desk study

4.73 TWIC returned no records for red squirrel in 2 km of the Site.

4.74 Red squirrel are listed as qualifying species in Birham Wood LBS and Leet Water - Leitholm to Chaterpath LBS, approximately 950 m south and north east of Site respectively. These are not considered to have functional connectivity to the Site due to fragmentation of woodland and hedgerow habitats, and the presence of the A697.

Extended Phase 1 habitat survey results

4.75 Habitats on Site are of negligible suitability to support red squirrel. Crown Gorse and Egerton Covert immediately adjacent the Site are stands of mixed woodland which may be suitable for the species, however, routine felling in this woodland (such as that observed during the wintering bird survey) is likely to limit overall habitat suitability for red squirrel.

Evaluation

4.76 The Site is therefore considered to have **negligible suitability for red squirrel and they are scoped out of further consideration.**

Otter

Desk study

4.77 No records of otter within 2 km of the Site were returned by TWIC. Otter are known to be present on the River Tweed (and are listed as qualifying species on the River Tweed SAC) which has hydrological connectivity to the Site via a network of small burns and watercourses through the arable and woodland habitats in the wider area.

Extended Phase 1 habitat survey results

4.78 There are two ditches within the Site, though these are of poor suitability to support otter. The water flow of these ditches was very low at the time of survey and is unlikely to increase considerably throughout the year; it is considered that the ditches offer negligible foraging potential for otter as they will not support substantive fish populations. Tree cover along these ditches is low and they remain relatively exposed, reducing their attractiveness for otter to use these ditches for shelter and commuting.

4.79 Terrestrial habitats within the Site are not suitable for otter as they are open and exposed, offering little opportunity for resting or shelter. Crown Gorse, south of Site is more suitable for the species, which is linked to a small stream and the small Lithtillum Loch via woodland, offering potential opportunities for holt creation.

Evaluation

4.80 The Site is therefore considered to be of **negligible value to otter and they are scoped out of further consideration.**

Water vole

Desk study

4.81 No records of water vole within 2 km of the Site were returned by TWIC. Potentially suitable watercourse habitat may be present approximately 600 m south of the Site at Wallace's Crook and Lithtillum Burn beyond Crown Gorse Woodland, but these are beyond the Zone of Influence proposed for the species.

Extended Phase 1 habitat survey results

4.82 The drainage ditches on Site are considered to have negligible suitability to support water vole due to their steep banks, low water levels, and high cover of choking vegetation along the watercourse.

Evaluation

4.83 The Site is considered to be of **negligible value to water vole and they are scoped out of further consideration.**

Other Species

4.84 No other protected or SBL species[4] are considered likely to be present within the Site.

[4] As listed in https://www.nature.scot/scotlands-biodiversity/scottish-biodiversity-strategy/scottish-biodiversity-list

5 Standard mitigation

Embedded mitigation

5.1 The assessment process assumes the application of standard mitigation measures and adherence to current environmental protection policies and guidance, including but not limited to:

- SEPA Supporting Guidance: Water Run-Off from Construction Sites (WAT-SG-75) (SEPA, 2021)
- A Practical Guide to the CAR Regulations (SEPA 2022); and
- SEPA Land Use Planning System Guidance Note 31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (LUPS-GU31) (SEPA, 2017)

Construction Environmental Management Plan (CEMP)

5.2 Details of work necessary to retain, create and manage new ecological features during and on completion of the construction phase will be provided in a Construction and Environmental Management Plan (CEMP) or equivalent. It is recommended that the production of such a document is subject to an appropriately worded planning condition. The CEMP would cover all designed-in mitigation as well as any additional ecology mitigation detailed in this assessment.

Pollution control measures

5.3 Surface water drainage from the Site is to be drained to an attenuation basin immediately south of the proposed BESS footprint (see Appendix 1).

5.4 During the construction phase, a suitable Pollution Prevention Plan will be drafted and incorporated into the CEMP. Mitigation measures will include the following:

- All construction activity should be limited to clearly defined areas.
- Avoidance of all natural water features where possible. Landscaping of the Site and works to construct the western access track over the existing ditch must be done in a sensitive manner to avoid siltation of the existing watercourses.
- Drains, silt traps, check dams and other barriers in place to prevent silt-laden run-off from entering watercourses.
- The application of best practice in accordance with Guidance for Pollution Prevention (NetRegs, n.d.).
- Sensitive location and containment of storage areas and stockpiles.
- Refuelling to only take place on hardstanding areas and include the use of drip trays.
- In any period of prolonged dry weather, damping down of areas of heavy plant activity.

Lighting

5.5 Appropriate measures will be put in place to control new artificial lighting, following guidance from the BCT and ILP (2023):

- Narrow spectrum lights with no UV content and warm white LED (2700 Kelvin or less) should be selected.
- Reducing light spill where possible through appropriate choice of light. Spill onto retained and created features that link to existing dark corridors will be avoided so as to minimise effects on species that may be using these features during the construction and operational stages.
- The use of light barriers to prevent light spillage, this can include physical barriers such as fences and also vegetation planting.

- Lighting controls and/or sensors should be used to ensure that lights are only in use when required.

Ecological Clerk of Works (ECoW)

5.6 An Ecological Clerk of Works will be appointed to ensure compliance with any ecological guidance, plans or method statements that may be required (for example the ecological aspects of a CEMP). The ECoW will provide briefings to all relevant personnel, provide advice in the event of any unforeseen protected species issue that may arise during development, and oversee the implementation of mitigation, compensation and enhancement measures.

Habitat Management Monitoring Plan (HMMP)

5.7 All proposed mitigation, compensation and enhancement measures detailed below will be incorporated into a Habitat Management and Monitoring Plan). It is anticipated that the HMMP would be the subject of an appropriately worded planning condition.

5.8 The plan will include a series of management prescriptions and an annual work plan for a standard minimum period of 5 years from completion of the construction of the development which is capable of being rolled out over a 30 year period. Personnel responsible for implementation of the plan will be identified. Monitoring will take place at appropriate intervals to ensure that habitats develop according to the targets set, and protected species are not adversely affected. The consented development shall be implemented in accordance with the approved plan. The production of this plan will make reference to relevant sections of current best practice, notably that identified in BS42020:2013 (BSI, 2013).

Pre-works checks for badger and breeding birds

5.9 Whilst it is unlikely that badger are resident in the habitats on Site, the proposed development (particularly the access tracks) are sited within 30 m of habitat that may be suitable for badger sett creation. To avoid disturbance of any potential sett located within 30 m of the works, a precautionary pre-works check should be undertaken a maximum of two months prior to any construction work commencing. The timing of the work would allow sufficient time for any follow-up survey work (if required), and a licence application (if required) to be made to NatureScot, and its subsequent decision and implementation (if required).

5.10 All works involving the disturbance or destruction of any areas capable of supporting breeding birds should be undertaken outside of the breeding season, which typically extends from mid-March to mid-August. Should works commence during the breeding bird season, the area affected should be checked by a suitably experienced ecologist within 48 hours of works commencing. Where active nests are identified, work in that area (plus a suitable buffer zone, to be determined by the ECoW) must be delayed until the nest is vacated (as signed off by the ECoW).

Mitigation through design

5.11 The proposed landscaping plan for the Site includes measures to avoid and mitigate for potential impacts to ecological receptors. Ecology specific mitigation includes:

- The retention and protection of all existing woodland and hedgerow habitats on and adjacent the Site in accordance with BS 5837: 2012 (BSI, 2012).
- The design of the lighting scheme will utilise downward lighting columns, with a minimum 50 m stand-off to woodland edge, hedgerow and watercourse habitat, and screening via the proposed bund to reduce light spill on existing dark corridors. Lighting specifications will be in line with guidance provided by BCT and ILP (2023). This will retain the habitat's value for species that may be utilising the existing dark corridors they provide.
- Compensation for the loss of approximately 170 m of species-poor native hedgerows at the proposed access points will be achieved through the planting of approximately 800 m of native hedgerow mix and infill planting of lateral gaps in retained hedges (species mixes shown in Appendix 1).

- Improvement of the vegetation structure and diversity on Site through extensive planting of a general purpose meadow mix (such as MG5 Meadow Mix by Scotia Seeds, or similar), and native woodland and scrub planting mixes, which will positively contribute to foraging and / or sheltering provision for birds, bats, and badgers. New habitats have direct connectivity to existing ecological features at Crown Gorse and Egerton Covert.

6 Potential Impacts and Recommendations

6.1 This section considers the potential effects of the proposed development on key ecological features (designated sites, habitats and species) that have been scoped in for further consideration.

Statutory and non-statutory designated sites

Potential impacts

6.2 Statutory and non-statutory designated sites that were scoped in for further consideration (see Section 4) were as a result of potential impacts on qualifying bird species and/or potential indirect impacts as a result of pollution events during the construction stage.

6.3 The suite of bird surveys did not record wintering or breeding use of the Site by qualifying species listed in the citations for the sites that were scoped in for further consideration. It is considered that the Site does not present significant resource for these species and the potential impacts on designated sites are limited to indirect impacts resulting from potential pollution events only on the following five sites:

- The Hirsel SSSI,
- River Tweed SSSI,
- River Tweed SAC (England and Scotland),
- Tweed Catchment Rivers – England: Lower Tweed and Whiteadder SSSI, and
- Leet Water – Leitholm to Chaterpath LBS.

Mitigation

6.4 Potential pollution events would be attenuated by the on Site attenuation basin, which will be constructed prior to or at the same time as the access tracks and Site compound. During construction, interim measures will be put in place such as the placement of silt fences across the Site around areas with high runoff and silt load (e.g. spoil heaps, excavations and engineered fill) and retained in place until after high silt generating activities have ceased and the attenuation basin is established. Through these measures and adherence to environmental protection policies (see Section 5), **no significant impacts on statutory designated sites are predicted**.

Habitats within the Site and Survey Area

Potential impacts

6.5 The proposals will result in a loss of approximately 170 m of intact species poor hedgerow of **Site level importance.** This will be compensated through the planting of approximately 800 m of new native hedgerow along the Site's north-eastern boundary, perpendicular the A697, and infill planting of all existing native hedgerows with a diverse native hedge mix (see Appendix 1 for indicative species mixtures).

6.6 In the absence of pollution control, pollution events during the construction phase could negatively affect the ditch habitats on Site through siltation. A culverted water crossing is also proposed along the western access track over Ditch 1 (see Photograph 6, Section 9, and Appendix 1). At the time of writing, specifications for the water crossing and culvert have not been finalised, but the crossing will impact approximately 10 m of ditch habitat of **Site level importance.**

Mitigation

6.7 The temporary loss of hedgerow habitats can be further mitigated for through an adjustment in their management, by allowing the hedgerows to grow to a minimum height of 3 m. In addition, hedges should be rotationally managed such that any one section of hedge is subject to low-impact flailing

every other year, to allow the previous year's growth to bear fruit and contribute to sheltering and foraging resource for invertebrates, birds and bats.

6.8 This will result in a **temporary non-significant adverse effect** on hedgerow habitats whilst the new hedgerow and planting establishes, becoming a **minor beneficial effect** once the new hedgerow has established.

6.9 Potential pollution events would be attenuated by the on Site attenuation basin, which will be constructed prior to or at the same time as the access tracks and site compound. During construction, interim measures will be put in place such as the placement of silt fences across the Site around areas with high runoff and silt load (e.g. spoil heaps, excavations and engineered fill) and retained in place until after high silt generating activities have ceased and the attenuation basin is established. Design of the culvert and access crossing is not finalised but will adhere to relevant drainage policies and best practice. Through these measures and adherence to environmental protection policies (see Section 5), **no significant impacts on ditch habitats are predicted**.

Badger

Potential impacts

6.10 Existing arable habitats on Site are considered to be of negligible suitability for badger and the linear habitats on Site are of **Site level importance** for badger foraging and commuting only.

Mitigation

6.11 The design of lighting during construction, if required, should be sensitive to preserve existing dark corridors around the hedgerow, ditch and woodland edge habitats, to retain their suitability for foraging and commuting badger and avoid fragmenting suitable habitat in the wider area. The guidance provided by BCT and ILP (2023) is considered sufficient to protect both bats and badger.

6.12 A pre-works check for active badger setts within 30 m of any proposed works (see Section 5) should be undertaken a maximum of two months prior to construction work commencing to avoid impacts on active badger setts that may be in the area subsequent to the original survey work.

6.13 The provision of diverse grassland, woodland, hedgerow and scrub planting, along with the creation of a bund to the north of the BESS (see Appendix 1), will offer badger additional foraging, commuting and sett creation opportunities, with direct connectivity to other suitable badger habitat to the south of Site at Crown Gorse.

6.14 The provision additional landscape features, preservation of dark corridors, and avoidance of disturbance to active badger setts during the works is considered to represent a **minor beneficial effect for badger**.

Bats

6.15 Habitats on Site are of **Site level importance** for foraging and commuting bats, with the highest value habitat present being the hedgerow and ditch habitats.

Mitigation

6.16 The design of lighting during construction, if required, should be sensitive to preserve existing dark corridors around the hedgerow, ditch and woodland edge habitats, to retain their suitability for foraging and commuting bats and avoid fragmenting suitable habitat in the wider area. The guidance provided by BCT and ILP (2023) is considered sufficient to protect both bats and badger.

6.17 The provision of diverse grassland, woodland, hedgerow and scrub planting, along with the creation of a bund to the north of the BESS, will offer bats additional foraging and commuting opportunities, with direct connectivity to suitable foraging, commuting an potential roosting habitat to the south of Site at Crown Gorse.

6.18 This is considered to represent a **minor beneficial effect for foraging and commuting bats**.

Birds

Potential impacts – wintering birds

6.19 Habitats on Site are considered to be of **Site level importance** to wintering birds. Of the assemblage recorded using the Site, the birds considered to be most affected by loss of approximately 10.17 ha of arable habitats on Site are fieldfare and redwing, with skylark and grey partridge considered likely to use the Site (though not observed during the surveys).

6.20 All other birds recorded are of low conservation concern or are dependent on the hedgerow, ditch and woodland habitats, which are to be retained and protected: no impacts on these birds are predicted.

Mitigation – wintering birds

6.21 The creation of higher quality habitat for wintering birds through creation of 5.27 ha of diverse grassland, 1.65 ha of woodland, hedgerow creation, enhancements and scrub planting, along with the creation of a bund to the north of the BESS, will offer wintering birds more diverse foraging opportunities. The higher quality habitat will be suitable to support the peak counts of fieldfare and redwing observed using the arable habitats on Site (66 and 38 birds respectively). This is considered to be a **minor beneficial effect for wintering birds.**

6.22 No additional mitigation measures are considered necessary.

Potential impacts – breeding birds

6.23 Habitats on Site are considered to be of Site level importance for breeding birds. Following surveys and territory analysis, only one skylark territory will be lost to development, with all other territories found on Site belonging to passerine birds and centred on retained hedgerow habitats (and therefore protected during development – see Section 5) or belonging to birds not of conservation concern. The skylark territory is located on the footprint of the BESS itself (see Appendix 1).

Mitigation – breeding birds

6.24 The provision of 5.27 ha diverse grassland, 1.65 ha of woodland, hedgerow creation and enhancements, and scrub planting, along with the creation of a bund to the north of the BESS, will offer breeding skylark in the area more diverse foraging opportunities. In addition, the new habitats will encourage invertebrate dispersal into the adjacent arable fields, improving that habitat's value for breeding skylark and potentially encourage additional skylark territories within the retained arable habitats. This is considered sufficient to offset the loss of the single skylark breeding territory in absence of additional mitigation and will be a **neutral effect on breeding birds.**

6.25 No additional mitigation measures are considered necessary.

Summary and conclusion

6.26 Landscaping measures around the Site will enhance habitat diversity and structure, whilst providing higher quality foraging resource for badger, bats, wintering and breeding birds that is well connected to other features in the local landscape.

6.27 Through the mitigation measures described above it is considered that there will be **no significant adverse residual effects on ecological receptors.**

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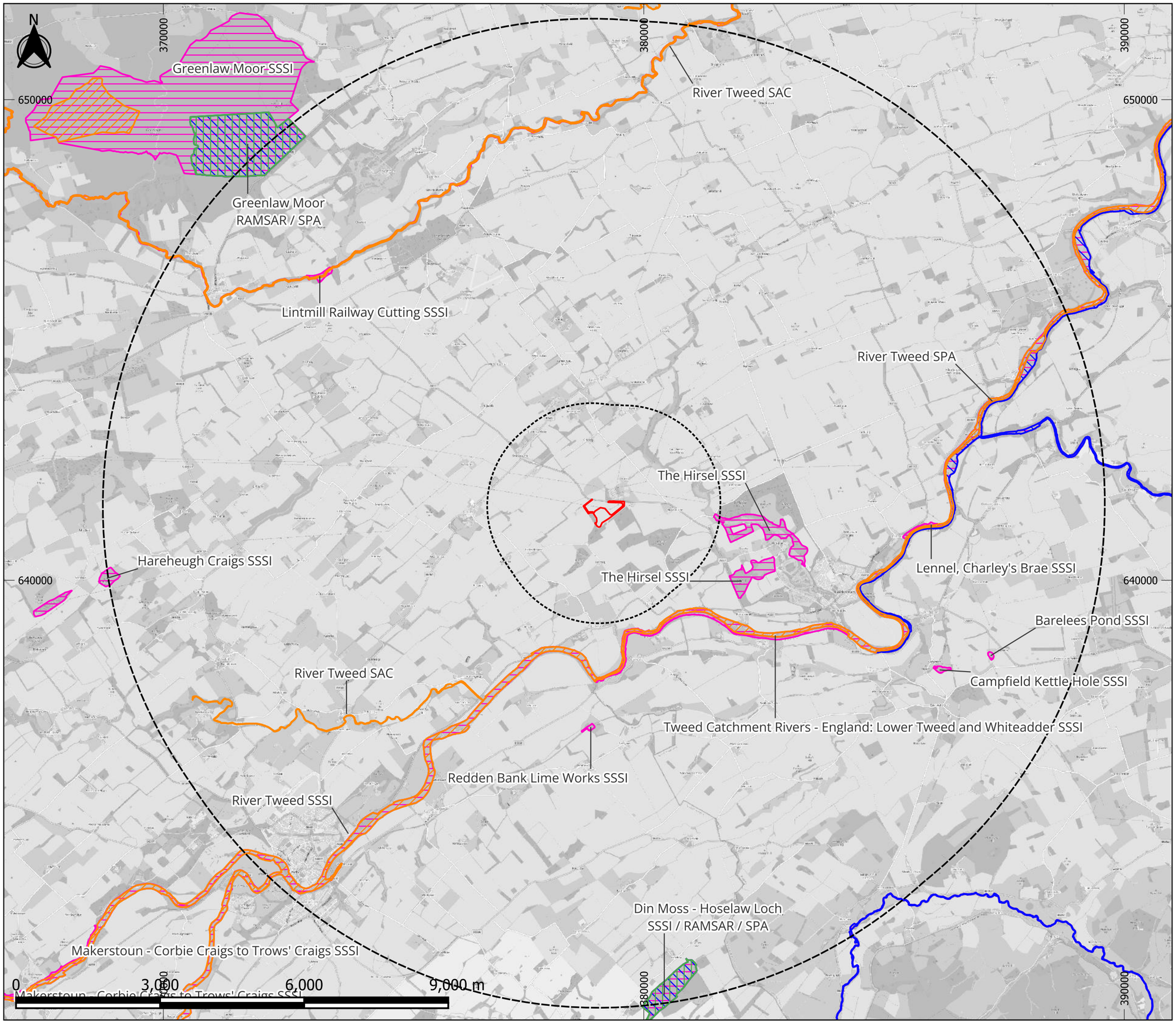
8 Figures



Legend

- Special Areas of Conservation
- Ramsar
- Special Protection Areas
- Sites of Special Scientific Interest
- Site boundary
- 2km from site boundary
- 10km from site boundary

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JOB REF: P24-005

PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure 1: Statutory Designated Sites within 10km

DATE: 30/07/2024 CHECKED: AM SCALE: 1:75,000

DRAWN: CS APPROVED: AM VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: © NatureScot

Graphics Ref. No.: 07422

Legend

- Locally Designated Sites
- Site boundary
- 2km from site boundary

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PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure 2: Locally designated sites within 2 km

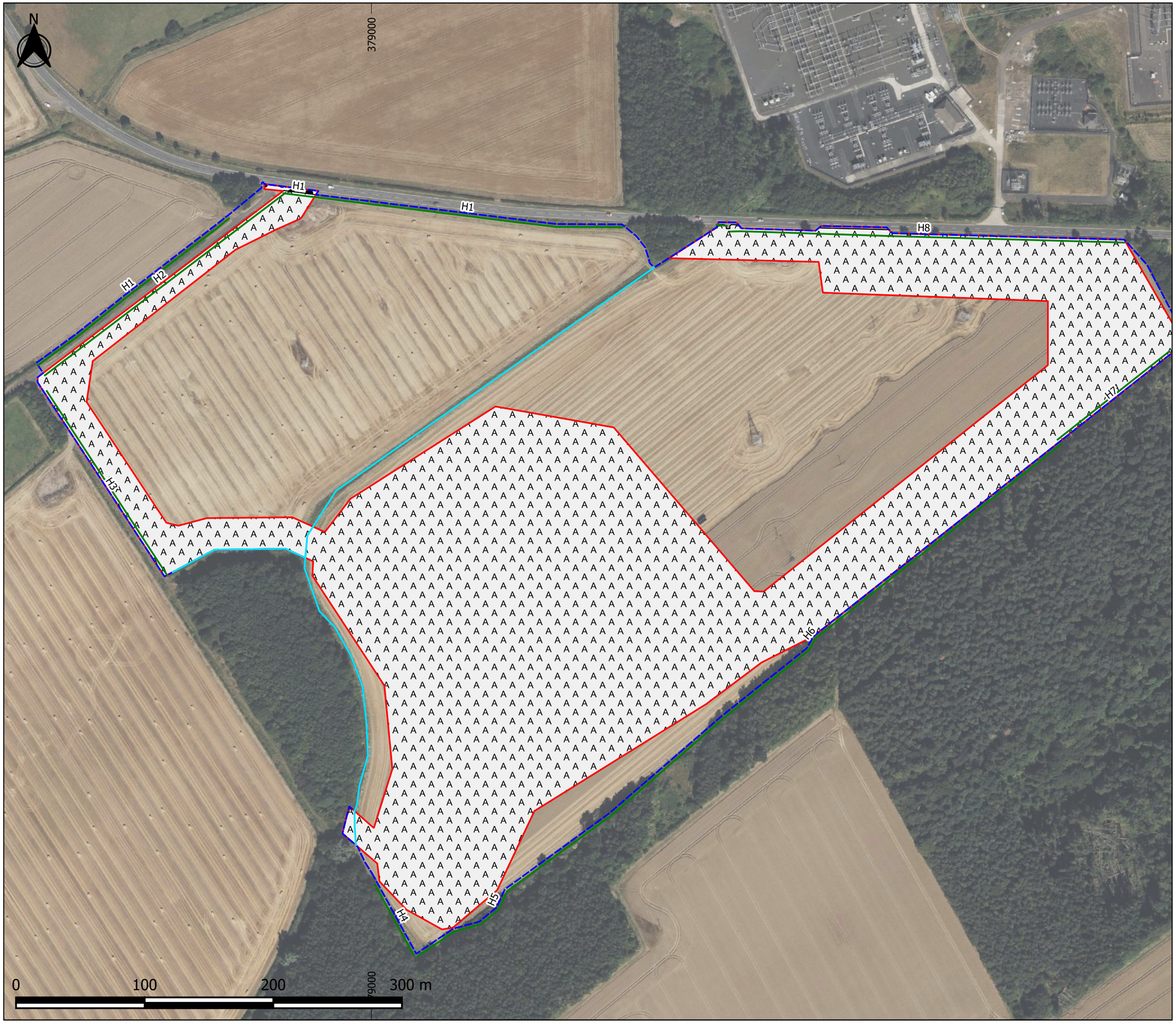
DATE: 30/07/2024 CHECKED: AM SCALE: 1:16,500

DRAWN: CS APPROVED: AM VERSION:1.0

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: © Natural England

Graphics Ref. No.: 07423



Legend

- Intact hedge - species-poor
- Running water
- Cultivated/disturbed land - arable
- Built up areas inc. hardstanding
- Bare ground
- Survey boundary
- Site boundary

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PROJECT TITLE

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DRAWING TITLE

Figure 3: Phase 1 Habitat Map

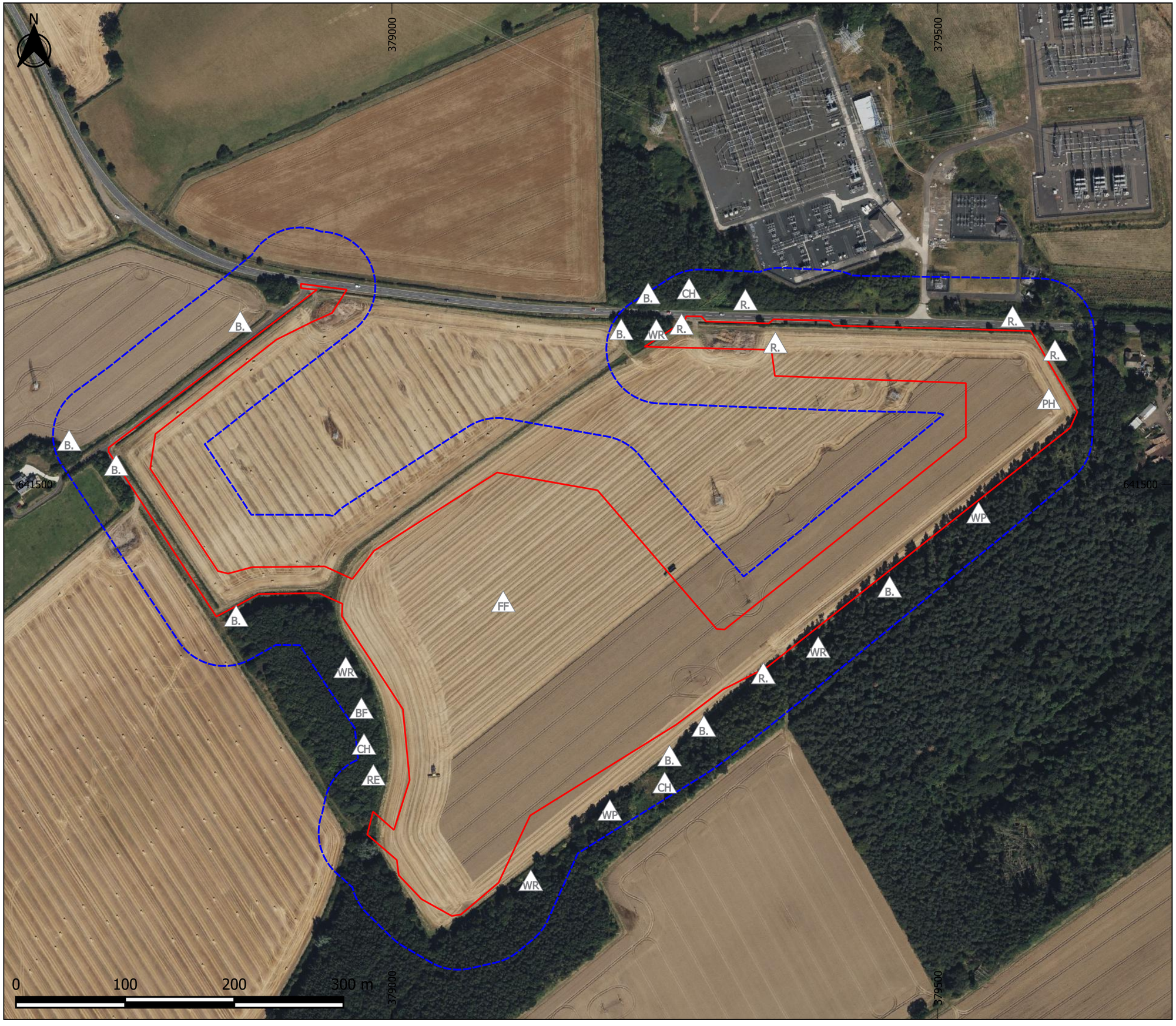
DATE: 07/07/2025 CHECKED: AM SCALE: 1:2,800

DRAWN: CS APPROVED: CD VERSION:1.1

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 07418



Legend

CH Visit 1 - non-breeding

Survey boundary

Site boundary

BTO Code	Common Name
B.	Blackbird
BF	Bullfinch
CH	Chaffinch
FF	Fieldfare
PH	Pheasant
R.	Robin
RE	Redwing
WP	Woodpigeon
WR	Wren

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PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure : Wintering bird survey - Visit 1

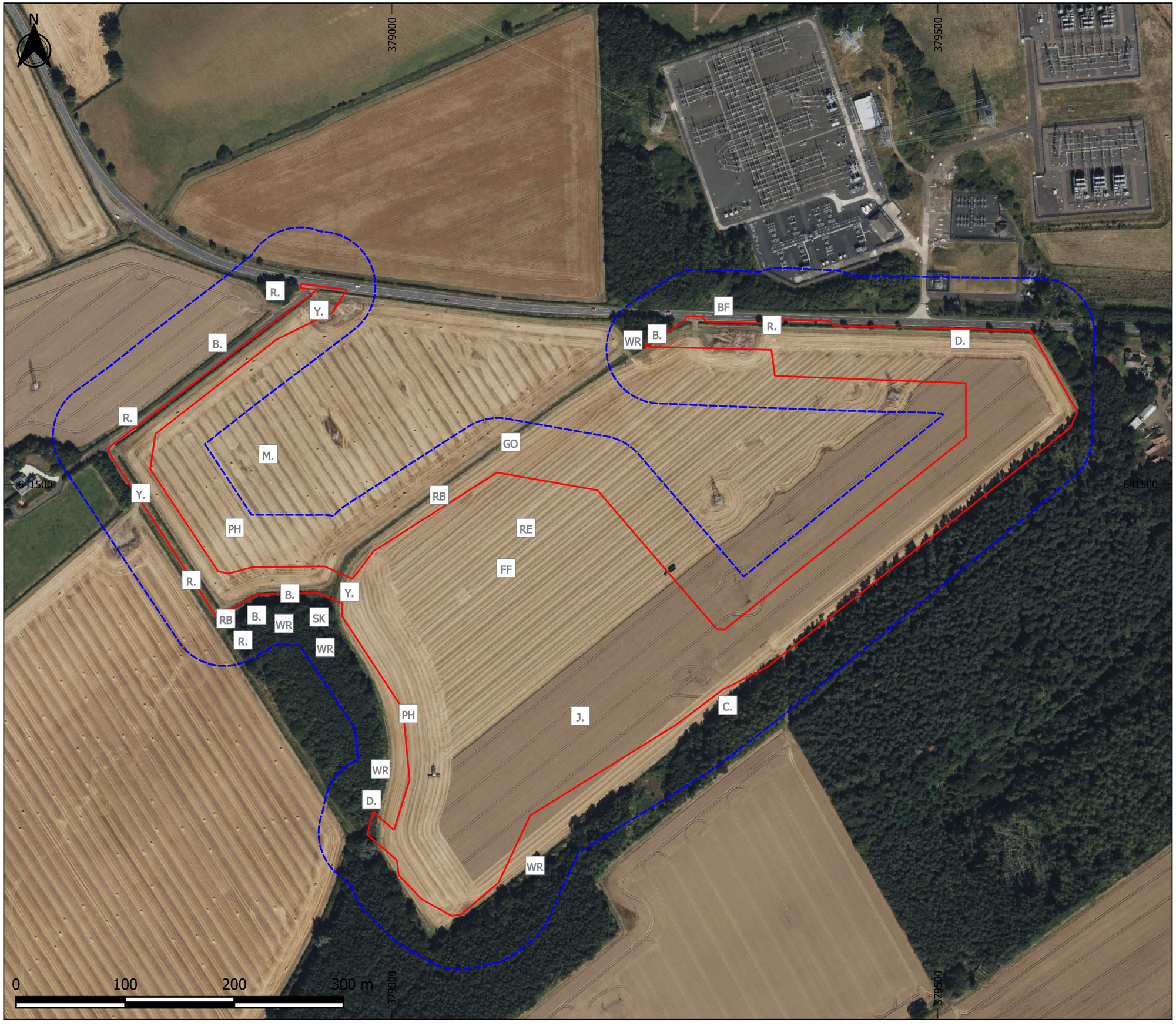
DATE: 19/02/2025 CHECKED: JG SCALE: 1:3,300

DRAWN: MZ APPROVED: CD VERSION:1.1

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 09130



Legend

- CH — Visit 2 - non-breeding
- Bird Flight Line
- Survey boundary
- Site boundary

BTO Code	Common Name
B.	Blackbird
BF	Bullfinch
C.	Carrion Crow
D.	Dunnock
FF	Fieldfare
GO	Goldfinch
J.	Jay
M.	Mistle Thrush
PH	Pheasant
R.	Robin
RB	Reed Bunting
RE	Redwing
SK	Siskin
WR	Wren
Y.	Yellowhammer

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PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure : Wintering bird survey - Visit 2

DATE: 19/02/2025 CHECKED: JG SCALE: 1:3,300

DRAWN: MZ APPROVED: CD VERSION:1.2

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 09130

Legend

- CH — Visit 3 - non-breeding
- Bird Flight Line
- Survey boundary
- Site boundary

BTO Code	Common Name
B.	Blackbird
BZ	Buzzard
C.	Carrion Crow
R.	Robin
WR	Wren

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PROJECT TITLE

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DRAWING TITLE

Figure : Wintering bird survey - Visit 3

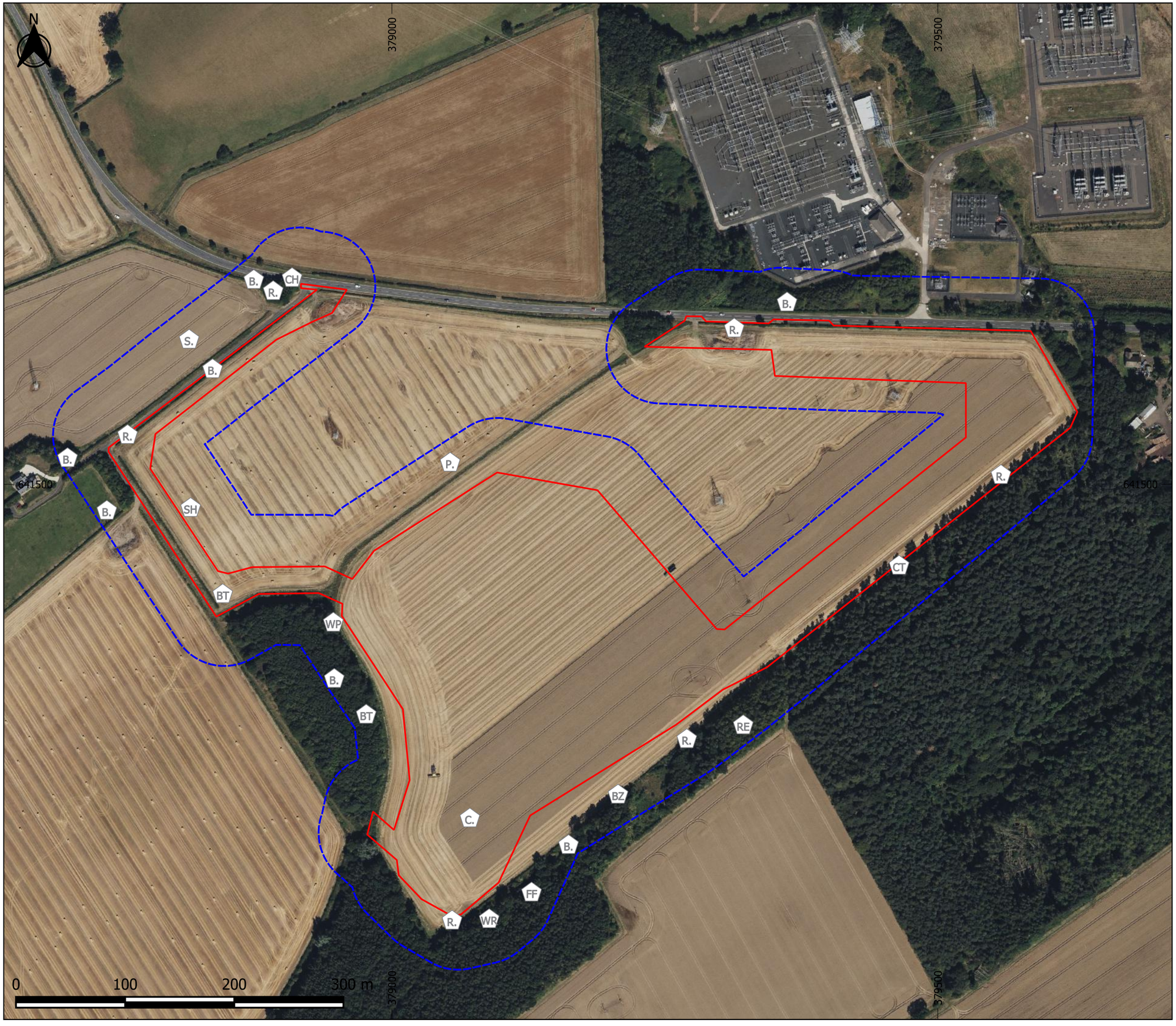
DATE: 19/02/2025 CHECKED: JG SCALE: 1:3,300

DRAWN: MZ APPROVED: CD VERSION:1.1

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 09130



Legend

- Visit 4 - non-breeding
- Bird Flight Line
- Survey boundary
- Site boundary

BTO Code	Common Name
B.	Blackbird
BT	Blue Tit
BZ	Buzzard
C.	Carrion Crow
CH	Chaffinch
CT	Coal Tit
FF	Fieldfare
P.	Grey Partridge
R.	Robin
RE	Redwing
S.	Skylark
SH	Sparrowhawk
WP	Woodpigeon
WR	Wren

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PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure : Wintering bird survey - Visit 4

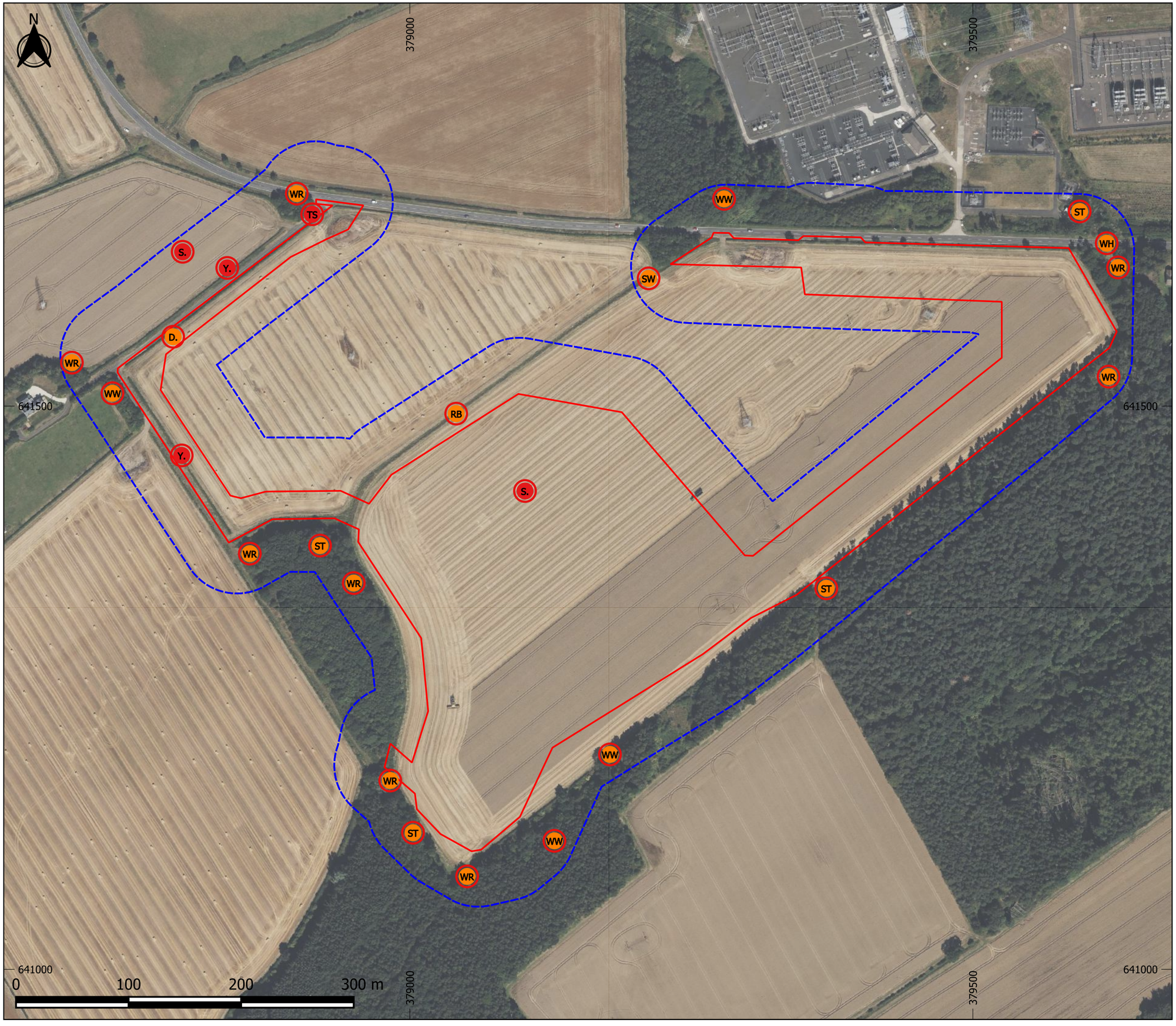
DATE: 19/02/2025 CHECKED: JG SCALE: 1:3,300

DRAWN: MZ APPROVED: CD VERSION:1.1

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 09130



Legend

- CH — Red Confirmed Breeding
- CH — Amber Confirmed Breeding
- Survey boundary
- Site boundary

BTO Code	Common Name
D.	Dunnock
RB	Reed Bunting
S.	Skylark
ST	Song Thrush
SW	Sedge Warbler
TS	Tree Sparrow
WH	Whitethroat
WR	Wren
WW	Willow Warbler
Y.	Yellowhammer

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PROJECT TITLE

BISHOPS DAL BESS

DRAWING TITLE

Figure : Confirmed breeding territories

DATE: 24/07/2025 CHECKED: HG SCALE: 1:3,200

DRAWN: SP APPROVED: IH VERSION:1.1

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Graphics Ref. No.: 11378

9 Photographs

Photograph 1: Northern arable field, margins will form western access track.

Photograph 2: Southern arable field.

Photograph 3: Hedgerow 5. Species poor and heavily managed.

Photograph 4: Hedgerow 1. Species poor and heavily managed.

Photograph 3: Ditch 1, dividing the two fields.

Photograph 4: Ditch 2, dividing the Site from Egerton Covert.

Appendix 1: Landscape masterplan

Eccles Substation

Proposed native mixed hedgerow and proposed General Purpose Meadow Mix along and adjacent to the north-eastern boundary is indicative. These landscape features will be implemented subject to the completion of development by others in this location and be complementary to the requirements of the development, including any landscaping proposals

Existing tree and hedgerow planting along A697 to be retained as far as is practicable, with additional mixed native tree and hedgerow species introduced between existing gaps, to assimilate the proposed development into the local environment and provide biodiversity enhancement (where practical and feasible)

Existing hedgerow to be managed to a minimum height of 3m

Puncheon Bridge

A697

Proposed water crossing

Proposed bund

Surrounding woodland on the boundaries of the application site to be retained and protected during construction in accordance with BS 5837: 2012

Egerton Covert

Crown Gorse

BESS substation compound

DNO substation compound

Attenuation basin

Paxton Wood

INDICATIVE PLANTING LISTS

Native Woodland Planting

***TREES - 60%** even species split*
Alnus glutinosa - 150-175cm ht, B, fthrd, 3 brk
Betula pendula - 150-175cm ht, B, fthrd, 3 brks
Corylus avellana - 100-125cm ht, RB, 5 brks
Ilex aquifolium - 100-125cm ht, RB
Pinus sylvestris - 100-125cm ht, RB
Quercus petraea - 100-125cm ht, B, 1+2
Quercus robur - 100-125cm ht, B, 1+2
Sorbus aucuparia - 100-125cm ht, B, 1+2

***SHRUBS - 40%** even species split*
Crataegus monogyna - 60-80cm ht, B, 1+1
Malus sylvestris - 60-80cm ht, B, 1+1
Prunus spinosa - 60-80cm ht, B, 1+1
Salix caprea - 60-80cm ht, B, O/1
Sambucus nigra - 60-80cm ht, B, 1+1
Viburnum opulus - 60-80cm ht, B, 1+2

Native Mixed Hedgerow Planting

15% - Corylus avellana - 40-60cm ht, B, 1+1
40% - Crataegus monogyna - 40-60cm ht, B, 1+0
10% - Ilex aquifolium - 40-60cm ht, 2L
5% - Malus sylvestris - 40-60cm ht, B, 1+1
10% Prunus spinosa - 40-60cm ht, B, 1+1
10% - Sambucus nigra - 40-60cm ht, B, 1+0
10% - Viburnum opulus - 40-60cm ht, B, 1+1

N 0 50 100 m

Key

Existing

- Site boundary
- Vegetation to be retained
- Vegetation to be removed
- Contours
- Overhead powerlines
- Drainage infrastructure

Proposed

- Palisade, weldmesh / acoustic fence
- Stock proof fence
- Battery storage enclosure (BSE)
- Power conversion systems (PCS)
- BESS substation building
- DNO substation building
- Auxiliary transformer
- LV distribution equipment
- Aggregation panel with LV pillar
- Pre-insertion resistor
- Capacitor bank
- Harmonic filter and resistor
- Spare container
- Lighting / CCTV column
- Gravel / asphalt finish - to suit detailed earthing design
- Access track
- Surface water filter drain
- Surface water pipe
- Surface water catch pit / inspection chamber
- Flow control manhole
- Water channel crossing culvert
- Native woodland planting mix *(tree planting shown is illustrative)*
- Native mixed hedgerow
- General Purpose Meadow Mix - i.e. MG5 Meadow Mix (SCM8) by Scotia Seeds, or similar approved
- Wet meadow mix - i.e. Wet Meadow Mix (SCM2) by Scotia Seeds, or similar approved

NOTE:
- BESS layout based upon drawing no. 05389-RES-LAY-DR-PT-001 REV 6
- Proposed bund based on indicative information received from RES Limited. This drawing is therefore indicative only and the site layout may change as more information becomes available.

BISHOPS DAL ENERGY STORAGE - LANDSCAPE MASTERPLAN

| PEGASUSGROUP.CO.UK | TEAM/DRAWN BY: VK/VR | APPROVED BY: DT | DATE: 16/12/2024 | SCALE: 1:2000@A2 | DRWG: P24-0160_EN_08_E | CLIENT: RES LIMITED |

PEGASUS GROUP

Appendix 2: Survey weather conditions

Table A-1: *Extended Phase 1 habitat survey weather conditions*.

Date	Timing	Temperature (°C)	Wind speed (Beaufort scale)	Cloud cover (Oktas)	Precipitation	Visibility
28/02/2024	10:00 – 13:30	7	3	7	None	>2 km

Table A-2: *Survey of wintering birds weather conditions*.

Date	Timing	Sunrise	Temperature (°C)	Wind speed (Beaufort scale)	Cloud cover (Oktas)	Precipitation	Visibility
12/11/2024	08:30 – 10:15	07:40	4	1	5	None	>2 km
06/12/2024	08:30 – 10:15	08:23	4	1	1	None	>2 km
07/01/2025	09:15 – 11:00	08:37	0	1	1	None	>2 km
05/02/2025	08:15 – 08:35	07:52	2	1	1	None	>2 km

Table A-3: *Survey of breeding birds weather conditions*.

Date	Timing	Sunrise / sunset*	Temperature (°C)	Wind speed (Beaufort scale)	Cloud cover (Oktas)	Precipitation	Visibility
25/03/2025	06:20 – 07:50	05:57	10	1	5	None	>2 km
11/04/2025	06:30 – 08:05	06:13	8	1	2	None	>2 km
28/04/2025	19:20 – 20:55	20:41*	15	2	7	**None**	>2 km
13/05/2025	05:20 – 06:50	05:01	8	1	6	None	>2 km
03/06/2025	04:45 – 06:10	04:31	9	2	8	Light intermittent	>2 km
17/06/2025	04:40 – 06:10	04:24	14	2	8	None	>2 km

***** Crepuscular visit timed around sunset.

Appendix 3: Summaries of Relevant Policy, Legislation and Other Instruments

This section briefly summarises the legislation, policy and related issues that are relevant to the main text of the report. The following text does not constitute legal or planning advice.

Scottish wildlife legislation

In Scotland wildlife is afforded protection via a range of legal instruments. The key Acts and Regulations, which have been taken into account throughout this assessment, are as follows:

- Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)[5]
- Wildlife and Countryside Act 1981 (as amended)
- Nature Conservation (Scotland) Act 2004 (as amended)
- The Protection of Badgers Act 1992

European protected species

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended in Scotland) transpose the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.

"European protected species" (EPS) are those which are present on Schedule 2 of the Regulations. They are subject to the provisions of Regulation 39. In summary, this legislation makes it an offence to:

- capture, injure or kill a wild animal EPS
- to disturb such an animal while it is occupying a structure or place it uses for shelter or protections
- to disturb such an animal while it is rearing or otherwise caring for its young
- to obstruct access to a breeding site or resting place of such an animal or to otherwise deny the animal use of the breeding site or resting place
- to disturb such an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs
- to disturb such an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogation) through the issuing of licences. The licences in Scotland are currently determined by Scottish Natural Heritage (SNH) for development works. In accordance with the requirements of the Regulations, a licence can only be issued where the following requirements are satisfied:

- that there is no satisfactory alternative, and
- that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Protected species - Wildlife and Countryside Act 1981 (as amended in Scotland)

Protected animals are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended in Scotland), (all EPS are also protected under the 1981 Act). In summary, this legislation makes it an offence to intentionally or recklessly:

- Kill, injure or take any wild animal listed on Schedule 5

[5] In so far as they apply to Scotland, see Regulation 2 of 2017 Regulations for provisions relevant to Scotland.

- Damage, destroy or obstruct access to any structure or place which such an animal uses for shelter or protection or to disturb such an animal when it is occupying a structure or place for that purpose.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended in Scotland) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to disturb any wild bird listed on Schedule 1 of the act whilst it is building a nest or is in, on, or near a nest containing eggs or young, or whilst lekking; or to disturb the dependent young of any wild bird listed on Schedule 1.

Species and habitats of principal importance

Section 1 of the Nature Conservation (Scotland) Act 2004 states that 'It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions'. To assist with this objective Section 2(4) of the Act sets out the requirement to publish a list of flora and fauna considered to be of principal importance in Scotland.

The list required under Section 2(4) of the Act has now been published and includes a diverse range of habitats and species[6]. The measures required to protect these species and habitats are set out in the document 'Scotland's Biodiversity: It's in Your Hands - A strategy for the conservation and enhancement of biodiversity in Scotland' (Scottish Executive, 2004). Biodiversity Targets are outlined in the 'Strategic Plan for Biodiversity 2011-2020' (Scottish Government, 2013). The two documents together comprise the Scottish Biodiversity Strategy.

Protection of Badgers Act 1992 (as amended)

The 1992 Act protects badgers and their setts. It has been amended by the Nature Conservation (Scotland) Act 2004 under Schedule 6 (26). In summary, offences under this legislation are:

- Wilfully taking, injuring or killing badgers
- Cruelty; selling and possession; marking and ringing
- Intentionally or recklessly interfering with a badger sett (interfering with a badger sett includes damaging or destroying a badger sett or any part of it, obstructing access to a sett, disturbing a badger whilst it is in a sett, or causing or allowing a dog to enter a badger sett

Competent authorities

Under Regulation 7 of the Conservation of Habitats and Species Regulations 2017 (as amended) a "competent authority" includes "any Minister of the Crown…, government department, statutory undertaker, public body of any description or person holding a public office.

In accordance with Regulation 9, "a competent authority must exercise their functions which are relevant to nature conservation, including marine conservation, so as to secure compliance with the requirements of the [Habitats and Birds] Directives. This means for instance that when considering development proposals a competent authority should consider whether EPS or European Protected Sites are to be affected by those works and, if so, must show that they have given consideration as to whether derogation requirements can be met.

National Planning Framework 4 policies

The National Planning Framework 4 (NPF4) sets out Scotland's spatial principles, regional priorities, national developments and national planning policies which reflect Scottish Ministers' priorities for the development and use of land. NPF4 also relates to preparation of development plans, development design and determination of planning applications and appeals. NPF4 plays a key role in supporting the delivery of Scotland's national outcomes and the United Nations Sustainable Development Goals.

The following NPF4 policies are considered applicable to the Proposed Development:

[6] The list is published at: https://www.nature.scot/scottish-biodiversity-list

Policy 1: Tackling the climate and nature crises – states proposals should give significant weight to global climate and natural crisis.

Policy 3: Biodiversity – states development should contribute to enhancing biodiversity, integrating nature-based solutions where possible. National or Major proposals should demonstrate how they will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. Any potential adverse impacts should be minimised through careful planning and design.

Policy 4: Natural places – notes how development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported. Criterion (d) states development proposals that affect a site designated as a local nature conservation site or landscape area in the LDP will only be supported where: i. Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or ii. Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.

Policy 5: Soils – The policy intent is to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development. The Policy supports the generation of energy from renewable sources on prime agricultural land, or land of lesser quality that is culturally or locally important for primary use.