MKA

Wintering Bird Survey Report

East Claydon Battery Energy Storage Site

Site	*East Claydon Battery Energy Storage Site*
Project number	*130322*
Client name / Address	*Statera Energy Limited, 4th Floor, 80 Victoria Street, London, SW1E 5JL*

Version number	**Date of issue**	**Revisions**
1.0	*04 July 2024*	*Original*

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Declaration of compliance

The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

MKA Ecology Ltd is a CIEEM Registered Practice. This means that MKA Ecology Ltd are formally recognised for high professional standards, working at the forefront of our profession.

Validity of data

Unless stated otherwise the information provided within this report is valid for a maximum period of 24 months from the date of survey. If works at the Site have not progressed by this time an updated Site visit may be required in order to determine any changes in site composition and ecological constraints.

CONTENTS

1. EXECUTIVE SUMMARY

In February 2024, MKA Ecology Ltd was commissioned to undertake a wintering bird survey of the proposed Battery Energy Storage System (BESS) in East Claydon in order to establish the potential impacts of a BESS facility with associated temporary cable easement route. It was agreed with Buckinghamshire Council a single visit would be completed to provide greater confidence on the presence or likely absence of notable wintering species or a notable wintering assemblage. A site visit was completed on 12 February 2024.

The Site comprises arable fields surrounded by hedgerows and a tree-lined stream along the north-western boundary. It proposed the BESS facility is developed within the arable fields, with a temporary haul route and cable easement extending north across modified grassland to an existing National Grid substation.

The survey comprised a single visit following standard Bird Survey Guidelines methodology (Bird Survey & Assessment Steering Group (2023)). The visit identified the presence of 15 notable species, including four Schedule 1 bird species (red kite, peregrine, fieldfare and redwing). Five species are listed on Section 41 as Species of Principal Importance (NERC Act, 2006): skylark, starling, song thrush, dunnock and yellowhammer. In addition, four species listed on the Birds of Conservation Concern Red List were recorded during the visit, namely skylark, starling, fieldfare and yellowhammer. A further nine species listed on the Birds of Conservation Concern Amber List were recorded, mallard, stock dove, woodpigeon, lesser black-backed gull, sparrowhawk, wren, redwing, song thrush and dunnock.

With the exception of fieldfare, redwing and sparrowhawk, the observations of notable species were similar to the results of the breeding bird survey (MKA Ecology Ltd, 2023), suggesting the presence of resident individuals, rather than an influx of overwintering birds. No evidence of notable wintering species associated with farmland habitats, such as lapwing, golden plover, snipe, or large assemblages of finches or buntings were recorded.

The hedgerows and line of trees supported the majority of the overwintering assemblage, and as these habitats will be predominately retained, the majority of impacts will be avoided. The scheme will result in the loss of arable farmland which will have the greatest impact upon skylark, although these were not recorded in numbers exceeding local significance.

Soft landscaping proposed as part of the masterplan includes the creation of species-rich grassland, hedgerows, woodland, scrub, wetlands and an orchard. Previous recommendations to enhance the bird assemblage are repeated and include species-rich grassland creation will benefit priority species such as skylarks in both the breeding and non-breeding seasons, and including seed-rich species will increase value in the non-breeding season for these species as well as finches and buntings. The

creation of berry-rich native hedgerows and an orchard will further serve to enhance the foraging value of the Site for overwintering thrushes.

2. INTRODUCTION

2.1. Aims and scope of bird surveys

Buckinghamshire Council raised a holding objection on 9 January 2024 against the proposed Battery Energy Storage System in East Claydon (planning reference: 23/03875/APP) with regards to ecology. In relation to overwintering birds, the council stated:

"No overwintering bird assessment has been provided. Clarification or further survey effort is required to understand why this has not been performed."

The Preliminary Ecological Appraisal considered the risk of the site supporting a significant overwintering assemblage to be low due to the habitats present, the size and geographical location of the Site (MKA Ecology Ltd, 2023a). Following a meeting on 2 February 2024 between the applicant and the council, it was agreed a single overwintering bird survey would be completed in February 2024 to provide further support as to whether this informed assumption was accurate (MKA Ecology Ltd, 2024). MKA Ecology Limited was commissioned to undertake the wintering bird survey The aims of the wintering bird survey were to:

Record the bird species present on site, and immediate surrounds,
Identify evidence of protected bird species/ bird species of conservation concern at the Site;
Assess the potential impacts of the proposed development on assemblages of wintering birds; and
Detail recommendations for mitigation or further survey effort where required; and
Detail recommendations for biodiversity enhancements with regard to wintering bird assemblages.

This report must be read in conjunction with the Preliminary Ecological Appraisal (MKA Ecology Ltd, 2023a). With respect to wintering birds, this report supersedes the findings and recommendations given in the Preliminary Ecological Appraisal (MKA Ecology Ltd, 2023a).

2.2. Site description and context

The survey area is shown on the map in Figure 1. Within this report, this area is referred to as the Site or East Claydon BESS. The Site is located west of the village of Granborough within Buckinghamshire (grid reference: SP 75515 25296) and falls under the authority of Buckinghamshire Council. It supports the habitats of arable fields with field margins, surrounded by hedgerows and a tree-lined stream running along the north-western boundary. These are very common habitats within the wider landscape which is dominated by arable farmland, with a network of connecting hedgerows, scattered with small villages. No statutory or non-statutory designated sites are present within 2km of the Site boundary.

2.3. Proposed development

The proposed development comprises a 500MW Battery Energy Storage System (BESS) facility. The proposal involves the installation of 1,204 battery containers, 38 inverter buildings, seven control rooms and an attenuation pond. These will be constructed on the arable fields. The proposed soft landscaping includes areas of species-rich grassland, new woodland, native hedgerows, an orchard, scrub, pond and wetland creation. The site masterplan is shown in Figure 2.

The proposed development will require a cable easement to the nearby existing National Grid East Claydon Sub-Station to the north via a tunnel dug underneath the stream. In addition, a temporary haul route from the north will require two temporary crossings over the stream. The bridges' design will span both banks, avoiding impacts to their profiles. The bridges will be removed upon completion of the development.

2.4. Previous survey effort

A number of ecological surveys have been undertaken at the Site:

Preliminary Ecological Appraisal (MKA Ecology Ltd, 2023a)
Breeding Bird Survey (MKA Ecology Ltd 2023b)
Reptile Survey (MKA Ecology Ltd, 2023c)
Bat Activity Survey (MKA Ecology Ltd 2023d)
Water Vole and Otter Survey (MKA Ecology Ltd, 2023e)

Whilst scoping for important bird species, and suitable habitat, occurs during each Preliminary Ecological Appraisal, and a Breeding Bird Survey was carried out in March-July 2023, there have been no published surveys to date of the wintering bird population at the Site.

2.5. Legislation and planning policy

This wintering bird survey has been undertaken with reference to relevant wildlife legislation and planning policy. Relevant legislation considered within the scope of this document includes the following:

EU Birds Directive (2009/147/EC);
The Wildlife and Countryside Act 1981 (as amended);
The Conservation of Habitats and Species Regulations 2017;
Natural Environment and Rural Communities (NERC) Act 2006;
The Countryside and Rights of Way (CRoW) Act 2000;

Further information is provided in Appendix 1.

In addition to obligations under wildlife legislation, a revised National Planning Policy Framework (NPPF) updated on 19 December 2023 requires planning decisions to contribute to conserving and enhancing the local environment. Further details are provided in Appendix 1. Other policies and guidance are also taken into consideration including the Birds of Conservation Concern (BoCC, Stanbury *et al.*, 2021) which identifies bird species which have shown, or are showing, significant population declines.

The Vale of Aylesbury Local Plan (VALP) 2013-2033, is the current Local Plan which Buckinghamshire Council has adopted for this area (adopted in 2021). It has a number of policies relating to biodiversity and habitat conservation:

Policy NE1 – Biodiversity and Geodiversity
Policy NE2 – River and stream corridors
Policy NE8 – Trees, hedgerows and woodlands

Where relevant these are discussed in further detail in Section 5.

Figure 1: UK Habitat Classification map of East Claydon BESS

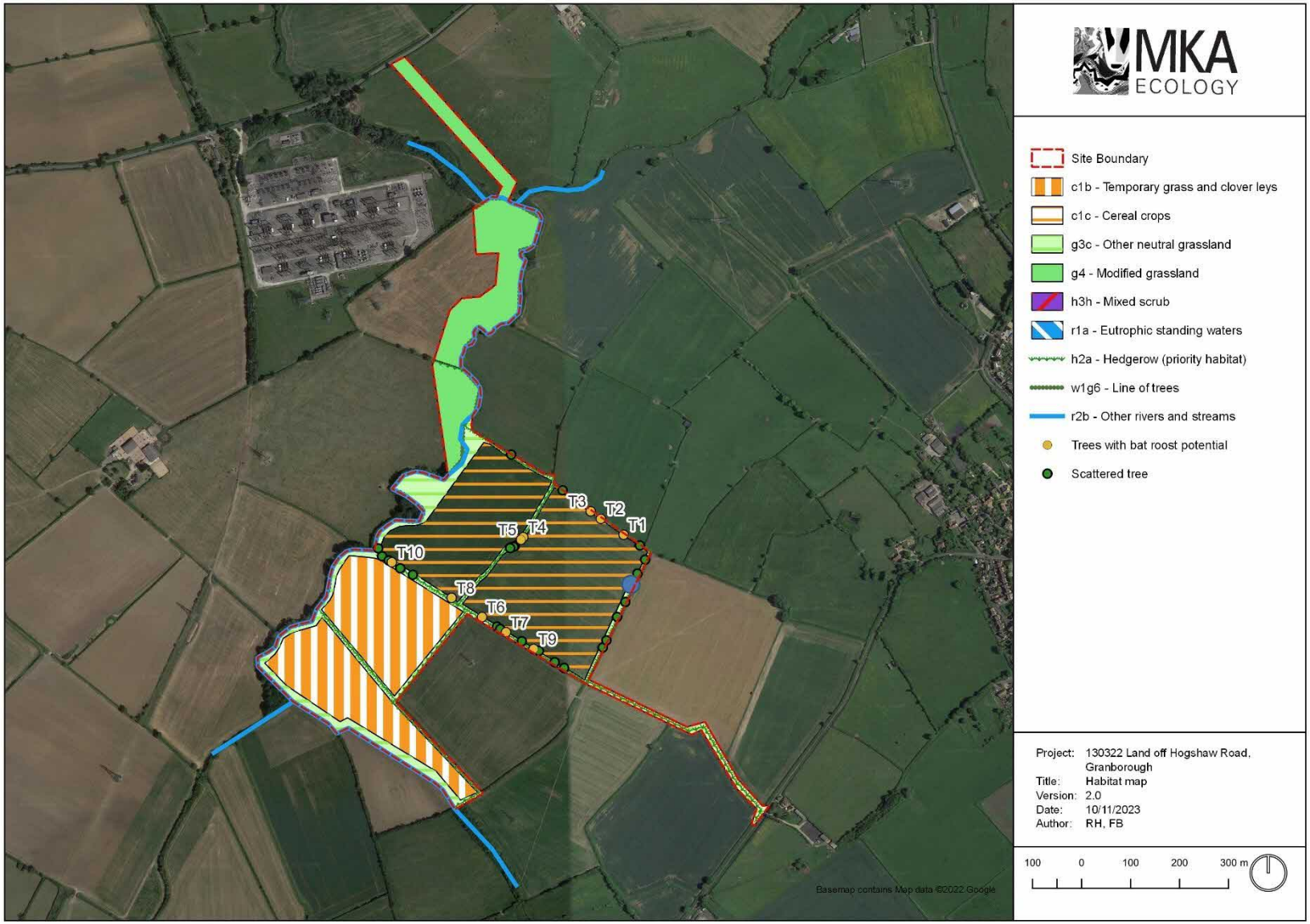

Figure 2: East Claydon BESS masterplan

3. METHODOLOGIES

3.1. Wintering bird survey

The Site was walked at a slow pace, stopping to scan habitats and features where appropriate and covering the entirety of the Site to a minimum distance of 50m (subject to access constraints and conscious of avoiding excessive disturbance to species and habitats) in order to locate and identify all individual birds. The survey avoided heavy rain, strong winds (Beaufort force >5) and other conditions where visibility was significantly reduced (eg, dense fog). Any inaccessible areas were surveyed as effectively as possible from accessible viewpoints, with the extent of any likely impacts discussed within the constraints section. Impacts of developments can extend outside of red line boundary, so birds within immediately surrounding habitats were also recorded on the survey. Analysis took into account species that were recorded within and without the site boundary.

The whole survey area was assessed during the visit, using suitable optical equipment (binoculars and a telescope) to observe bird behaviour. Registrations of birds were recorded digitally using standard British Trust for Ornithology (BTO) two letter species codes onto an appropriate field map on a tablet device. Details on the how the birds were using the habitats was also recorded.

For allocation of records to habitats within the Site, only birds considered to be using those habitats were counted. Birds perched in, or flying to or from a given habitat are counted. Those flying over and not considered to be 'using' the habitat in any way are recorded separately. Species observed in flight over habitat which would be counted include, for example, skylark and meadow pipit *Anthus pratensis* in flight over grassland habitat, as well as low-flying gulls judged to be foraging rather than commuting.

3.2. Survey date, time and weather conditions

Table 1 provides details on the date, time and weather conditions recorded during the survey visit.

Table 1: Date, time and weather conditions of survey visit*

Date	Start time	End time	Temp.	Cloud	Rain	Wind
12.02.24	07:40	11:40	3-7°C	1/8	None	BF2

*Temperature in °C; Wind as per Beaufort Scale; Cloud cover given in Oktas.

3.3. Surveyor, author and reviewer

The wintering bird survey was undertaken by Felix Bird, Senior Ecologist at MKA Ecology Ltd. Felix has over five years' experience of undertaking commercial ornithological surveys. The report was drafted by Felix and reviewed by Marcus Kohler, Director and founder of MKA Ecology Ltd. Marcus has 30 years' experience as an ecologist.

3.4. Assessment methodology

An assessment of the ornithological importance of the Site was made by evaluating the species recorded against the following conservation status criteria:

Annex 1 of the EU Birds Directive (2009/147/EC);
Schedule 1 of the Wildlife and Countryside Act (1981, amended 1985);
Species listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006;
Birds of Conservation Concern (BoCC) Red and Amber Lists (Stanbury *et al.*, 2021).

The common and scientific names of all bird species referred to in this report follow British Ornithologists' Union (BOU) taxonomy (BOU, 2022).

3.5. Survey constraints

Only one site visit was completed, which limits the conclusions which can be drawn from the survey results. Bird survey guidelines typically recommend one visit per month over the winter period as part of a survey for non-breeding birds, however fewer survey visits may be justified for projects with limited impacts or sites with habitats of low value for birds (Bird Survey & Assessment Steering Group, 2023).

Within the scope of the survey, which was to provide further evidence of the presence/likely absence of a notable wintering assemblage and the need for further survey effort or mitigation, a single visit was considered sufficient and agreed with Buckinghamshire Council (2024).

There were no constraints encountered during the duration of the survey.

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4. RESULTS

4.1. Wintering bird survey

The wintering bird survey, undertaken in February 2024, recorded 35 species and 397 individual bird records, including species flying over or present in habitats directly adjacent to the Site. Fieldfare *Turdus pilaris* was recorded to have the greatest overall abundance with 79 individuals, of which 42 were within the site boundary. Smaller flocks of woodpigeon (totalling 65 individuals) and redwing (54 individuals) were also recorded.

Eight species (greylag goose *Anser anser*, feral pigeon *Columba livia*, sparrowhawk *Accipiter nisus*, red kite *Milvus milvus*, great spotted woodpecker *Dendrocopos major*, raven *Corvus corax* , treecreeper *Certhia familiaris* and song thrush *Turdus philomelos*) were recorded off-site only, although suitable habitat is present onsite and these species may utilise the Site. A further two species (lesser black-backed gull *Larus fuscus* and cormorant *Phalacrocorax carbo*) were recorded flying high over the site and were considered to be commuting and not associated with the Site.

The line of trees adjacent to the stream supported the greatest number of species (15) as well as the greatest abundance of individuals (129), followed by the hedgerows which supported 68 individuals from 12 species. The arable fields, comprising cereal crop and temporary grass ley, were found to only support three skylark and six woodpigeon, although a further 11 skylark were recorded in arable fields outside the site boundary.

See Table 2 for a complete species list, including the total counts for onsite as well as the immediate surroundings, and Table 3 to Table **7** for species counts associated with each main habitat type. Where individuals were only recorded flying over the Site, and not associating with a particular habitat, these counts are excluded from Table 3 to Table **7**.

Table 2: Total diurnal wintering species list and counts for East Claydon BESS

Species	Systematic name	Total count (onsite only)	Total count (onsite and immediate surroudings)
Pheasant	*Phasianus colchicus*	1	2
Greylag goose	*Anser anser*	0	2
Mallard	*Anas playrhynchos*	2	2
Feral pigeon	*Columba livia*	0	4*
Stock dove	*Columba oenas*	4*	7*
Woodpigeon	*Columba palumbus*	23	65

Species	Systematic name	Total count (onsite only)	Total count (onsite and immediate surroudings)
Lesser black-backed gull	*Larus fuscus*	6**	6**
Cormorant	*Phalacrocorax carbo*	1**	1**
Sparrowhawk	*Accipiter nisus*	0	1
Red kite	*Milvus milvus*	0	3
Buzzard	*Buteo buteo*	1*	3
Great spotted woodpecker	*Dendrocopos major*	0	1
Green woodpecker	*Picus viridis*	1	1
Peregrine	*Falco peregrinus*	2*	2
Jay	*Garrulus glandarius*	1	1
Magpie	*Pica pica*	5*	5
Jackdaw	*Corvus monedula*	21	45
Carrion crow	*Corvus corone*	4*	7
Raven	*Corvus corax*	0	1
Blue tit	*Cyanistes caeruleus*	12	17
Great tit	*Parus major*	17	18
Skylark	*Alauda arvensis*	4	16
Long-tailed tit	*Aegithalos caudatus*	4	6
Wren	*Troglodytes troglodytes*	10	12
Treecreeper	*Certhia familiaris*	0	1
Starling	*Sturnus vulgaris*	3*	20
Blackbird	*Turdus merula*	4	6
Fieldfare	*Turdus pilaris*	42	79
Redwing	*Turdus iliacus*	41	54
Song thrush	*Turdus philomelos*	0	2
Robin	*Erithacus rubecula*	9	11
Dunnock	*Prunella modularis*	3	4
Chaffinch	*Fringilla coelebs*	4	4
Goldfinch	*Carduelis carduelis*	2	8

Species	Systematic name	Total count (onsite only)	Total count (onsite and immediate surroudings)
Yellowhammer	*Emberiza citrinella*	11	14

* Flying over the site only.

** Flying high over the Site only, and not considered to be associated with the Site.

Table 3: Species list for the hedgerows

Species	Systematic name	Total count
Jackdaw	*Corvus monedula*	3
Blue tit	*Cyanistes caeruleus*	6
Great tit	*Parus major*	7
Skylark	*Alauda arvensis*	1
Long-tailed tit	*Aegithalos caudatus*	2
Wren	*Troglodytes troglodytes*	3
Blackbird	*Turdus merula*	2
Fieldfare	*Turdus pilaris*	25
Robin	*Erithacus rubecula*	4
Dunnock	*Prunella modularis*	3
Chaffinch	*Fringilla coelebs*	2
Yellowhammer	*Emberiza citrinella*	11

Table 4: Species list for the line of trees

Species	Systematic name	Total count
Woodpigeon	*Columba palumbus*	17
Green woodpecker	*Picus viridis*	1
Jay	*Garrulus glandarius*	1
Jackdaw	*Corvus monedula*	18
Carrion crow	*Corvus corone*	2
Blue tit	*Cyanistes caeruleus*	6
Great tit	*Parus major*	10
Long-tailed tit	*Aegithalos caudatus*	2
Wren	*Troglodytes troglodytes*	7

Species	Systematic name	Total count
Blackbird	*Turdus merula*	2
Fieldfare	*Turdus pilaris*	17
Redwing	*Turdus iliacus*	41
Robin	*Erithacus rubecula*	5
Chaffinch	*Fringilla coelebs*	2
Goldfinch	*Carduelis carduelis*	2

Table 5: Species list for the arable habitats (cereal crops and temporary grass leys).

Species	Systematic name	Total count
Woodpigeon	*Columba palumbus*	6
Skylark	*Alauda arvensis*	3

Table 6: Species list for the stream

Species	Systematic name	Total count
Mallard	*Anas platyrhynchos*	2

Table 7: Species list for modified grassland

Species	Systematic name	Total count
Pheasant	*Phasianus colchicus*	1

4.2. Protected and notable species

The wintering bird survey identified the presence of 15 bird species of conservation concern. Table 8 provides a species list of each bird species of conservation concern and their conservation status.

Table 8: Notable species recorded at East Claydon BESS during the wintering bird survey and their conservation designations

Species	Systematic name	Schedule 1 [1]	BOCC 4 [2]	Section 41 [3]	Annex 1 [4P]
Mallard	*Anas platyrhynchos*	-	Amber	-	-
Stock dove	*Columba oenas*	-	Amber	-	-
Woodpigeon	*Columba palumbus*	-	Amber	-	-

Species	Systematic name	Schedule 1 [1]	BOCC 4 [2]	Section 41 [3]	Annex 1 [4P]
Lesser black-backed gull	*Larus fuscus*	-	Amber	-	-
Sparrowhawk	*Accipiter nisus*	-	Amber	-	-
Red kite	*Milvus milvus*	Yes	Green	-	-
Peregrine	*Falco peregrinus*	Yes	Green	-	Yes
Skylark	*Alauda arvensis*	-	Red	Yes	-
Wren	*Troglodytes troglodytes*	-	Amber	-	Yes
Starling	*Sturnus vulgaris*	-	Red	Yes	-
Fieldfare	*Turdus pilaris*	Yes	Red	-	-
Redwing	*Turdus iliacus*	Yes	Amber	-	-
Song thrush	*Turdus philomelos*	-	Amber	Yes	-
Dunnock	*Prunella modularis*	-	Amber	Yes	-
Yellowhammer	*Emberiza citrinella*	-	Red	Yes	-

[1] Schedule 1 of The Wildlife and Countryside Act 1981 (see Appendix 1)
[2] Birds of Conservation Concern (see Appendix 1
[3] Section 41 (NERC Act 2006) 'Species of Principal Importance' (see Appendix 1)
[4]Annex 1 of EU Birds Directive (see Appendix 1)

Four species that are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) were recorded (red kite, peregrine, fieldfare, redwing). Listing on Schedule 1 relates to breeding only; fieldfare and redwing are listed as they are an extremely rare breeding species in the UK (primarily in Scotland), although they are much more numerous as a winter visitor. The Schedule 1 listing for these species therefore does not affect their presence in winter at the Site. The observations of red kite and peregrine are in line with the previous breeding bird survey results which confirmed the breeding status of red kite on site (MKA Ecology Ltd, 2023b). Peregrine may breed at the nearby sub-station, but there is limited suitable nesting habitat on the Site itself and the species was not found to be breeding there in the Breeding Bird Survey.

The survey identified the presence of five Section 41, Species of Principal Importance (NERC Act, 2006). These species were skylark, starling, song thrush, dunnock and yellowhammer.

In addition, four species listed on the Birds of Conservation Concern Red List were recorded during the visit, namely skylark, starling, fieldfare and yellowhammer. A further nine species listed on the Birds of Conservation Concern Amber List were recorded, mallard, stock dove, woodpigeon, lesser black-backed gull, sparrowhawk, wren, redwing, song thrush and dunnock.

Species accounts for the protected and notable species are described in greater detail below.

4.3. Species' accounts

Mallard

Mallard is a common resident duck species that is widespread across the UK. The wintering population appears to be steady decline, which is reflected in a population decrease of 8% between 1995 and 2021, however the breeding population for mallard remains stable. Mallard is on the Amber list on account of the decline in the immigration of mallards to the UK in winter (Stanbury *et al.,* 2021). Within Buckinghamshire, mallard are a common resident (Bucks Bird Club, 2024).

A pair were observed within the stream onsite and are likely resident as the breeding bird survey also recorded a pair which were considered to be probably breeding onsite (MKA Ecology Ltd, 2023b).

Stock dove

Stock dove is a widespread and numerous breeding resident in England. England supports 44% of the European population of stock dove and is therefore included on the BoCC Amber List. Stock dove is a widespread resident in Buckinghamshire (Bucks Bird Club, 2024).

Stock dove were recorded flying over the Site in in low numbers. Whilst not directly observed associating with any habitat type, the arable fields likely provide suitable foraging habitat. The trees within the hedgerows, offsite woodlands and line of trees adjacent to the stream provide suitable nesting habitat and this species was considered to be possibly breeding onsite during the breeding bird survey (MKA Ecology Ltd, 2023b)

Woodpigeon

Woodpigeon is one of the most common and widespread species in the UK; it was recorded in 91% of squares surveyed during the 2022 breeding bird survey (Heywood *et al*., 2023). Despite the recent population increases, woodpigeon has recently been moved from the BoCC Green list to the Amber list on account of the UK supporting over 20% of the European population (Stanbury *et al.,* 2021). Woodpigeon is a very common resident within Buckinghamshire (Bucks Bird Club, 2024).

Woodpigeon was abundant across the Site during the survey, associating with the line of trees, hedgerows and flying low over the Site. A flock of 27 individuals was observed foraging within sheep pasture north-east of the Site. The arable fields onsite also provide some suitable foraging habitat, although foraging onsite was not observed during the survey.

Lesser black-backed gull

There has been a marked national increase in the wintering and breeding populations of lesser black-backed gull since the 1970s. It has been listed on the BoCC Amber list due to the international significance of the UK population – which breeds at less than ten sites and accounts for 40% of the European population. Within Buckinghamshire, lesser black-backed gull are a common resident.

Individuals were observed commuting high over the Site, but not associating with the Site in any way.

Sparrowhawk

Sparrowhawks are widespread across Britain and Ireland, however declines of 25% in the population between 1995 and 2021 have seen this species Amber listed (Heywood *et al*., 2023). Most sparrowhawk are sedentary; however the wintering population is increased by individuals from northern Europe. Sparrowhawk is a common and widespread resident within Buckinghamshire (Bucks Bird Club, 2024).

A single observation of a sparrowhawk was recorded within offsite hedgerow to the north-west of the cable easement route. This species was not recorded during the breeding bird survey.

Red kite

Formerly restricted in distribution to mid-Wales, a late 20th century reintroduction programme facilitated the successful nationwide population growth of this species. Red kite has seen a 2000% distribution and population increase since 1995 and is Green listed under BoCC (Stanbury *et al*., 2021). Despite this increase, red kite remains a Schedule 1 and Annex 1 species. It is a common and widespread resident in Buckinghamshire (Bucks Bird Club, 2024)

A pair and an individual were recorded within off-site woodland parcels, within previously identified breeding territories (MKA Ecology Ltd, 2024). The arable farmland onsite, and pasture offsite, form part of the foraging habitat to support these breeding territories.

Peregrine

Peregrine is a scarce breeding species found across England, typically nesting on coastal cliffs. In recent years the species has undergone an expansion in breeding and wintering range, and is increasingly recorded nesting on inland cliffs and man-made structures (e.g. church spires). Due to ongoing population declines Peregrine is included on Annex 1 of the EC Birds Directive and Schedule 1 of the Wildlife and Countryside Act (1981). Within Buckinghamshire, peregrine are a scarce resident (Bucks Bird Club, 2023)

A pair of peregrine were recorded flying across the northern haul route and associating with the man-made structures of the National Grid Sub-Station. Peregrine were recorded in a similar location during the breeding bird survey (MKA Ecology Ltd), and whilst breeding was not confirmed, these observations suggest a resident pair occupy a territory at the substation.

Skylark

Skylark is on the Birds of Conservation Concern Red List and a Section 41 Species of Principal Importance based on population declines, although it remains very common and widespread throughout lowland England and Buckinghamshire (Bucks Bird Club, 2024).

Three individuals were recorded associating with the arable habitats and a single individual was observed singing on a hedgerow. A further 11 individuals were recorded within arable fields adjacent to the Site boundary. These findings correspond with the results of the breeding bird survey which identified four territories onsite and a further 14 territories within the adjacent fields (MKA Ecology Ltd, 2023).

Wren

Wren is the UK's most common breeding bird and breeds widely across country in woodland, farmland, heathland, and urban habitats. Whilst the English population of wren has experienced population growth (Heywood *et al*., 2023), wren is now Amber listed under the BoCC on account of the UK supporting over 20% of the European population (Stanbury *et al*., 2021). The wren is a very common resident in Buckinghamshire (Bucks Bird Club, 2024).

Wrens were numerous across the Site associating with hedgerows and the line of trees. A total of 12 individuals was recorded, providing similar numbers to the breeding bird survey results, which identified 13 breeding territories (MKA Ecology Ltd, 2023).

Starling

Starling is a widespread and numerous resident breeder which has undergone a steady population decline since the mid-1960s. Between 1995 and 2021 the English population has declined by 62% (Heywood *et al*., 2023) Consequently, the species is listed as a Species of Principal Importance (NERC Act, 2006) and is included on the BoCC Red List, although it remains a common resident within Buckinghamshire (Bucks Bird Club, 2023).

Small numbers of starling were observed flying across the Site, with a total of 20 individuals recorded onsite and within the immediate vicinity. The arable farmland provides some suitable foraging habitat, although the offsite pasture is likely to be of greater value. Starling were also recorded in low numbers during the breeding bird survey (peak count of three individuals) and considered to possibly breed at the Site.

Fieldfare

Widespread winter visitor to Britain that occasionally breeds in very small numbers in Scotland. Fieldfare has been Red listed since 2009 and are a Schedule 1 breeding species. Within Buckinghamshire fieldfare are a common winter visitor.

Fieldfare were found to be present within hedgerows and line of trees in groups between 15 to 25 individuals, however the number of individuals recorded onsite (42) is not considered to be significant at a local level. Fieldfare were observed foraging in pasture fields over 250m north-east of the Site, but not recorded foraging within the arable farmland onsite. No evidence of breeding was recorded during the breeding bird surveys and these are all considered to be overwintering individuals.

Redwing

Widespread winter visitor to Britain that occasionally breeds in very small numbers in Scotland. It is estimated that around 700,000 redwing winter in the UK however this number fluctuates year to year. Within Buckinghamshire redwing is a common, widespread winter visitor (Bucks Bird Club, 2024)

Redwing were present across the whole Site where they associated with the hedgerow or line of trees. Here they were found roosting or feeding on berries. No evidence of breeding was recorded during the breeding bird surveys and these are all considered to be overwintering individuals.

Song thrush

Song thrush is a widespread and common resident breeding species which has undergone a moderate decline in its breeding population over the longer term. However, more recent trends have shown signs of recovery (23% increase between 1995 and 2021, Heywood *et al*., 2023), which has resulted in this species moving from the Red to Amber list on the fifth review of the BoCC list. Song thrush are a common resident within Buckinghamshire,

Two song thrush were recorded within off-site parcels of woodland. These observations were broadly in line with the breeding bird survey results, which identified five territories including the territories within the offsite woodlands (MKA Ecology Ltd, 2023).

Dunnock

Dunnock is a resident and highly sedentary species in the UK (Balmer *et al.*, 2013). The species occupies a range of habitats and tends to nest in hedgerows. Dunnock is listed on the Birds of Conservation Concern Amber List due to a moderate decline of the breeding population over the longer term, and it is also listed as a Species of Principal Importance (NERC Act, 2006). Within Buckinghamshire dunnock is a common resident (Bucks Bird Club, 2023).

Dunnocks were recorded in small numbers across the Site associating with hedgerows and included singing individuals. Breeding was considered to be probable during the breeding bird survey, during which three territories were identified within the hedgerows.

Yellowhammer

Yellowhammer distribution and abundance has undergone a decline in recent decades, though exacerbated by a rather sharper decline that occurred between 1985 and 1990. Like other small seed-eating species such as skylark, yellowhammer have suffered as the availability of food from spilt grain and seeds of arable weeds have declined, particularly during winter. Consequently, yellowhammer are listed as a Species of Principal Importance and on the BoCC Red list. Yellowhammer is described as a common resident in Buckinghamshire (Bucks Bird Club, 2024).

Yellowhammer were identified within the hedgerows as well as foraging in offsite arable field margins . These observations relate to single or paired birds and no flocks were identified within the survey. A

total of 11 individuals were recorded onsite (14 within the wider survey area), a similar result to the breeding bird survey which identified eight breeding territories.

5. ECOLOGICAL CONSTRAINTS, OPPORTUNTIES AND RECOMMENDATIONS

This section outlines key ecological issues for consideration and ecological enhancements where appropriate.

5.1. Evaluation of wintering bird assemblages

A total of 35 bird species were recorded at East Claydon BESS during the February wintering bird survey. The assemblage represents a mixture of woodland/hedgerow species and those typical of arable farmland.

Fifteen notable species were recorded during the wintering survey effort: mallard, stock dove, woodpigeon, lesser black-backed gull, sparrowhawk, red kite, peregrine, skylark, wren, starling, fieldfare, redwing, song thrush, dunnock and yellowhammer. However, these species were not recorded in numbers exceeding local significance.

Similar numbers of mallard, stock dove, woodpigeon, red kite, peregrine, skylark, wren, starling, song thrush, dunnock and yellowhammer were also recorded during the breeding bird survey effort and thus the wintering survey observations are considered likely to relate to resident individuals which are present throughout the year. Sparrowhawk, fieldfare and redwing were not recorded during the breeding bird survey effort and definitely represent an influx of an overwintering thrushes, and a probable overwintering bird of prey.

The line of trees supported the greatest diversity of species, followed by the hedgerows. The arable farmland habitats only supported few species, although this did include skylark – a notable farmland species which has specific habitat requirements.

There was no evidence of other notable wintering species associated with farmland habitats, such as lapwing *Vanellus vanellus*, golden plover *Pluvialis apricaria*, grey partridge *Perdix perdix*, or significant gatherings of finches and buntings.

Overall, this is a fairly typical assemblage of wintering birds associated with arable farming systems in England with elements of hedgerow and woodland. The presence of Schedule 1 listed species such as peregrine and red kite, which also breed on the Site, together with skylark and wintering thrushes using the woodland and hedgerows, are perhaps the most significant winter bird features at the Site.

5.2. Impacts in the absence of mitigation

Impacts upon the wintering bird community are anticipated as a result of the development. In particular, habitat clearance works during the construction phase will involve the removal of a significant area of arable farmland, as well as a short section of hedgerow to facilitate access between the fields. Temporary impacts will occur upon the modified grassland for a construction haul route and cable easement.

The line of trees, stream and majority of hedgerows will be retained, avoiding potential impacts upon the majority of the wintering bird assemblage.

The loss of arable farmland is likely to have the greatest impact upon skylark, a farmland species which specialises in arable habitats. However, this species was not recorded in numbers exceeding local significance.

The loss of arable farmland may also reduce the foraging habitat available for more generalist notable species including starling, fieldfare, redwing and red kite. Arable farmland does not provide optimal habitat for these species, suggesting if appropriate enhancements are incorporated into the final scheme, the value of the site for overwintering individuals could be improved.

5.3. Recommendations

The National Planning Policy Framework (NPPF) states that all planning decisions should aim to maintain and enhance, restore or add to biodiversity and geological conservation interests. The following recommendations are measures that should be undertaken to maintain and enhance the biodiversity of the Site in line with the policies contained within the NPPF and local policies. Further recommendations are made to ensure any proposed works comply with wildlife legislation.

There have been significant declines in UK farmland bird species in recent decades (Defra, 2019) and measures to offset any impacts to these species should be explored.

The proposed masterplan includes the creation of species-rich grassland, new hedgerows, woodland, wetlands and an orchard. These habitats have the potential to enhance the foraging resource for overwintering birds, if created and managed appropriately. In particular, the areas of species-rich grassland should include seed-rich species to provide winter food for skylark, finches and buntings such as yellowhammer. To provide the maximum value, these grassland habitats must be at the outer edge of the development where they are contiguous with surrounding arable areas

Recommendation 1

Areas of species-rich grassland to be included within the development and managed to benefit species such as skylark. Including seed-rich species within the mix should increase the value of the habitat for wintering birds.

A number of wintering birds of conservation concern identified during the survey visits were associated with hedgerows and the line of trees. These included song thrush, redwing, fieldfare, dunnock and yellowhammer. The proposed hedgerows, woodland and orchard therefore have potential to add significant ecological value to the development footprint. The inclusion of thorny and berry producing species within the hedgerows will provide habitat for nesting and winter foraging species such as redwing and fieldfare. Suitable species include holly *Ilex aquifolius*, hawthorn *Crataegus monogyna* and rowan *Sorbus aucuparia*, all of which are rich in winter berries.

Recommendation 2

Include a range of berry-rich species such as holly, hawthorn, blackthorn and rowan within the proposed hedgerows to maximise their value for wintering birds such as thrushes. The proposed orchard should also be managed to provide an enhanced foraging resource.

6. CONCLUSIONS

MKA Ecology Ltd was commissioned to undertake a wintering bird survey of the proposed East Claydon BESS project in order to establish the potential impacts of a BESS facility with associated temporary cable easement route. A wintering bird survey was completed at the Site in February 2024.

The survey identified 15 notable species using the Site. With the exception of redwing, fieldfare and a single sparrowhawk, all species were previously recorded in similar abundances during the previous breeding bird survey effort. All of these species were recorded in low numbers and no population observed was considered to be of greater than local significance.

Limited conclusions can be drawn from a single visit, however, no evidence of notable wintering species associated with arable farmland, such as lapwing, golden plover, grey partridge or significant flocks of finches, buntings or wildfowl was recorded. As such, the risk of a notable overwintering population or species which were not previously recorded is considered to be low.

No additional survey effort or mitigation measures are considered necessary. The loss of arable farmland is predicted to have the greatest impact upon skylark, a farmland specialist associated with this habitat type. Previous recommendations for the creation of species-rich, seed-rich grassland are repeated to provide a foraging resource for overwintering birds.

The proposed masterplan also includes the creation of species-rich native hedgerows, woodland, wetlands, scrub and an orchard. Provided these are created and managed appropriately, it is considered the scheme has the potential to enhance the foraging value of the site for overwintering notable species, as well as the bird assemblage more broadly.

7. REFERENCES

Balmer, D. E., Gillings, S., Caffery, B. J., Swann, R. L. Downie, I. S. & Fuller, R. J. (2013). *Bird Atlas 2007 – 2011: the breeding and wintering birds of Britain and Ireland*. BTO: Thetford.

Bucks Bird Club (2024). Bucks Species List. Available at: https://www.bucksbirdclub.co.uk/birding-in-bucks/bucks-species-list

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

Bird Survey & Assessment Steering Group. (2023). *Bird Survey Guidelines for assessing ecological impacts, v.1.1.1* https://birdsurveyguidelines.org

British Ornithologists' Union (2022) *The British List 10th Edition.* Available at: https://www.bou.org.uk/british-list/

Buckinghamshire Council (2018) *Vale of Aylesbury Local Plan (VALP) 2013 – 2033*. [ONLINE] Available at: https://www.buckinghamshire.gov.uk/planning-and-building-control/planning-policy/local-development-plans-and-guidance/local-development-plans/

Heywood, J.J.N., Massimino, D., Balmer, D.E., Kelly, L., Noble, D.G., Pearce-Higgins, J.W., Woodcock, P., Wotton, S., Gillings, S. and Harris, S. J. (2023) *The Breeding Bird Survey 2022*. BTO Research Report 756. British Trust for Ornithology, Thetford.

MKA Ecology Ltd. (2023a) *Land off Hogshaw Road, Granborough. Preliminary Ecological Appraisal.* MKA Ecology Ltd.

MKA Ecology Ltd. (2023b) *Land off Hogshaw Road, Granborough. Breeding Bird Survey.* MKA Ecology Ltd.

MKA Ecology Ltd. (2023c) *Land off Hogshaw Road, Granborough. Reptile Survey.* MKA Ecology Ltd.

MKA Ecology Ltd. (2023d) *Land off Hogshaw Road, Granborough. Bat Activity Survey.* MKA Ecology Ltd.

MKA Ecology Ltd. (2023e) *Land off Hogshaw Road, Granborough. Water Vole and Otter Survey.* MKA Ecology Ltd.

MKA Ecology Ltd. (2024) *Land off Hogshaw Road, Granborough. Council Meeting Summary.* MKA Ecology Ltd.

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114: 723-747. Available online at https://britishbirds.co.uk/content/status-our-bird-populations.

8. APPENDICES

8.1. Appendix 1: Relevant wildlife legislation and planning policy

Please note that the following is not an exhaustive list, and is solely intended to cover the most relevant legislation pertaining to species commonly associated with development sites.

Subject	Legislation (England)	Relevant prohibited actions
Birds		
All wild birds	Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure, or take any wild bird or their eggs or nests.
'Schedule 1' Birds	Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)	Disturb any wild bird listed on Schedule 1 whilst it is building a nest or is in, on, or near a nest containing eggs or young; or Disturb the dependent young of any wild bird listed on Schedule 1.

The Birds Directive (Directive 2009/147/EC)

Full legislation text available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0147

lists 193 species and sub-species which are in danger of extinction; vulnerable to specific changes in their habitat; considered rare because of small populations or restricted local distribution; requiring particular attention for reasons of the specific nature of habitat. For these species Member States must conserve their most suitable territories in number and size as Special Protection Areas.

The Conservation of Habitats and Species 2017 (as amended)

Full legislation text available at: The Conservation of Habitats and Species Regulations 2017 (legislation.gov.uk)

The Wildlife and Countryside Act 1981 (as amended)

Full legislation text available at: http://www.legislation.gov.uk/ukpga/1981/69/contents.

Countryside and Rights of Way Act 2000

Full legislation text available at: http://www.legislation.gov.uk/ukpga/2000/37/contents

Section 41 of Natural Environments and Rural Communities (NERC) Act 2006

Full legislation text available at: http://www.legislation.gov.uk/ukpga/2006/16/section/41

Many of the species above, along with a host of others not afforded additional protection, are listed on Section 41 of the NERC Act 2006.

Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006) requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 56 species of birds) has been drawn up in consultation with Natural England and draws upon the UK Biodiversity Action Plan (BAP) List of Priority Species and Habitats.

The S41 list should be used to guide decision-makers such as local and regional authorities to have regard to the conservation of biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006. The duty applies to all local authorities and extends beyond just conserving what is already there, to carrying out, supporting and requiring actions that may also restore or enhance biodiversity.

Birds of Conservation Concern (BoCC)

This is a quantitative assessment of the status of populations of bird species which regularly occur in the UK, undertaken by the UK's leading bird conservation organisations. It assesses a total of 245 species against a set of objective criteria to place each on one of three lists – Green, Amber and Red – indicating an increasing level of conservation concern. There are currently 70 species on the Red list, 103 on the Amber list and 72 on the Green list. The classifications described have no statutory implications, and are used merely as a tool for assessing scarcity and conservation value of a given species.

National Planning Policy Framework (NPPF)

Full text is available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2

The revised NPPF was updated on 19 December 2023 setting out the Government's planning policies for England and the process by which these should be applied. The policies within the NPPF are a material consideration in the planning process. The key principle of the NPPF is a presumption in favour of sustainable development, with sustainable development defined as a balance between economic, social and environmental needs.

Policies 174 to 188 of the NPPF address conserving and enhancing the natural environment, stating that the planning system should:

Contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes;

Recognise the wider benefits of ecosystem services; and

Minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.

Furthermore, there is a focus on re-use of existing brownfield sites or sites of low environmental value as a priority, and discouraging development in National Parks, Sites of Specific Scientific Interest, the Broads or Areas of Outstanding Natural Beauty other than in exceptional circumstances.

Where possible, planning policies should also:

"promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity".

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