
BREEDING BIRD SURVEY REPORT

LAND EAST OF STOKE ROAD AND NORTH OF NORMANDY
WAY (A47), HINCKLEY, LEICESTERSHIRE, NR LE10 1YA

ON BEHALF OF

MR & MRS ADCOCK C/O RICHBOROUGH ESTATES

REFERENCE: ZEL_203

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Report Data	
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Client	Mr & Mrs Adcock C/O Richborough Estates
Site	Land East of Stoke Road and North Of Normandy Way (A47), Hinckley, Leicestershire, Nr LE10 1YA
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V1	Breeding Bird Survey	A. Elliott	18 November 2022

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NON-TECHNICAL SUMMARY

- Zebra Ecology Ltd was commissioned by Richborough Estates Ltd to undertake a suite of breeding bird surveys at the land east of Stoke Road and north of Normandy Way (A47), Hinckley, Leicestershire LE10 1YA (Ordnance Survey grid reference SP 420 956), in order to consider the potential impacts to breeding bird populations by the proposed residential development of the site.
- The survey was recommended following the Preliminary Ecological Appraisal (Zebra Ecology, 2021) conducted by Zebra Ecology Ltd in November 2021, wherein 26 species of bird were recorded incidentally during the initial site visit, 10 of which were on the Red List for Birds of Conservation Concern (BOCC⁵).
- The breeding bird surveys were conducted in May, June and July 2022, and comprised 5 dawn visits, (commencing half an hour prior to sunrise), and one dusk/nocturnal visit (extending at least one hour after sunset), as per the latest Bird Survey Guidelines (RSK Biocensus, 2021).
- All species encountered within the site and on adjacent land (up to 100m from the site boundary) were recorded. In total, 32 species of bird were recorded during the survey visits, 15 of which were considered 'notable' species.
- The breeding bird assemblage utilising the site was typical of the on-site habitats, mainly comprising common and widespread bird species. Thus, the site has been deemed as holding 'Local' importance only with regards to birds.
- Mitigations and enhancements strategies have been advised for confirmed/probable breeding species which are found within the Leicestershire & Rutland Red Data Base list, and therefore considered 'notable' – details can be found in Table 6 within this report.
- Post-development habitat creation and enhancements would be expected to favourably contribute towards the conservation status of the notable species recorded on site, especially those species that are also identified within the Leicester, Leicestershire, and Rutland Biodiversity Action Plan (LLRBAP) – barn owl, common swift and barn swallow.
- Further survey work is required to confirm the presence of breeding barn owl *Tyto alba* on site.

1.0 INTRODUCTION

Background to the Development

- 1.1 Zebra Ecology Ltd was commissioned by Richborough Estates Ltd to undertake a suite of breeding bird surveys at the land east of Stoke Road and North of Normandy Way (A47), Hinckley, Leicestershire LE10 1YA – referred to from now on as ‘the site’ (centred on Ordnance Survey grid reference SP 420 956). The report has been produced to identify any ornithological constraints and opportunities for the site, in light of the proposed residential development.
- 1.2 The survey was recommended following the Preliminary Ecological Appraisal (Zebra Ecology, 2021) conducted by Zebra Ecology Ltd in November 2021, wherein 26 species of bird were recorded incidentally during the initial site visit, 10 of which were on the Red List for Birds of Conservation Concern (BOCC⁵).
- 1.3 The site is c.25.4ha in area and comprises five cattle-grazed fields with a further parcel of agricultural land located to the west of Stoke Road surrounded by mixture of native species-rich and species-poor hedgerows. The site lies to the north of the A47, which constitutes the existing northern boundary of the urban spread of Hinckley town. A small reed-bed is present to the south-west of the site, and a tributary of the River Tweed runs along the eastern boundary. An active farm, farm-house and associated barns are present to the north of the site. Numerous well established and mature trees can be found within the site and along the site boundaries, and a small woodland area is present where Stoke Road meets the A47. The application site boundary is shown in Figure 1.



Figure 1: Application Site Boundary

- 1.4 Planning consent is being sought from Hinckley and Bosworth Council for ‘*outline permission for the erection of up to 475 dwellings, including public open space, land reserved for a primary school together with future expansion land (Use Class F1(a)), landscaping, drainage and associated infrastructure*’.

Survey Objectives

- 1.5 The primary aims of the survey included the following:
1. Identify the presence and distribution of bird species interacting with the site and highlight areas of ornithological interest within the site;
 2. Evaluate the level of conservation importance of the bird species interacting with the site;
 3. Evaluate the relative importance of the breeding bird populations within the site;
 4. Identify any mitigation measures likely to be required, to minimise the impacts of the development proposals on local bird populations;
 5. Identify opportunities to deliver ornithological enhancement at the site level.

Relevant Legislation & Policy¹

- 1.6 Wild birds within the UK are primarily protected by the Wildlife & Countryside Act (WCA) 1981 (as amended by the Countryside & Rights of Way Act 2000). The WCA is the UK’s domestic legislation which incorporates the legislation outlined in the European Community Council Directive 79/409/EEC on the Conservation of Wild Birds, more commonly known as the ‘Birds Directive’ – the oldest EU legislation on the environment. The Birds Directive provides legal guidance for the management and conservation of wild birds within member states. This legislation states that all birds, their nests and eggs are protected by law, and it is illegal to (subject to exception) to recklessly or intentionally:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while in use or being built;
- Take or destroy the egg of any wild bird.

- 1.7 A total of 193 species of bird are identified with Annex 1 of the Birds Directive. These species 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.

¹ The legal information found within this section serves as a summary of guidance only. A full transcript of the original legal documentation should be consulted for definitive information and can be found in the References section at the end of this report.

- 1.8 Habitats and important sites for species found on Annex 1 of the Birds Directive are safeguarded by the designation of Special Protected Area (SPA) status. SPAs are protected through the implementation of the Conservation of Habitats and Species Regulations 2012 (The Conservation Regulations). Ramsar sites (wetlands of international importance designated under the Ramsar convention) are also protected by the Conservation Regulations, which was amended in 2012 to enhance provision for the preservation, maintenance and enhancements of habitats for wild birds in the UK.
- 1.9 Species listed on the Schedule 1 of the Wildlife & Countryside Act (as amended), are offered greater levels of protection, whereby it is an offence to intentionally disturb adult birds engaged in nest building and during nest occupation, as well as the intentional disturbance of dependent young.
- 1.10 A further 49 species of bird are also protected by Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC S.41). These species have been identified due to their importance to nature conservation.

Protection within the Planning System

National Planning Policy 2021

- 1.11 The National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2021) provides guidance for Local Planning Authorities (LPAs) in creating development plans and determining applications.
- 1.12 The NPPF states:

'When determining planning applications, local planning authorities should apply the following principles:

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁶³ and a suitable compensation strategy exists; and*
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around*

developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The following should be given the same protection as habitats sites:

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on*
- *habitats sites, potential Special Protection Areas, possible Special Areas of*
- *Conservation, and listed or proposed Ramsar sites.'*

- 1.13 Section 174(d) states that planning policies and decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net-gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressure.
- 1.14 Section 179(b) states that in order to protect biodiversity, plans should 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.
- 1.15 Section 1 states if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists.
- 1.16 The NPPF states that local plans must be prepared by LPAs with the objective of contributing to the achievement of sustainable development and also that significant adverse impacts should be avoided, mitigated or compensated for.

[Hinckley & Bosworth Borough Council Core Strategy \(Adopted December 2009\)](#)

- 1.17 **Spatial Objective 10:** Natural Environment and Cultural Assets to deliver a linked network of green infrastructure, enhancing and protecting the borough's distinctive landscapes, woodlands, geology, archaeological heritage and biodiversity and encourage its understanding, appreciation, maintenance and development.
- 1.18 *'The borough's attractive environment is one of its key strengths in many people's minds and safeguards to protect the best of its landscapes, wildlife and heritage- whilst encouraging responsible enjoyment of it- must therefore be at the centre of spatial policies.*

'Preserve and enhance natural habitats and biodiversity - Despite popular natural attractions such as Burbage Common, Charnwood Forest, Ashby Canal and part of the National Forest, biodiversity is not particularly high overall. In fact, the East Midlands has one of the lowest percentages of woodland cover compared to the UK as a whole. There are 7 Sites of Special Scientific Interest in the borough, of these 60% are in an unfavourable condition and are

continuing to decline. There are also numerous local wildlife sites/Sites of Importance for Nature Conservation. There is a strong need to provide protection and enhancement to these sites and the nature conservation sites, habitats and species listed in the Leicester, Leicestershire and Rutland Biodiversity Action Plan (BAP). The development occurring in Hinckley & Bosworth up until 2026 is likely to increase the pressure on the borough's landscapes and green spaces as well as presenting opportunities for enhancing and extending green infrastructure assets, linking and improving biodiversity within the borough.'

Space for Wildlife - Leicester, Leicestershire, and Rutland (LLR) Biodiversity Action Plan 2012-2016

1.19 Space for Wildlife is LLR association of Council's local biodiversity plan, based on the National Biodiversity Action Plan (UKBAP), and has three main components:

- *To promote the restoration, management and creation of BAP priority habitats*
- *To promote the creation of new wildlife habitat in the wider countryside*
- *To survey, monitor and promote favourable management of existing good sites through the Local Wildlife Sites system.*

In essence, Space for Wildlife: LLRBAP goes back to the broader intentions of the 1992 Biodiversity Convention - to halt the loss of biodiversity – by broadening the overall scope of the LLRBAP to also address wildlife conservation in the wider countryside. The intention is to promote a new, more flexible approach to nature conservation and areas managed for wildlife in Leicestershire and Rutland which is relevant and applicable to all parts of the local landscape.'

1.20 The plan considers both habitats and species of national and local importance. Bird species identified within the plan include the following:

- Barn owl *Tyto alba*
- Nightingale *Luscinia megarhynchos*
- Redstart *Phoenicurus phoenicurus*
- Sand martin *Riparia riparia*
- Common Swift *Apus apus*
- Barn swallow *Hirundo rustica*
- House martin *Delichon urbicum*

2.0 METHODOLOGY

Desk Study

- 2.1 The Preliminary Ecological Appraisal (Zebra Ecology, 2021) included a 2km biological records data search from Leicestershire and Rutland Environment Records Centre (LRERC) to identify any designated sites and protected / notable species (including avian species) within a 2km radius of SP 420 956. It should be noted that the absence of biological records for an area does not imply that taxa are not present.
- 2.2 Leicester and Rutland Ornithological Society were contacted on July 20th 2022 via email to enquire about the latest local bird report; however, no response has been received at the time of reporting.
- 2.3 The Multi Agency Geographic Information for the Countryside (MAGIC) online database (<http://magic.defra.gov.uk>) was used to search for European statutory designated sites such as Ramsar Sites or Special Protection Areas (SPA) within 20km of the site boundary.

Breeding Bird Survey

- 2.4 The site was subject to seven survey visits – the original Preliminary Ecological Appraisal and a suite of six Breeding Bird Surveys. The British Trust for Ornithology (BTO)'s Breeding Bird Survey (BBS) methodology recommends 3 site visits, whilst the Common Bird Census (CBC) methodology recommends 10 site visits. Due to the size of the site, 6 survey visits was considered sufficient to assess the importance of the assemblages on site, and gauge areas of ornithological interest within the survey area. These surveys were undertaken between late May and early July, falling within the bounds of the accepted breeding season for the majority of bird species in the UK (March-August).
- 2.5 Surveys were undertaken in favourable weather conditions for surveying birds (low winds, little to no precipitation etc to maximise the potential to detect birds on-site). As per the latest Bird Survey Guidelines (RSK Biocensus, 2021) five of the surveys were undertaken at dawn, whilst one (Survey 5) was undertaken at dusk, in order to account for species that may be more active during this time (owls, nightingale etc). Surveys commenced 30 minutes prior to sunrise (or prior to sunset for Survey 5) and lasted for an average of approximately 2 hours, to cover peak bird activity times. Details of each survey can be seen below in Table 1.

Table 1: survey details for breeding bird surveys at the land east of Stoke Road & north of Normandy Way (A47), Hinckley.

Date	Visit	Start Time	Sunrise or Sunset	End Time	Start-End Temp	Wind (BF)	Cloud (% Cover)	Precipitation
31/05/2022	1	04:20	04:50	06:10	8-12	0	90	None
14/06/2022	2	04:12	04:42	05:50	11-15	1	10	None
22/06/2022	3	04:13	04:43	05:55	14-18	1	10	None
28/06/2022	4	04:14	04:44	05:10	10-15	2	10	None
04/07/2022	5	21:00	21:30	22:50	16-12	0	100	None
06/07/2022	6	04:05	04:51	06:20	15-17	2	100	None

- 2.6 Elements of both the BBS and CBC methodology were adopted and adapted. A line transect methodology was employed. Based on the information provided by the Preliminary

Ecological Appraisal (Zebra Ecology Ltd, 2021), a route which encountered key features (such as reedbeds, ponds and woodland areas) was identified prior to surveys commencing. This route enabled all areas of the site to be visually assessed within 50m. The route was walked in reverse on Survey 2, 4 and 6. Key features in the landscape were given increased focus during the survey. A 10-minute static observation period was given to these areas along the transect route to improve the chances of identifying specialist breeders within these habitats, or species which are generally skulky or shy in nature. All birds seen/heard were recorded and mapped using the 2-letter BTO codes, including birds on the wing passing over the site. The survey bounds extended up to c.100m beyond the site boundary, to account for species using adjacent habitats to the site. Species lists and maps, with details of behaviour and activity were used to assess the status of each species identified interacting with the site. The species lists and maps provided a general assessment of the species present, their potential for breeding on site and any on-site ornithological constraints.

- 2.7 Suitable survey attire was worn (natural coloured clothing) to avoid disturbance to potential breeders. High-power binoculars (Nikon 10x42SE CF) were used to allow observation of potential breeders at distance.
- 2.8 Surveys were completed by personnel with experience of the likely species assemblage for this geography and habitat type. All surveys were undertaken by the same surveyor to reduce inter-survey biases, and to maintain standardisation in recording ability across the survey effort.

Assessment Criteria – Breeding Status

- 2.9 The results were analysed to assess the breeding status of the birds interacting with the site. See Table 2 below.

Table 2: breeding status of birds interacting with the site

Breeding Status	Definitions - Criteria for Classification
Non-breeding	Flyover or species observed within unsuitable breeding habitat
Possible Breeding	Species observed in breeding season in suitable nesting habitat
Probable Breeding	Pair observed in suitable nesting habitat in breeding season, territorial behaviour observed on at least two occasions, courtship and display observed, observed visiting probable nest site, agitated behaviour or alarm calls from adults or nest building observed
Confirmed Breeding	Used nest or eggshells, distraction display/injury feigning observed, recently fledged young, adults on nest, adult carrying faecal sac or food, nest containing eggs or nest with young seen/heard

Assessment Criteria – Conservation Importance (National Scale)

- 2.10 The level of importance for each species was evaluated based on the criteria outlined in Percival (2007) and can be seen in Table 3 below.

Table 3: assessment criteria for conservation importance for breeding bird surveys at land east of Stoke Road & north of Normandy Way, (A47), Hinckley.

Level of Conservation Importance	Definitions - Criteria for classification
Very High (International)	Internationally significant and viable populations of birds listed on Annex 1 of the EC Birds Directive. Regularly occurring, globally threatened species. Any regularly occurring populations of internationally important species that are rare or threatened in the UK or of uncertain conservation status. A regularly occurring significant population/number of any internationally important species.
High (National)	A regularly occurring significant population/number of any nationally important species i.e. listed on Schedule 1 of the 1981 Wildlife and Countryside Act (as amended). Any regularly occurring population of a nationally important species that is threatened or rare in the county or region.
Medium (Regional)	Any regularly occurring significant population of a species listed as being nationally scarce, or in the local BAP or relevant Natural Area Profile on account of its regional rarity or localisation. Significant populations of a species important at regional or county level. A viable significant population of a Species of Principal Importance (SPI) in England, Wales and Scotland.
Low (Local/District)	Species that are scarce within the locality or which appreciably enrich the local area's habitat resource. Any regularly occurring, significant population of a species that is listed in a Local RDB or BAP on account of its rarity or localisation. Any other species of conservation importance e.g. species listed in Birds of Conservation Concern (BOCCS) i.e. Red List Species (Eaton et al., 2021).
Negligible (Parish/Neighbourhood)	Species populations considered to enrich the habitat resource appreciably within the context of the Parish or Neighbourhood.

Assessment Criteria – Relative Conservation Importance of the Survey Area (Local Scale)

2.11 The potential for the site to be classified as a Local Wildlife Site, based on its ornithological assemblage can be assessed using the criteria outlined in Leicestershire County Councils 'Guidelines for the selection of Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation or SINCs) in Leicester, Leicestershire and Rutland' (2011). The following criteria are considered:

- Sites with significant and established populations of Leicestershire & Rutland Red Data Book (L&R RDB) bird species can be selected as LWS.
- L&R RDB birds are defined as uncommon, scarce, rare or very rare breeding or wintering species within a current LROS County list, or species listed in the latest BOCC as a 'red' or 'amber' species, or a current UKBAP or LBAP priority species.
- Bird populations can only be used to select LWS according to the criteria used for their inclusion in the current LROS County List (e.g. rare breeding birds should only be used to select breeding sites; rare winter visitors should only be used to select wintering sites).
- A significant population is defined as supporting at least 10% of the usual range of occurrence for that species within a current LROS County list (e.g. for an uncommon breeding species, a LWS would need to support 10 breeding pairs; for a scarce species, 1 breeding pair would be sufficient; for a common bird, 100 breeding pairs would be required).
- An established population is where the species has been recorded in significant number on 5 occasions within the last 15 years.

Limitations

- 2.12 The results, interpretations, and conclusions found within this report are representative of the time of surveying.
- 2.13 The methodologies used were up to date at the time of surveying and are widely accepted as the industry standard and by Natural England. Zebra Ecology Ltd cannot accept responsibility where methods used fail to account for all species on site.

3.0 RESULTS

STATUTORY / NON-STATUTORY SITES

Statutory Designated Sites

- 3.1 No SPAs or Ramsar sites were identified within 20km of the site. The nearest Ramsar site is Rutland Water approximately 46km from the site.
- 3.2 Three statutory designated sites have been identified within 5km of the application site:
- Burbage Common & Woods (LNR) located c. 2.3km east.
 - Burbage Wood and Aston Firs (SSSI) located c. 3.1km south-east
 - Kendall's Meadow (SSSI) located c. 3.6km north-west
- 3.3 A further ten statutory sites have been identified within 10km of the application site:
- Ensor 's Pool (LNR)
 - Galley Common (LNR)
 - Griff Hill Quarry (SSSI)
 - Illing's Trenches (SSSI)
 - Croft and Huncote Quarry (SSSI)
 - Croft Pasture (SSSI)
 - Ashby Canal (SSSI)
 - Woodlands Quarry (SSSI)
 - Boon's Quarry (SSSI)
 - Croft Hill (SSSI)

Non-statutory Designated Sites

- 3.4 A total of 25 Local Wildlife Sites (LWS) have been identified within 2km of the application site. The closest is 'Richmond School Ash' located c. 440m south.

Third-party Data Search – Leicestershire & Rutland Environmental Records Centre

- 3.5 The 2km data search returned 127 records for 25 species of bird. Nine of these species are on the UK Biodiversity Action Plan list, whilst only two were on the Local Biodiversity Action Plan (Leicestershire & Rutland), namely swift *Apus apus* and barn owl *Tyto alba*. A further eleven species from the UK Red List for Birds of Conservation Concern (BoCC⁵) were returned. The most numerous record for birds in the local area was for common swift *Apus apus*, with the nearest being located 733m south of the site.

FIELD SURVEY(S)

On-site Habitats & Opportunities for Breeding Birds

- 3.6 At the local level, the habitat across the site represents a moderate-low level of importance for breeding opportunity for common and widespread bird species identified during the survey efforts. Mature trees with multiple nesting opportunities for hole nesting species are present across the site and within the boundary vegetation. The grazed grassland in the eastern land parcel offers some reasonable foraging opportunity for insectivorous and/or omnivorous species, whilst the hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa* and bramble *Rubus fruticosus* found within the extensive hedgerow network around the site provide a good resource for frugivorous species (although over-wintering thrushes are primarily non-breeders at the time of fruiting for these plant species).
- 3.7 The hedgerows and scrub provide a significant opportunity for nesting passerines, particularly priority farmland species such as yellowhammer *Emberiza citrinella*, common linnet *Linaria cannabina*, greater whitethroat *Sylvia communis*, greenfinch *Chloris chloris* and Eurasian bullfinch *Pyrrhula pyrrhula*, all of which were possible, probably or confirmed breeders on-site. The small patches of scrub/woodland associated with the site supported Eurasian blackcap *Sylvia atricapilla*, and other very common species such as great tit *Parus major*, blue tit *Cyanistes caeruleus* and magpie *Pica pica*.

Field Survey Results

- 3.8 A total of 268 registrations, relating to 32 species of bird were recorded throughout the survey effort. Of these 32 species identified, 25 species are thought to be possible, probable, or confirmed breeders within the survey boundary. Six species were classed as non-breeders.
- 3.9 The species registrations across the survey effort were dominated by common and widespread species associated with lowland farmland habitat in central England. The most frequently encountered species included woodpigeon *Columba palumbus*, European robin *Erithacus rubecula*, Eurasian wren *Troglodytes troglodytes* and blackbird *Turdus merula*.
- 3.10 Three raptor species were identified during the surveys, including Eurasian sparrowhawk *Accipiter nisus*, common buzzard *Buteo buteo* and western barn owl *Tyto alba*.
- 3.11 Six species were classified as 'non-breeding', as their records were either 'roosting' (but not nesting) on site, 'passing over the site' or recorded on 'adjacent habitat', but never within the survey boundary/proposed development areas. These species were carrion crow *Corvus corone*, common buzzard *Buteo buteo*, Eurasian jay *Garrulus glandarius*, Eurasian skylark *Alauda arvensis*, Eurasian sparrowhawk *Accipiter nisus* and herring gull *Larus argentatus*.
- 3.12 Seven species were recorded that are classed as 'Species of Principle Importance', of which five were possible, probable, or confirmed breeders. A male and female common reed bunting *Emberiza schoeniclus* were observed in the reed bed adjacent to the site; European starling *Sturnus vulgaris* were witnessed roosting and foraging on-site on multiple occasions; house sparrow *Passer domesticus* were nesting in the buildings and hedgerow at Middlefield's Farm, directly adjacent to the northern boundary; song thrush *Turdus philomelos* territorial behaviour was witnessed on multiple occasions and at least two

yellowhammer *Emberiza citrinella* were heard singing in the centre of the site during survey 1.

- 3.13 Four species found within the UK Biodiversity Action Plan were identified during the survey efforts, common linnet *Linaria cannabina*, European starling *Sturnus vulgaris*, Eurasian skylark *Alauda arvensis* and yellowhammer *Emberiza citrinella*.
- 3.14 Barn swallow *Hirundo rustica*, common swift *Apus apus* and western barn owl *Tyto alba* were all recorded and are found on the Local Biodiversity Action Plan (Leicestershire & Rutland).
- 3.15 No EU Birds Directive Annex 1 species were recorded, and only 1 WCA Schedule 1 species (western barn owl *Tyto alba*) was recorded.
- 3.16 Western barn owl was only observed once during the survey effort, leaving a potential nesting site within a mature ash *Fraxinus excelsior* tree on the northern boundary of the site. Barn owl calls were then heard coming from the same tree during a bat transect survey undertaken by Zebra Ecology on 27 July 2022.
- 3.17 A full species list, relevant legal protection, and status (BoCC⁵, SPI, EU Birds Directive, UKBAP, Local BAP, WCA, Breeding Status and Relative Conservation Importance with species accounts) can be seen in Table 3.1 below.

Table 4: species identified during the Breeding Bird Survey effort at Land East of Stoke Road & North of Normandy Way, (A47), Hinckley.

Species	BoCC ⁵ Status	SPI (NERC, 2006)	EU Birds Directive Annex 1	UKBAP	Local BAP (LLRBAP)	WCA Schedule 1	Breeding Status	Relative Conservation Importance of Site Population	Species Account
Barn swallow <i>Hirundo rustica</i>	Green				Yes		Confirmed breeding	Low	Nesting off-site, in buildings adjacent to site, foraging over site on multiple surveys.
Blackbird <i>Turdus merula</i>	Green						Probable Breeding	Negligible	Pair observed in suitable habitat in breeding season.
Blue tit <i>Cyanistes caeruleus</i>	Green						Confirmed breeding	Negligible	Recently fledged young observed on third survey.
Carion crow <i>Corvus corone</i>	Green						Non-breeding	Negligible	Passing over site.
Chiffchaff <i>Phylloscopus collybita</i>	Green						Probable Breeding	Negligible	Heard singing consistently across all surveys in habitat surrounding reedbed to the west.
Common buzzard <i>Buteo buteo</i>	Green						Non-breeding	Negligible	Observed leaving roost site on one survey.
Common linnet <i>Linaria cannabina</i>	Red			Yes			Possible Breeding	Low	Observed in suitable habitat during breeding season
Common pheasant <i>Phasianus colchicus</i>	Introduced						Possible Breeding	Negligible	Male observed and heard in suitable habitat during breeding season.

Species	BoCC ⁵ Status	SPI (NERC, 2006)	EU Birds Directive Annex 1	UKBAP	Local BAP (LLRBAP)	WCA Schedule 1	Breeding Status	Relative Conservation Importance of Site Population	Species Account
Common reed bunting <i>Emberiza schoeniclus</i>	Amber	Yes					Possible Breeding	Low	Breeding pair observed in reed beds to west, suitable habitat on site
Common swift <i>Apus apus</i>	Red				Yes		Possible Breeding	Low	Off-site, in buildings adjacent
Dunnock <i>Prunella modularis</i>	Amber						Possible Breeding	Negligible	Male heard singing in suitable habitat during breeding season.
Eurasian wren <i>Troglodytes troglodytes</i>	Green						Probably Breeding	Negligible	Territorial behaviour observed on at least 2 surveys
Eurasian Blackcap <i>Sylvia atricapilla</i>	Green						Probable Breeding	Negligible	Heard singing consistently across all surveys in suitable breeding habitat
Eurasian bullfinch <i>Pyrrhula pyrrhula</i>	Amber						Possible Breeding	Negligible	Off-site, in scrub/hedgerows to east of site, similar habitat present on site.
Eurasian jay <i>Garrulus glandarius</i>	Green						Non-breeding	Negligible	Flying over site
Eurasian skylark <i>Alauda arvensis</i>	Red	Yes		Yes			Non-breeding	Low	Only heard singing off-site twice. Not observed on-site. No suitable breeding habitat on-site.
Eurasian sparrowhawk <i>Accipiter nisus</i>	Amber						Non-breeding	Negligible	Observed once, pursuing prey (Woodpigeons)
European robin <i>Erithacus rubecula</i>	Green						Confirmed breeding	Negligible	Recently fledged young observed on Survey 6.
European starling <i>Sturnus vulgaris</i>	Red	Yes		Yes			Possible Breeding	Low	Observed flying over site and perching on power lines, as well as foraging within the grassland. Suitable nesting habitat on site
Goldfinch <i>Carduelis carduelis</i>	Green						Possible Breeding	Negligible	Species observed in suitable habitat on multiple occasions
Great tit <i>Parus major</i>	Green						Possible Breeding	Negligible	Species observed in suitable habitat on multiple occasions
Greater whitethroat <i>Sylvia communis</i>	Amber						Confirmed breeding	Negligible	Recently fledged young observed on final survey
Greenfinch <i>Chloris chloris</i>	Red						Possible Breeding	Negligible	Male heard singing on site once, heard off-site multiple occasions

Species	BoCC ⁵ Status	SPI (NERC, 2006)	EU Birds Directive Annex 1	UKBAP	Local BAP (LLRBAP)	WCA Schedule 1	Breeding Status	Relative Conservation Importance of Site Population	Species Account
Herring gull <i>Larus argentatus</i>	Red	Yes					Non-breeding	Negligible	Observed flying over site
House sparrow <i>Passer domesticus</i>	Red	Yes					Confirmed breeding	Low	Nesting off-site, in buildings adjacent, utilising site for foraging.
Magpie <i>Pica pica</i>	Green						Possible Breeding	Negligible	Young birds observed together, likely that birds are within parents breeding territory
Moorhen <i>Gallinula chloropus</i>	Green						Probable Breeding	Negligible	Off-site, in reed beds to west
Pied wagtail <i>Motacilla alba</i>	Green						Possible Breeding	Negligible	Roosting in reed beds to west (Peak count 11), likely foraging across farmland and some suitable nesting habitat on-site.
Song thrush <i>Turdus philomelos</i>	Amber	Yes					Probable Breeding	Low	Territorial behaviour observed on at least 2 surveys
Western barn owl <i>Tyto alba</i>	Green				Yes	Yes	Probable Breeding	Medium	Individual flew out of suitable tree for nesting, individual heard calling from within potential nest site during a Dusk Bat Transect Survey (Zebra 2022a).
Western jackdaw <i>Corvus monedula</i>	Green						Probable Breeding	Negligible	Bird observed visiting probable nest site in large ash tree
Woodpigeon <i>Columba palumbus</i>	Green						Confirmed Breeding	Negligible	By far the most populous bird on site, Nests present in two distinct locations, foraging and passing over consistently on all surveys.
Yellowhammer <i>Emberiza citrinella</i>	Red	Yes		Yes			Probable Breeding	Low	Individuals heard singing in the central hedgerow of the site, as well as outside of the survey boundary but on adjacent property of high affinity habitat.

Local Scale - Local Wildlife Site Assessment

- 3.18 Of the 32 species identified interacting with the site during the breeding bird surveys, only 13 were classed as probable or confirmed breeders. These species have been assessed

further using the guidance found in Leicestershire County Councils 'Guidelines for the selection of Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation or SINCs) in Leicester, Leicestershire and Rutland' (2011), to determine whether they are locally significant assemblages. A table detailing their breeding status, BoCC⁵ status, Leicestershire & Rutland Red Data Book status, local BAP status, whether species-specific mitigation and enhancement is recommended, and whether their population is significant enough to warrant the site being designated as a Local Wildlife Site can be seen in Table 5 below.

Table 5: status of confirmed/probably breeding bird species at the land East of Stoke Road & North of Normandy Way, (A47), Hinckley.

Species	Breeding Status	BoCC5 Status	L&R RDB Species?	LLR BAP Species	Species-specific Mitigation & Enhancements to be recommend?	Number of Breeding Pairs	Population Significance (to determine LWS potential)
Barn swallow <i>Hirundo rustica</i>	Confirmed breeding	Green	Yes	Yes	Yes	<10	Not Significant
Blackbird <i>Turdus merula</i>	Probable Breeding	Green	No	No	No	<10	Not Significant
Blue Tit <i>Cyanistes caeruleus</i>	Confirmed breeding	Green	No	No	No	<10	Not Significant
Chiffchaff <i>Phylloscopus collybita</i>	Probable Breeding	Green	No	No	No	<10	Not Significant
Eurasian wren <i>Troglodytes troglodytes</i>	Probable Breeding	Green	No	No	No	<10	Not Significant
Eurasian Blackcap <i>Sylvia atricapilla</i>	Probable Breeding	Green	No	No	No	<10	Not Significant
European robin <i>Erithacus rubecula</i>	Confirmed breeding	Green	No	No	No	<10	Not Significant
Greater whitethroat <i>Sylvia communis</i>	Confirmed breeding	Amber	Yes	No	Yes	<10	Not Significant
House sparrow <i>Passer domesticus</i>	Confirmed breeding	Red	Yes	No	Yes	<10	Not Significant
Moorhen <i>Gallinula chloropus</i>	Probable Breeding	Green	No	No	No	1	Not Significant
Song thrush <i>Turdus philomelos</i>	Probable Breeding	Amber	Yes	No	Yes	<10	Not Significant
Western barn owl <i>Tyto alba</i>	Probable Breeding	Green	Yes	Yes	Yes (additional survey work also required)	1	Significant (if breeding is confirmed)
Western jackdaw <i>Corvus monedula</i>	Probable Breeding	Green	No	No	No	<10	Not Significant
Yellowhammer <i>Emberiza citrinella</i>	Probable Breeding	Red	Yes	No	Yes	<10	Not Significant

3.19 Six of the species identified as confirmed/probable breeders will require bespoke levels of enhancement (which will be detailed in brief within this report, and in full within a Landscape & Ecological Management Plan), as they are species found within the Leicestershire & Rutland Red Data Book and the development proposals will have a direct impact on their breeding habitats at the site level. The details of the species-specific enhancements can be seen in Table 5 of this report.

3.20 Western barn owl is both a LLR BAP species, and a Schedule 1 WCA species. Further survey work is required for this species and is detailed further in section 4.10 of this report.

4.0 EVALUATION AND IMPACTS

4.1 The eastern land parcel is being developed into a residential estate, comprising 475 dwellings and associated access infrastructure. Therefore, significant changes to the general ecology of the site are predicted. Clearance of much of the site, alongside construction and operational movements within the site may potentially cause loss of roosting, foraging and nesting opportunities for a variety of bird species.

4.2 The following have been identified which may represent ornithological constraints (habitats utilised by breeding birds) or opportunities for enhancement within future development of the site:

- Woodland/Scrub (no woodland or scrub area is being lost to accommodate for the proposals)
- Trees (eight trees on site are being lost to accommodate the proposals, including large, mature trees with considerable nesting opportunities for birds)
- Ponds/Reedbeds (no ponds or reedbeds are being lost to accommodate for the development proposals)
- Grassland (a significant area of the grassland on-site is being lost to accommodate for the development proposals, being replaced with residential dwellings and associated infrastructure)
- Hedgerows (small sections of the boundary hedgerows are being removed to allow access into the proposed development. Several sections of internal hedgerow are also being removed to accommodate proposed road and access infrastructure within the site)
- Streams & Waterways (no streams and waterways are being directly impacted by the development proposals)

4.3 The potential impacts of the development on the breeding bird populations identified on site largely depends upon the ecological requirements for each species, and how these requirements are being impacted by the proposals. Table 6 details the habitat requirements for the six species identified as 'probable/confirmed breeders', the nature conservation value², suggested mitigation/compensation/ enhancements and any residual impacts that may arise from the proposed development³. The development proposals can be seen in Appendix A – Zebra Landscape Architects 2021.

² Based upon professional judgement and criteria outlined in Table 3.

³ Assumes that suggested mitigation, compensation and enhancements have been undertaken fully and appropriately.

Table 6: mitigation, compensation and enhancements for confirmed/probable breeding birds that are considered to be 'notable species' at the Land East of Stoke Road & North of Normandy Way, (A47), Hinckley.

Species	Habitat Requirements	Local Nature Conservation Value of On-site Population	Mitigation, Compensation, and Enhancements	Residual Impacts
Barn swallow <i>Hirundo rustica</i>	Summer visitors and breeders, particularly utilise farmland outbuildings for nesting, using dark ledges and nooks for nest building. Out of reach of predators, need very little light and only a small entrance gap. Requires stable insect supply to feed.	Local - Medium (L&R RDB Species, LLR BAP Species)	Enhancing field margins and open spaces with wildflowers and species rich buffer zones to increase insect diversity at the local level. Install swallow nests/bricks on proposed residential structures; use Hirundine friendly materials (avoid using smooth/slick wood/metal beneath the eaves as mud-built nests do not adhere to these surfaces). Maintain local ponds and sources of wet mud for nest building.	Negligible
Greater whitethroat <i>Sylvia communis</i>	Summer visitors and breeders, primary breeding habitat is farmland, often associated with scrub and reedbeds. Nests built out of dry grass and roots, will nest in bramble and scrub, as well as hedgerows.	Local - Low (BoCC ⁵ Amber List, L&R RDB Species)	Enhance on-site scrub in density and diversity to increase nesting opportunities. Increasing hedgerow density and employing a breeding friendly hedgerow management regime which will prevent nests from being disturbed during breeding season (Feb-August).	Negligible
House sparrow <i>Passer domesticus</i>	Commonly associated with man-made infrastructure, opportunistic breeders and foragers, nesting in loose colonies, will nest in holes and crevices, or build freestanding nests in hedgerows/vegetated walls.	Local - Medium (BoCC ⁵ Red List, L&R RDB Species)	Installing sparrow terraces on north-facing elevations of proposed residential units will improve nesting opportunities at the site level. House sparrows are quick to colonise new areas that provide reasonable foraging habitat, including residential gardens.	Beneficial
Song thrush <i>Turdus philomelos</i>	The nest is built entirely by the female, is low down in any suitable cover, including trees and shrubs, among creepers on walls, on ledges, and on the ground amongst thick vegetation.	Local - Low (BoCC ⁵ Amber List, L&R RDB Species)	Increasing hedgerow and scrub planting across the site will improve the habitat for song thrush.	Negligible
Western barn owl <i>Tyto alba</i>	Nests are not 'built' per se, existing holes, ledges, burrows, haystacks, etc. are utilised. Often the same site is used for many generations. Surrounding habitat should support a good small rodent population as a prey source.	Local - High (LLR BAP Species, L&R RDB Species & WCA Schedule 1 Species)	Further survey work is required to accurately determine the level of mitigation, compensation and enhancement required for this species (see Section 4.10)	N/A Further survey work needed (see Zebra Ecology, 2022b)
Yellowhammer <i>Emberiza citrinella</i>	Nests are on or close to the ground in ditch vegetation or at the base of short, thick hedgerows and scrub. They are mostly found in hedgerows which have a wide margin or ditch. Require consistent insect supply to feed young, and seed supply for adults	Local - Low (BoCC ⁵ Red List Species, L&R RDB Species)	The hedgerows associated with ditches on-site should be structurally maintained and appropriately managed. Bolstering of hedgerows to improve integrity and species richness would maintain viable habitat for this species, especially for the northern boundary hedgerows that are adjacent to retained farmland.	Negligible

Biodiversity Enhancements

- 4.4 It should be noted that the proposals include a c.2ha area of land to be used for biodiversity net gain and site-level biodiversity enhancements. This area is the arable field located to the west of the site, to the west of Stoke Road. The proposed biodiversity area is immediately

adjacent to the reedbed and will serve as a significant buffer zone between the proposed residential developments and the existing area of ecological interest.



Figure 2 – Area for biodiversity enhancements and buffer zone between the established reedbed and proposed development area at Land East of Stoke Road & North of Normandy Way, (A47).

Designated Sites

- 4.5 A search of the citations for each of the designated statutory sites within 10km of the site revealed that none of the purposes for designation were ornithological in nature. The sites represent a mix of geological and botanically important areas.
- 4.6 The nearest Ramsar site (Rutland Water) is over 46km from the site boundary. The area of reedbed to the west of the site - directly adjacent to the red line boundary may be used as a 'stop-over' site for migrating wetland-associated species. Opportunities for these migrating species to roost (and rest) have significant implications for predicting migrating and breeding success (The Cornell Lab, 2022). Due consideration was given to the reedbed habitat associated with the site at initial planning stages, and as such the area to the west of the site was proposed for biodiversity enhancements, rather than residential development.
- 4.7 Therefore, no significant impacts are predicted upon this area, or the species potentially associated with Rutland Water, as a result of the proposed developments.
- 4.8 The nearest non-statutory site is over 700m from the site boundary (Richmond School Ash), and the proposed developments will have no impact upon this site.

Habitat Impacts

- 4.9 The primary habitats of ornithological significance (grassland, hedgerows, waterbodies, woodland, bramble scrub and mature trees) were all considered as ecological constraints prior to a masterplan being finalised by Richborough Estates Ltd. Therefore, the majority of these features (aside from the grassland) are being retained and enhanced as part of the proposed development in order to minimise the impacts of the proposals on existing habitats/biodiversity. It is understood that some small sections of the hedgerows on the western and southern boundary of the eastern land parcel are being lost to allow for access into the site, as well as a small section on the western side of Stoke Road. Further sections of hedgerow are to be lost from the centre of the site. Despite the proposed hedgerow losses, a significant impact on local breeding bird populations is not predicted, as there is an abundance of high-affinity hedgerow habitat within the local landscape, immediately adjacent to the site. Species-specific mitigation, compensations and enhancements for these losses can be seen in Table 6 (above).

Western Barn Owl

- 4.10 Western barn owl *Tyto alba* was only observed once during the survey effort, leaving a potential nesting site within a mature ash *Fraxinus excelsior* on the northern boundary of the site. Barn owl calls were then heard coming from the same tree during a Bat Transect Survey undertaken by Zebra Ecology on 27 July 2022 (Zebra Ecology, 2022a). Given that the individual was not visible upon closer inspection, it is assumed that the bird was present in a potential nesting site and therefore is a 'probable breeder'. A full verification survey by a suitably licenced ecologist is recommended to determine the status of this potential nest-site, as per the guidance found in the Leicester, Leicestershire, and Rutland Barn Owl Survey Protocol (2021). Should breeding status be confirmed, the nest site would meet the criteria of a Local Wildlife Site. Barn owls are a scarce breeder within the locality, as well as being identified within the local BAP. Therefore, just one breeding pair is considered sufficient to be a significant population of this species found within the Leicestershire & Rutland Red Data Book (LCC, 2011).

Mitigation

- 4.11 During construction of the proposed development, all vegetation clearance, including arable land, should be conducted outside of the breeding season (March to September inclusive). Should areas of vegetation require clearance during the breeding season, then a pre-commencement survey for nesting birds should be undertaken by a qualified ecologist. If no nesting birds are present, then works can proceed but clearance must occur no more than 24 hours after the site visit from the ecologist. However, if active nests are recorded then protection measures including an exclusion zone around the nest will be necessary, with no works recommencing until all eggs have hatched and all chicks have fully and naturally fledged.

5.0 CONCLUSIONS

- 5.1 The results of the breeding bird surveys at the land east of Stoke Road & north of Normandy Way, (A47), Hinckley indicate that the site supports common and widespread bird species associated with lowland/farmland within England, and more specifically Leicestershire. Some of these species are 'notable' (BoCC⁵ Red List, UKBAP, LLRBAP, WCA Schedule 1), and therefore should be conserved and protected in line with national and local policy.
- 5.2 A brief description of enhancements, mitigation and habitat creation/management regimes for specific notable species can be found in Table 6. This should be developed further, and details should be provided within a full LEMP, prior to construction commencing.
- 5.3 Further survey work is required to determine the presence of a Western barn owl nesting site, within a large ash *Fraxinus excelsior* tree to the north of the site (T25 – Zebra Ecology Ground Based Tree Assessment).

6.0 REFERENCES

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APPENDIX A

Photographs



Photograph 1: Looking east across the site on Survey 1



Photograph 2: Sunrise on Survey 2, looking east across the site.



Photograph 3: Facing west on the dusk survey (Survey 5).



Photograph 4: A pond in the centre of the site.



Photograph 5: The pond within the scrub in the centre of the site.



Photograph 6: Mixed scrub in the centre of the site.

APPENDIX B

Qualifications and Experience

Zebra Ecology Ltd is Registered Practice of the Chartered Institute of Ecology and Environmental Management (CIEEM). A comprehensive range of ecological services are offered including Preliminary Ecological Appraisal (PEA), Ecological Impact Assessment (EclIA), Habitat Regulations Assessment (HRA), Biodiversity Impact Assessment (BIA) and European Protected Species (EPS) Surveys / Licensing.

The practice works closely with clients to achieve their aspirations alongside securing the best outcomes for the environment. With wildlife legislation and policy as its basis; commercial awareness, pragmatism and defensible advice is combined to form Zebra Ecology's approach.

As well as offering a wide range of ecological services, Zebra Ecology forms part of Zebra Group offering an in-house collaborative approach in conjunction with Zebra Architects, Zebra Landscape Architects, Zebra Trees and Zebra Land and Development.

Emma Seaton BSc (Hons) MCIEEM

Emma holds a BSc (Hons) degree in Biology from the University of Sheffield and has since gained a postgraduate certificate in Ecological Consultancy. Her ecological experience includes Preliminary Ecological Appraisals, Ecological Impact Assessments (EclIA), surveying for notable / European Protected Species, mitigation / licensing advice and providing Continued Professional Development (CPD) sessions for developers on Biodiversity Net Gain. She has held Natural England survey licences for bats (Class 2), great crested newts and white-clawed crayfish since 2015. She is also a Registered Consultant under the Bat Mitigation Class Licence (BMCL) licence and an Earned Recognition (ER) consultant under the Natural England pilot project. Emma is a Full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Andrew Elliott BSc (Hons)

Andy holds a BSc (Hons) degree in Biological Sciences (Zoology) from the University of Birmingham, and has a particular passion for ornithology, as well as social ecology. Since graduating, Andy has spent considerable time on the African continent, contributing to research projects in fields such as evolutionary sociality in birds, black rhinoceros behavioural ecology and linear infrastructure wildlife-mortality mitigation. Andy holds a Class 1 survey licence for bats, and has a broad range of consulting experience, working on large and small-scale projects across the UK.