



Crow Ecology
Creating a Nest for your Project & Nature

Emergence/Re-Entry Bat Survey Report

Site: 22/01785/PLF - Conversion of existing agricultural building to two dwellings - Newbreaks Farm, Kings Causeway, Swinefleet, East Yorkshire, DN14 8DZ

Client: The property owner

Date of Survey: 15th May 2023

**Prepared by Chris Crow BSc (Hons),
ACIEEM.**

NE Bat License No: 2015-11015-CLS-CLS
NE Great Crested Newt License No: 2015-18094-CLS-CLS
NE Barn Owl License No: CL29/00149

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Validity of survey data and report. The findings of this report are valid for 24 months from the date of survey. If work has not commenced within this period, an updated survey by a suitably qualified ecologist will be required.

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1. Summary

Crow Ecology was commissioned by the property owner to undertake an Emergence/Re-Entry (Presence/Absence) Bat Survey following the results of the Preliminary Roost Assessment (PRA).

The aim of the Emergence-Re-Entry bat survey is to determine the presence/absence of bats at the time of the survey and the need for further surveys and/or mitigation. The survey is required to inform a proposed planning application which is to be lodged with the local planning authority, in this case in this case East Riding of Yorkshire Council (ERYC).

The project site is an agricultural building, currently used for storage purposes within the property boundary of Newbreaks Farm, Kings Causeway, Swinefleet, East Riding of Yorkshire, DN14 8DZ. Copies of the proposed development were download from the East Riding of Yorkshire planning portal.

The proposal is:

- Conversion of existing agricultural building to two dwellings

The Emergence/Re-Entry surveys were undertaken on the 15/05/23 (Dusk) in suitable weather conditions for this type of survey.

No bats were found to be emerging or returning to the building during the survey. The building was inspected internally and externally prior to the survey to check for bat evidence; no bat evidence was found.

A number of Common pipistrelle bats are roosting within the neighbouring building to the North-East of the project site and bats from this roost commuted/foraged close to the project site building. Other bats from the surrounding area foraged and/or commuted past and close to the project site too.

No further surveys or an EPS licence is required for the proposed development to proceed.

A Precautionary Working Method Statement (PWMS - see section 8.1) will be strictly adhered to if the proposed development goes ahead. In the unlikely event that bats or bat droppings are present at the start or during the renovation work, work must be halted until a licensed bat holder can attend the site and give further advice where necessary.

To increase the net gain to biodiversity and to comply with national and local planning policies the following recommendation have been made:

- Two wall-mounted bird boxes on any of the retained buildings within the property boundary



2. Introduction

Crow Ecology was commissioned by the property owner to undertake an Emergence/Re-Entry (Presence/Absence) Bat Survey following the results of the Preliminary Roost Assessment (PRA). The PRA report: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹ is referred to throughout this report. Results from the PRA survey triggered an Emergence/Re-Entry (Presence/Absence) Bat survey of the building as it has a Low bat roosting potential.

The aim of this survey is to determine the presence/absence of bats at the time of the survey and the need for further survey and/or mitigation if necessary. The Emergence/Re-Entry survey involves visiting the site at dusk or dawn to watch, listen and record any bats exiting or entering the building/s of interest².

Recommendations for mitigation and/or further survey work can be made to reduce the impact on any bat species found and thereby also reducing potential constraints to any development which might take place.

2.1 Site Location

Please refer to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹.

2.2 Site Description

Please refer to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹.

Please see appendix 1 for existing site layout.

2.3 Site Proposal

The proposal is:

- Conversion of existing agricultural building to two dwellings

Please see appendix 2 for proposed site layout.

3. Methods

This report has been written in accordance with the following guidelines:

- The Bat Conservation Trust: Bat Surveys for Professional Ecologists - Good Practice Guidelines (3rd edition 2016)²
- Natural England Bat Mitigation Guidelines (2004)³.
- The current (March 2015) Natural England Standing Advice for bats can be found at: <https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects>
- Bat Workers Manual 3rd Edition (2004)⁴
- *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys* (2022) Bat Conservation Trust⁵
- *Bats: Advice for Planning Decisions* Crown Copyright (2022)⁶
- *Wild birds: Advice for Planning Decisions* Crown Copyright (2022)⁷
- The Code of Professional Conduct and guidelines as laid down by the Chartered Institute of Ecology & Environmental Management (CIEEM).
- Reference to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹.

3.1 - Desktop Study

Please refer to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹.

3.2 - Preliminary Roost Assessment

Please refer to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'¹.

3.3 - Emergence/Re-Entry – Presence/absence Survey

The Emergence/Re-Entry survey took place on the 15/05/2023 in suitable weather conditions for this type of survey.

3.3.1 - Survey Methodology²

This survey involves visiting the site at dawn and or dusk to watch and listen (using a bat detector) and record any bats that enter or exit the building/s in question. The information recorded should illustrate the species, numbers, access points and roost location, the latter two will have already been noted from the preliminary roost assessment.

The aims and objectives of the survey are to determine the presence/absence of bats at the time of the surveys and the data collected to recommend further surveys and or mitigation.

If bats are present then a roost characterisation survey may need to be carried out depending on how much information your presence/absence survey has gleaned.

A Presence/Absence survey is triggered by the following²:

- The preliminary roost assessment has not ruled out the likelihood of a roost been present due to some or all of the features highlighted in the assessment

- A detailed assessment of the building/s was not possible due to restricted access but the building may suggest there is a likelihood of a roost
- A PRF (Potential Roost Feature) of the trees has highlighted a moderate-high suitability but no definitive record of a roost has been identified
- There is the possibility that some bat evidence has been removed by the weather or by human activities

The access points and potential roost locations are where the main focus of the survey concentrates although observation on other areas should be performed as bats can be unpredictable. These access points also dictate the number of surveyors needed to adequately complete the survey to a satisfactory standard. Before the start of the survey, the lead ecologist briefs each surveyor about the area they are surveying and highlights the access points of interest. Briefing each surveyor prevents overlap and the potential for double counting. Another way to avoid this is using radio contact so each surveyor can discuss any sightings.

Surveyor coverage is crucial to accurately access all access points. Simple structure buildings require fewer surveyors but always a minimum of two and vice versa for larger/complex buildings. If there are not enough surveyors another visit will be required this time with surveyors standing at other access points of interest. Surveyors should remain stationary and as close as possible without sacrificing coverage throughout the survey to avoid any bats being missed. This is especially important during dusk as bats tend to exit straight away and fly off. At dawn they tend to swarm near the access point so it makes it a little easier to identify the access point.

The surveyors then record any bat activity on the recording forms. They indicate on the building plan the point at which the bat emerged/re-entered, the time and the species. Bats passing by are also recorded on the recording forms as this information may be useful for mitigation purposes.

3.3.2 - Method Justification

The building was identified as Low bat roosting potential (please refer to: Arbtech Consulting Ltd (2022) 'Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ'¹) due to the following factors:

- Gaps in ridge and roof tiles
- Gaps in doors and windows

Additionally, the surrounding habitat has moderate-high bat foraging and commuting suitability. The surveys were also performed at this time to co-inside with the peak active season from May to the end of August².



3.3.3 - Areas Surveyed and Justification

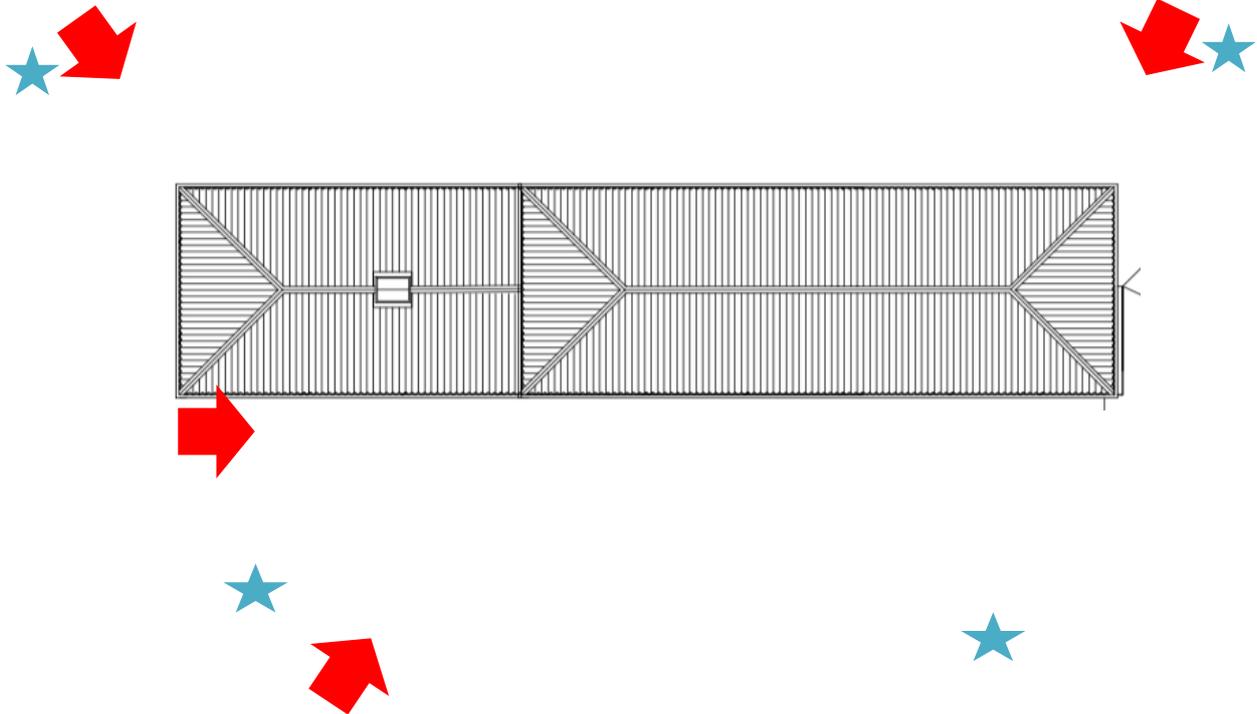


Figure 3.1 – Surveyor positions

-  Surveyor locations
-  SANNCE IR Cameras

The surveyor positions cover all elevations of the buildings that have points of interest as do the SANNCE IR cameras.



Figure 3.2 – Screenshot of the camera set-up to illustrate the field of view and visibility.

3.3.4 - Survey Personnel

Chris Crow BSc (Hons), ACIEEM of Crow Ecology. Chris Crow has over 10 years surveying experience and holds the following Natural England (NE) licences;

Bat Licence No: 2015-11015-CLS-CLS (Class 2)

Great Crested Newt Licence No: 2015-18094-CLS-CLS (Level 2)

Barn Owl Licence No: CL29/00149

In addition to Chris Crow (CC), the following other surveyors took part in this survey:

Natalie Duckett (ND) – Has an Ecology degree from the University of Hull. Throughout her studies she has participated in a variety of field work. She previously volunteered with the department of conservation in New Zealand assisting with species monitoring of the Northern brown kiwi. I have been tutoring Natalie now for four seasons in all aspects of ecology, including bat activity surveys. Natalie is now working towards her bat license.

Amelia Bateman-Young (ABY) – Amelia is currently studying a BSc in Geography at the University of Hull. Amelia was looking for work experience to see what career she could possibly go into after University. After travelling to Canada, Amelia realised working with animals and seeing animals in the wild was something she would like to push her career towards. Amelia is passionate about 'saving the planet' and helping wildlife is one step towards that goal. I have been tutoring Amelia over three seasons in all aspects of ecology, including bat activity surveys, giving her the experience in ecology beyond her degree. Amelia is now working towards her bat license.

Joe Trowell (JT) - Joe has a BSc in Biology from the University of Hull and is currently doing a masters in Environmental Change Management and Monitoring. Joe has a keen interest in the environment and ecology. From his degree, he has had experience with Environmental Impact assessments, Preliminary Ecological Appraisals, River habitat surveys, invertebrate and plant ID, He also has a keen interest in R statistical programming language and GIS software (ArcMap, ArcPro and qGIS). To further aide his bat ecology, he has completed a Kaleidoscope Bat analysis course. Joe has been working with Crow Ecology for two seasons on surveys and helping set up IR equipment.

3.3.5 - Limitations

The building could be accessed and assessed both internally and externally. Therefore, the data collated is accurate at the time of the survey.



4. Survey Results

4.1 - Desktop Study

Please refer to: Arbtech Consulting Ltd (2022) 'Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ'.

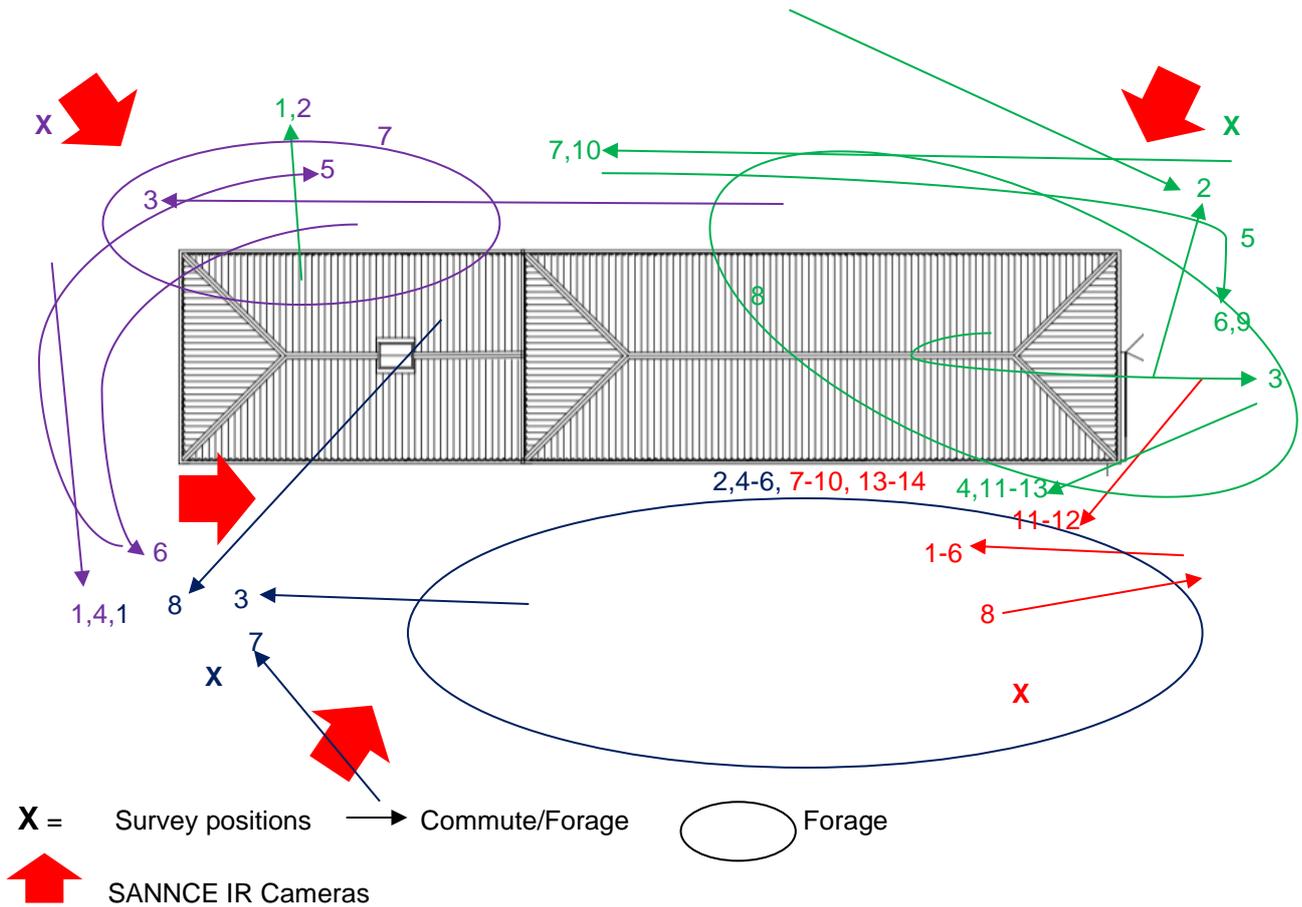
4.2 - Presence/Absence Survey Results

4.2.1 - Summary of Survey Information

Date	Timings	Weather	Structure (Numbered if more than 1 structure)	Equipment used
15/05/2023	Dusk – 20.58 Start time – 20.40 End Time – 22.45	Start temp – 13°C End temp - 11°C Wind (Beaufort Scale) – 2 Rain – Heavy from 20.50 – 21.10 then no rain for the rest of the survey Cloud – 100%	Buildings (see figure 3.1).	<ul style="list-style-type: none"> • SANNCE CCTV Camera System 4CH 1080N CCTV DVR with 10.1" HD Monitor • 4x KKmoon TP-W200BM HD Video Cameras, Day Night Weatherproof Security Cameras, P2P, Motion Alert, • 4x KKmoon 96 LEDS IR Illuminator Array Infrared Lamps Night Vision Outdoor Waterproof For CCTV Security Camera • Nebo Davinci Torches • Echo Meter Touch 2 Pro Bat detectors • Magneta Bat 5 Bat Detectors • Head torches • Digital thermometer • Bat recording forms • Cobra MT645 Walkie Talkie Radios • Ladders • CAT S61 Camera
Comments – N/A				



4.2.2 - Dusk Survey Report Map - 15.05.2023



4.2.3 - Dusk Record Sheet - 15.05.2023

Surveyor & Map Points	Time		Bat Species	No.	Behaviour**	Comments
	From	Until				
CC 1	21.14	21.14	C. pip	1	Comm	
CC 2	21.14	21.14	C. pip	1	For	
CC 3	21.21	21.21	C. pip	1	For	
CC 4	21.28	21.29	C. pip	1	For	
CC 5	21.40	21.40	C. pip	1	For	
CC 6	21.43	21.43	C. pip	1	For	
CC 7	21.58	21.58	BLE	1	Comm	
CC 8	22.01	22.01	Myo sp.	1	Comm	
ANV	21.46	21.46	C. pip	1	Comm	
ANV	21.47	21.47	C. pip	1	Comm	
ANV	21.48	21.48	C. pip	1	Comm	
ANV	22.00	22.00	C. pip	1	Comm	
ANV	22.01	22.01	C. pip	1	Comm	
ANV	22.12	22.12	C. pip	1	Comm	
ANV	22.15	22.15	C. pip	1	Comm	
ANV	22.18	22.18	BLE	1	Comm	



ANV	22.24	22.24	C. pip	1	Comm	
ANV	22.26	22.26	Noc	1	Comm	
ANV	22.27	22.27	C. pip	1	Comm	
ANV	22.37	22.37	C. pip	1	Comm	
ND 1	20.45	20.46	C.pip	2	Comm	Emerged from neighbouring building; NE of the project site and then foraged in courtyard. See plate 4.1.
ND 2	20.49	20.51	C.pip	2	Comm	
ND 3	21.05	21.05	C.pip	1	Comm	
ND 4	21.07	21.07	C.pip	2	Comm	
ND 5	21.09	21.09	C.pip	3	Comm	
ND 6	21.12	21.12	C.pip	2	Comm	
ND 7	21.14	21.14	C.pip	1	For	
ND 8	21.16	21.20	C.pip	1	Comm	Re-Entry into neighbouring building; NE of the project site. See plate 4.1.
ND 9	21.21	21.24	C.pip	1	For	
ND 10	21.28	21.29	C.pip	1	For	
ND 11	21.33	21.33	C.pip	1	For	
ND 12	21.37	21.37	C.pip	1	For	
ND 13	21.40	21.40	C.pip	1	For	
ND 14	21.43	21.43	C.pip	1	For	
ANV	21.48	21.48	C.pip	1	For	
ANV	21.52	21.54	C.pip	1	For	
ANV	22.00	22.02	C.pip	1	For	
ANV	22.12	22.15	C.pip	1	For	
ANV	22.29	22.29	Noc	1	For	
ANV	22.31	22.31	Noc	1	For	
ANV	22.37	22.37	Noc	1	For	
ANV	22.41	22.41	Noc	1	For	
ABY 1	21.18	21.18	C.pip	1	Comm	
ABY 2	21.22	21.22	C.pip	1	Comm	
ABY 3	21.25	21.25	Natt	1	Comm	
ABY 4	21.26	21.26	Natt	1	Comm	
ABY 5	21.31	21.31	C.pip	1	For	
ABY 6	21.33	21.33	C.pip	1	For	
ABY 7	21.33	21.33	C.pip	1	For	
ABY 8	21.44	21.44	C.pip	1	Comm	
ABY 9	21.46	21.46	C.pip	1	Comm	
ABY 10	21.47	21.47	C.pip	1	Comm	
ABY 11	21.48	21.48	C.pip	1	Comm	
ABY 12	21.53	21.53	C.pip	1	Comm	
ABY 13	22.03	22.03	C.pip	1	Comm	
ANV	21.13	21.13	C.pip	1	Comm	
ANV	21.20	21.20	Noc	1	Comm	
ANV	21.22	21.22	C.pip	1	Comm	
ANV	21.23	21.23	C.pip	1	Comm	
ANV	21.24	21.24	C.pip	1	Comm	



ANV	21.26	21.26	C.pip	1	Comm	
ANV	21.28	21.28	C.pip	1	Comm	
ANV	21.38	21.38	C.pip	1	Comm	
ANV	21.49	21.49	C.pip	1	Comm	
ANV	22.07	22.07	C.pip	1	Comm	
ANV	22.13	22.13	C.pip	1	Comm	
ANV	22.16	22.16	C.pip	1	Comm	
ANV	22.19	22.19	C.pip	1	Comm	
JT 1	21.14	21.14	C.pip	1	Comm	
JT 2	21.18	21.18	C.pip	1	Comm	
JT 3	21.25	21.25	C.pip	1	Comm	
JT 4	21.33	21.33	C.pip	1	Comm	
JT 5	21.45	21.45	C.pip	1	Comm	
JT 6	21.47	21.47	C.pip	1	Comm	
JT 7	22.02	22.12	C.pip	1	For	
ANV	21.20	21.20	Noc	1	Comm	
ANV	21.21	21.21	Myo	1	Comm	
ANV	21.28	21.32	C.pip	3	Comm	
ANV	22.04	22.04	C.pip	2	Comm	
ANV	22.07	22.07	C.pip	2	Comm	
ANV	22.10	22.10	C.pip	1	Comm	
ANV	22.18	22.18	C.pip	1	Comm	
ANV	22.20	22.30	C.pip	4	For	

** Comm – Commuting, For – Foraging/Feeding, Swr – Swarming, Soc – Socialising, Emrg – Emerge, Ent- Enter roost feature

Abbreviations – ANV – Audio no visual, C. pip = Common pipistrelle, BLE = Brown Long-eared bat, Myo = Myotis species, Noc = Noctule

Raw Data Recording Maps, Forms and EMT 2 Pro Data are available upon request.



Plate 4.1 – the neighbouring barn; NE of the project where a Common pipistrelle roost is present. Highlighted is the areas bats were emerging from

4.3 – Commuting routes

Bats were commuting in all bearings close to the project site. The first Bat activity started approximately 15 minutes before dusk and lasted the length of the survey.

The neighbouring barn; NE of the project site has a Common pipistrelle roost as observed during the survey. The bats from this roost foraged and socialised throughout the survey; firstly, within the courtyard and then beyond. Foraging within the courtyard from this roost lasted approximately 1 hour. A number of bats from other locations, commuted through the site.

The project site is surrounded by agricultural field with associated hedgerows and drains. Approximately 2km North is the River Ouse with its associated water and grass/tree/shrub lined banks. To the east are a number of large waterbodies and small parcels of woodland.

Within the property boundary; surrounding the property is plantation woodland. It is likely that the bats roosting in the neighbouring barn and bats from the surrounding area forage within the property boundary for a longer duration as the site is surrounded by agricultural fields which provide a low-medium foraging suitability. Please see figure 4.1).



Figure 4.1 - Aerial view with project site illustrated within the wider landscape (not to scale). Source – Google maps 2023⁸

5. Evaluation

No bats were present and no evidence of bat presence was identified during the PRA survey¹. The data collated from the PRA concluded that the bat roosting potential of the building was low (please refer to: Arbtech Consulting Ltd (2022) '*Preliminary Roost Assessment Newbreaks Farm Kings Causeway Swinefleet, East Riding, Yorkshire, DN14 8DZ*'). These points of interest triggered the Presence/Absence survey².

There were no bats recorded either visually (surveyors) or digitally (EMT2 Pro & SANNCE CCTV Camera System IR equipment) emerging or returning from and to the building. The building was checked internally and externally before the survey for any bat evidence; no fresh evidence or bat presence was identified; just the same as the PRA¹.

All cracks and crevices were checked for bat presence/evidence were safe to do so prior to the survey; no bats presence/evidence was found. Most cracks and crevices are heavily cobwebbed. Bats prefer cobweb free areas^{9,10}. There were no bat droppings present below the areas of interest. There were no grease marks or scratch marks on the timbers or the brickwork. There were no urine splashes too on the walls or timber.

5.1 – Digital Recorders

5.1.1 – EMT Touch Pro 2

All surveyors had these detectors. The data from these bat detectors was analysed using Kaleidoscope software. The raw data recordings performed by the surveyors and their times largely correlate with the data collected from these devices. The bats species recorded correlate with the surrounding habitat (residential dwellings, farm buildings, water bodies and woodland). However, it should be noted that while these detectors are accurate to certain levels of confidence, their Auto-ID function sometimes mis-record species and this is why the data has been analysed using Kaleidoscope software to reduce these possible errors.

5.1.2 – NVA - SANNCE CCTV Camera System IR equipment

The IR equipment was set up to cover all elevations of the building externally. Insects and bats were seen passing by the building on the IR cameras but none emerged or returned. This correlates with the data gathered from the surveyors.

5.2. – Limitations

The building could be accessed and assessed both internally and externally. Therefore, the data collated is accurate at the time of the survey.

5.3 – Project Site Species

5.3.1 – Bat Species

The neighbouring barn; NE of the project site has a Common pipistrelle *Pipistrellus pipistrellus* roost. The number of bats and the timings suggest this roost to be a small maternity roost^{2,3}. A total of 12 bats were

seen to emerge but they may have been more as the surveyor in that location was focused on the project site. Common pipistrelle on average, emerge 30mins after dusk². The bats from this roost emerged approximately 15mins before dusk; again, potentially indicating a maternity roost².

Other bat species recorded were: Brown Long-eared bat (BLE) *Plecotus auritus*, Noctule *Nyctalus noctula* and Myo sp. Common pipistrelle are crevice dwelling species that use buildings and sometimes trees to roost². Noctule is a tree dwelling species². BLE are hollow dwelling species that favour old buildings and trees to roost². The *Myotis* sp. recordings were not analysed as the bats did not emerge or return from/to the building. Analysis would have taken place if they had emerged/returned to the building/s. *Myotis* sp. roost characterisations are diverse; ranging from crevices between timber and brickwork to cracks in mortar but some *Myotis* sp. tend to favour roof voids with space for internal flight; just like BLE².

5.3.1.1 - Conclusion

Please see chapters 8 and 9 for recommendations and biodiversity enhancements.

5.3.2 – Birds

There was inactive and active birds' nest present in the building during this survey.

5.3.2.1 - Conclusion

Please see chapters 8 and 9 for recommendations and biodiversity enhancements.

5.4 – Commuting Routes

Bats were commuting in all bearings close to the project site. The first Bat activity started approximately 15 minutes before dusk and lasted the length of the survey.

The neighbouring barn; NE of the project site has a Common pipistrelle roost as observed during the survey. The bats from this roost foraged and socialised throughout the survey; firstly, within the courtyard and then beyond. Foraging within the courtyard from this roost lasted approximately 1hour. A number of bats from other locations, commuted through the site.

The project site is surrounded by agricultural field with associated hedgerows and drains. Approximately 2km North is the River Ouse with its associated water and grass/tree/shrub lined banks. To the east are a number of large waterbodies and small parcels of woodland. These habitats are connected via hedgerows and ditches within the surrounding agricultural landscape.

Within the property boundary; surrounding the property is plantation woodland. It is likely that the bats roosting in the neighbouring barn and bats from the surrounding area forage within the property boundary for a longer duration as the site is surrounded by agricultural fields which provide a low-medium foraging suitability.

5.5 - Evaluation Conclusion

- No bats were present and no evidence of bat presence was identified during the PRA survey¹
- No fresh evidence found before the emergence/re-entry survey
- No bats were present during the Maternity roosting period (May-August)
- Bats were commuting in all bearings as expected due to the surrounding habitat.



No roosting bats were evident during the Emergence/Re-Entry surveys. Therefore, a European Protected Species (EPS) license is not required for either of the buildings. However, should the unlikely presence of bats or bat droppings be found during the proposed development and work continues then you would be breaking the law under the Wildlife and countryside Act 1981¹¹ and Habitat and Species Regulations 2019 (Amendment) (EU Exit)¹².



6. Wildlife Legislation and Planning Policy

Bats and their roosts are protected by UK and European laws. Bat roosts are protected all through the year, whether or not they are occupying a roost site.

6.1 - The Wildlife and Countryside Act (WCA) 1981 (as amended)¹¹

The long title of the WCA 1981 as amended;

An Act to repeal and re-enact with amendments the Protection of Birds Acts 1954 to 1967 and the Conservation of Wild Creatures and Wild Plants Act 1975;

- to prohibit certain methods of killing or taking wild animals;
- to amend the law relating to protection of certain mammals;
- to restrict the introduction of certain animals and plants;
- to amend the Endangered Species (Import and Export) Act 1976;
- to amend the law relating to nature conservation, the countryside and National Parks and to make provision with respect to the Countryside Commission;
- to amend the law relating to public rights of way; and for connected purposes.

6.1.1 – Animals

Animals are protected under Schedule 5 of the WCA. It is illegal to;

- capture, kill, disturb or injure animals deliberately
- damage or destroy a breeding or resting place
- obstruct access to their resting or sheltering places (deliberately or by not taking enough care)
- possess, sell, control or transport live or dead animals, or parts of them
- take eggs

6.1.2 - Birds

Birds, their eggs and nest are protected under by UK law under the following act:

Wildlife & Countryside Act (as Amended) 1981: Schedules 1-4 and in some cases 9.

To summarise, you would be breaking the law by;

- intentionally kill, injure or take birds
- intentionally take, damage or destroy a nest while it's being used or built
- intentionally take or destroy a bird's egg/s
- possess, control or transport live or dead bird, or parts of them, or their eggs
- sell birds or put them on display for sale
- use prohibited methods to kill or take birds

Birds that are listed as a schedule 1 bird are provided further protection. Additionally, it is an offence to:

- disturb them while they're nesting, building a nest, in or near a nest that contains their young
- disturb their dependent young

6.2 - The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹²

The Conservation of Habitats and Species Regulations 2017 is an EU directive and consolidates all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites form a network termed Natura 2000 and include Special Areas of Conservation and Special Protection Areas. All European bats species and their roosts are listed in Annex IV and some bat species are also listed in Annex II giving those species even greater protection. Section 43 of this law states that it is an offence to:

- capturing, killing, disturbing or injuring European protected species deliberately
- damaging or destroying a breeding or resting place
- obstructing access to their resting or sheltering places (deliberately or by not taking enough care)
- possessing, selling, controlling or transporting live or dead protected species, or parts of them
- taking eggs

6.3 - The Natural Environment and Rural Communities (NERC) Act (2006)¹³

‘An Act to make provision about bodies concerned with the natural environment and rural communities; to make provision in connection with wildlife, sites of special scientific interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes’.

In regards to the planning process sections 40 and 41 are of particular importance:

‘Section 40 (1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.’

Section 41 lists habitats and species of primary importance to the conservation of biodiversity therefore making these habitats and species a consideration in the planning process.’

6.4 - National Planning Policy Framework (NPPF) (July 2021)¹⁴

This policy states under section 15 ‘Conserving and enhancing the natural environment’ that;

174.

Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.

Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

175. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

176. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

177. When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

178. Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and biodiversity

179. To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) 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.

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

- a) 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;

- b) 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;
- c) 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; and
- d) 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.

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

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and
- c) 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.

182. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

6.5 - Department for Communities & Local Government Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System¹⁵

'This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the National Planning Policy Framework and the Planning Practice Guidance' (Department for Communities and Local Government, 2005).

6.6 - The 'UK Post-2010 Biodiversity Framework' (July 2021)¹⁶

The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach'. It is the result of a change in strategic thinking. The UKBAP is still used as a source of reference with regards to habitats and species. UK Biodiversity Action Plan was a government initiative and contains a list of priority habitats and species of conservation concern in the UK which are the same as those listed within Section 41 of The Natural Environment and Rural Communities (NERC) Act 2006. The plan also outlines biodiversity initiatives designed to enhance their conservation status. The UKBAP requires conservation of biodiversity to be addressed at a county level via a Local BAP and are usually targeted towards species of conservation concern within each separate area.

6.7 - UK Biodiversity Action Plan (UKBAP) and Local BAP^{17,18}

UK BAP priority species and habitats were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original lists of UK

BAP priority species and habitats were created between 1995 and 1999, and were subsequently updated in 2007, following a 2-year review of UK BAP processes and priorities, which included a review of the UK priority species and habitats lists.

The aim of the 'Species and Habitats Review' was to ensure that the UK BAP lists of priority species and habitats remained up-to-date and focussed on the correct priorities. This was the first full review of the lists, generated over 10 years previously, and provided an opportunity to take into account emerging new priorities, conservation successes, and the huge amount of new information that had been gathered since the original lists were created. Selection of priority species and habitats for the priority lists followed consideration by expert working groups against a set of selection criteria, based on international importance, rapid decline, high risk, and habitats of importance for key species.

As a result of new drivers and requirements, the 'UK Post-2010 Biodiversity Framework, published in July 2012, has succeeded the UK BAP. In particular, due to devolution and the creation of country-level biodiversity strategies, much of the work previously carried out under the UK BAP is now focussed at a country level.

The UK BAP lists of priority species and habitats remain, however, important and valuable reference sources.

LBAP have two targets: to reflect and help implement the national priorities identified in the UK Action Plans, and to identify and address local priorities and local distinctiveness.

6.9 - Local Planning Policy¹⁹

The East Riding Local Plan 2012 – 2029 Strategy Document outlines the council's planning policy targets. Policy ENV4 is the leading planning policy with regards to biodiversity.

Policy ENV4: Conserving and enhancing biodiversity and geodiversity

- A. Proposals that are likely to have a significant effect on an International Site will be considered in the context of the statutory protection which is afforded to the site.
- B. Proposals that are likely to have an adverse effect on a National Site (alone or in combination) will not normally be permitted, except where the benefits of development in that location clearly outweigh both the impact on the site and any broader impacts on the wider network of National Sites.
- C. Development resulting in loss or significant harm to a Local Site, or habitats or species supported by Local Sites, whether directly or indirectly, will only be supported if it can be demonstrated there is a need for the development in that location and the benefit of the development outweighs the loss or harm.
- D. Where loss or harm to a National or Local designated site, as set out in Table 9, cannot be prevented or adequately mitigated, as a last resort, compensation for the loss/harm must be agreed. Development will be refused if loss or significant harm cannot be prevented, adequately mitigated against or compensated for.
- E. Proposals should further the aims of the *East Riding of Yorkshire Biodiversity Action Plan (ERYBAP)*, designated Nature Improvement Areas (NIAs) and other landscape scale biodiversity initiatives. To optimise opportunities to enhance biodiversity, proposals should seek to achieve a net gain in biodiversity where possible and will be supported where they:
 1. Conserve, restore, enhance or recreate biodiversity and geological interests including the Priority Habitats and Species (identified in the *ERYBAP*) and Local Sites (identified in the *Local Sites in the East Riding of Yorkshire*).
 2. Safeguard, enhance, create and connect habitat networks in order to:
 - i. protect, strengthen and reduce fragmentation of habitats;
 - ii. create a coherent ecological network that is resilient to current and future pressures;
 - iii. conserve and increase populations of species; and
 - iv. promote and enhance green infrastructure.



7. Impact Assessment – In the Absence of Mitigation

No bats were identified during the PRA¹ and Emergence/Re-Entry survey and therefore there is no impact on bats with regards to the proposed development³.

However, it should be noted that there is a potential Common pipistrelle Maternity roost in the neighbouring Barn; NE of the project site. In addition, surrounding bat activity involved commuting and foraging close to the building. Bats can be susceptible to disturbance. Based on the survey data, assessment and guidance from the Bat Mitigation Guidelines³ the overall collective impact of the development on bat populations locally, regionally and nationally from the proposed development is considered to be low³.

Please see 'Chapter 8 – Recommendations' to further minimise the impact on bats.

8. Recommendations

8.1 – Precautionary Working Bat Method Statement (PWMS)

This method statement must be made available to any contractors who will be involved in any future developments of the project site.

The building still has Low bat roosting potential and even though no bats were present during the surveys undertaken on this building, bats are highly mobile and move between roost sites and hence why it is important to check the below features first and daily before work commences each day. The buildings should be treated as if bats were present.

In addition, the neighbouring barn; NE of the project site has a bat roost and therefore this PWMS will be strictly adhered to.

Prior to the start and then-on the following places must be checked on the building prior to renovation⁴:
These include:

- Crevices in brick work and gaps in mortar
- Gaps between roof tiles and brickwork
- Gaps between rafters and walls
- Gaps between rafters and battens
- Roof timbers including ridge beams, rafters, trusses and purlins
- Mortise joints
- Above the eaves
- Lintels
- Door frames
- Gaps between ceiling joists and walls
- Gaps around some purlin puttock holes
- Gap between doorframes and brickwork
- Window Frames
- Behind any boarding
- Ventilation bricks
- Stored items

During the works, careful removal by hand of all fittings and fixtures will be exercised. Remove roof coverings by hand. Remove half on the first day and the other the day after⁴. This will create sub-optimal conditions for any bats that maybe roosting within the roof structure and thereby inspire the bats to leave on their own will and not return.

In the unlikely event that bats or bat droppings are present at the start or during the renovation work, work must be halted until a licensed bat holder (Crow Ecology 07813900097 or other ecologists) can attend the site and give further advice where necessary⁴.

Bats should not be handled by unlicensed personnel. If it is absolutely necessary to remove a bat from the premises for overruling health and safety reasons or to avoid it being harmed, gloves must be worn and the bat placed carefully in a breathable container and placed in a dark, quiet place, safe from predators, until a licensed bat holder arrives⁴.



8.2 - Timings

As no bats were present at the time of the surveys work can commence any time of the year³. However, there is a potential Common pipistrelle maternity roost in close proximity so renovation works to this building should take place in either Autumn and/or Spring. Working in these seasons will reduce possible disturbance to this neighbouring roost³. To minimise the impact on foraging/commuting bats from the surrounding area, **works will take place only in the daytime during light hours**. Therefore, in particular, any works such as the renovation of the building will not disturb the local bat populations' foraging/commuting routes.

Even though no bats were present during these surveys as stated above, bats are highly mobile and may have taken up residence prior to works commencing and therefore the PWMS in section 8.1 will be strictly adhered to.

8.3 - Breeding birds

Breeding birds were present during the Emergence/Re-Entry survey. **It is strongly recommended that works to the building takes place outside of the breeding bird season (1st September – 28th February).**

If breeding birds are present then no works can commence between 1st March-31st August⁷. This is the time when adult birds are rearing their young. It is an offence under the WCA 1981 to in relation to this proposed development to:

- intentionally kill, injure or take birds
- intentionally take, damage or destroy a nest while it's being used or built
- intentionally take or destroy a bird's egg/s

If works need to be carried out during the nesting period (1st March to 31st August) checks should be made by an ecologist for nesting birds, up to 72hrs before the works are due to commence⁷. Any nesting birds found should be left to complete their breeding cycle (e.g., until the young have fully fledged) before any works can take place.

8.4 – Lighting²⁰

A number of bats commuted close to the building. Although the foraging and commuting routes of bats are not legally protected, the proposed development will create an increase in artificial light. Light pollution may have an effect on the commuting and foraging routes of neighbouring bats. Such effects may reduce their survival chances and the possibility of breeding.

8.4.1 - Building

Under the proposed development there are no proposed external lighting to be installed. However, if this changes in the future, then any external lighting installed, will be downlighting only with cowling on the top. This will minimise light spread and light pollution and reduce possible disturbance to the Common pipistrelle

9. Biodiversity Enhancements

To increase the net gain to biodiversity and to comply with national (NERC¹³ and NPPF¹⁴) and local planning policies (ENV4)¹⁹, please see below.

9.1 – Wall-mounted Bird Boxes

9.1.1 – Specifications and Locations – Small Eco Bird Box

Although not woodcrete, this bird box is made from recycled plastic which is eco-friendly and durable. Please see appendix 3 for an example of this box. A minimum of two boxes will be erected as requested by the LPA. A 25mm and a 32mm hole are recommended to allow a greater diversity of birds to access the box.

9.1.2 – Location

The bird boxes will be erected on any of the retained buildings within the property boundary.

- The boxes will be located at least 2m high and no greater than 3m high²¹.
- The box's entrance hole will be in a NW-NE bearing.

9.1.3 – Location Justification

The boxes will be cited with an NW-NE bearing to avoid strong sunlight and prevailing wind and rain²¹. The prevailing winds in Whitgift are more frequent in a South to SW bearing²².

9.1.4 – Timings

The boxes will be in place post development.

9.2 – Integrated bat box

9.2.1 – Vivara Pro Build-in WoodStone Bat Box

As no suitable mature trees are no longer present an integrated bat box is recommended. This box will accommodate crevice dwelling bats commonly found in buildings within urban locations. Species such as: Pipistrelle sp., Natterer's, Whiskered, and Brandt's bats will use this box. Common pipistrelle was the species most frequently recorded. Please see appendix 4 for an example of this box. Please see figure 9.1.

9.2.2 – Specifications

The location of this box is as follows:

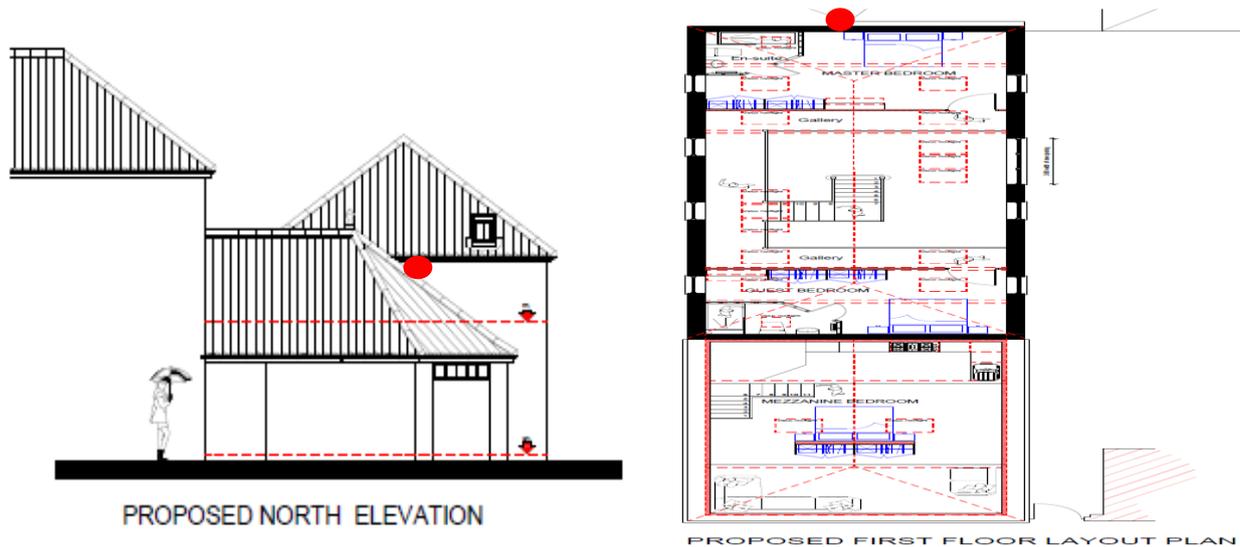


Figure 9.1 - Location of integrated bat box (red circle).

- The boxes will be located as close as possible to the eaves of the North elevation gable end without been cited above a window or door²³.
- The eaves of the buildings will also provide a level of protection from rainfall²³.
- These boxes are 'self-cleaning' so very little maintenance is needed.

9.2.3 – Location Justification

The box selected will accommodate crevice dwelling species that are present within the setting this development is in. The entrance is in a North-facing bearing which is an unfavoured bearing for bats² but bats are roosting in the neighbouring property close to this elevation and foraged/commuted close to this elevation. Bats emerged from the existing Common pipistrelle roost in the neighbouring barn from the south elevation and this north-facing box provides a greater variety of roosting potential to the site.

The surrounding landscape is optimal foraging habitat as stated previously. The box will create a potential roost for bats that the project site did not have previously and it is allowing the bats to forage/commute closer to their preferred foraging habitats along the ecotones of woodland and waterbodies.

9.2.4 – Timing

The box will be integrated during the development.



I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Chris Crow, BSc (Hons) ACIEEM. June 2023 For and on behalf of Crow Ecology, 66 Belgrave Drive, Hull, HU4 6DN. Tel – 07813 900097.
Email – info@crowecology.co.uk
Report printed on recycled paper

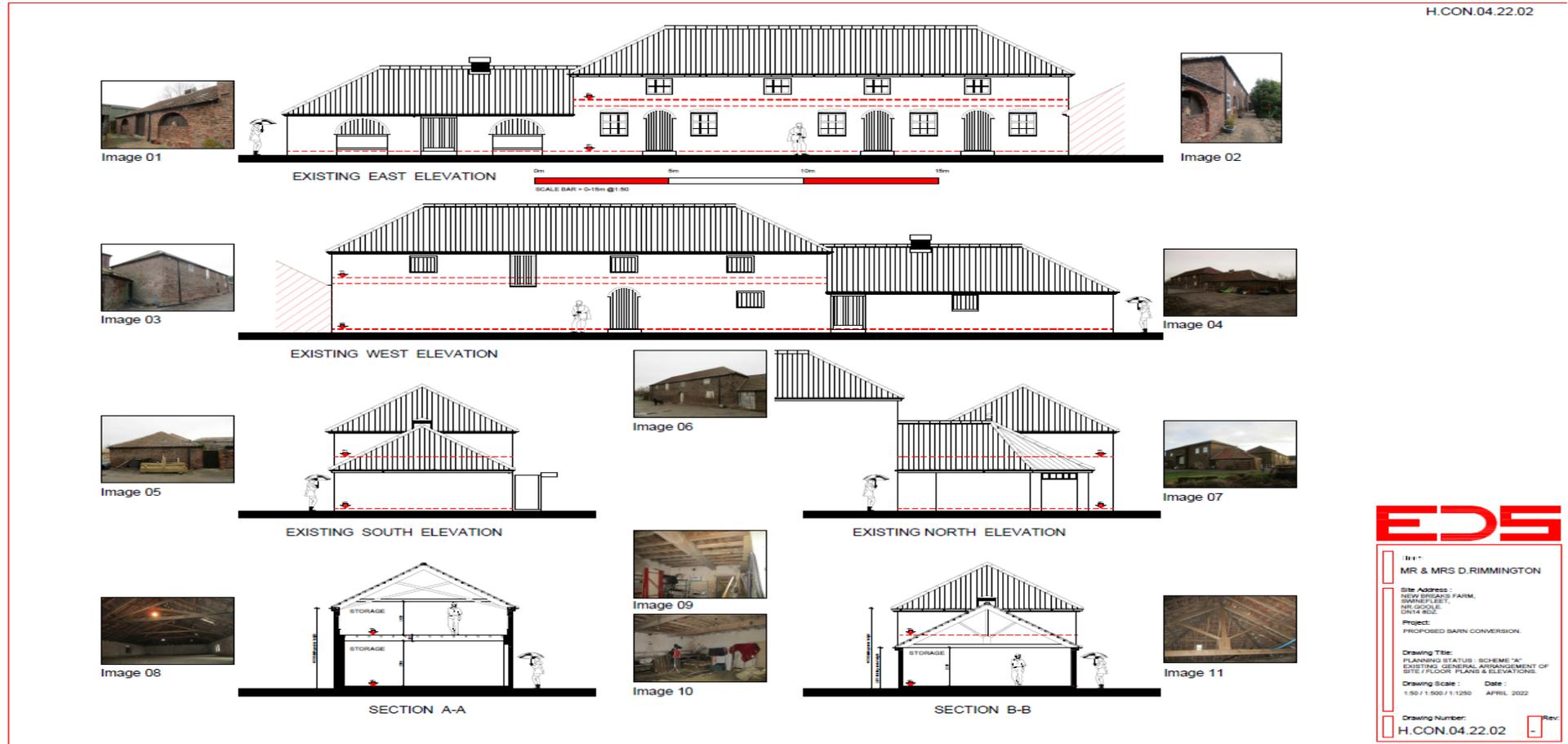


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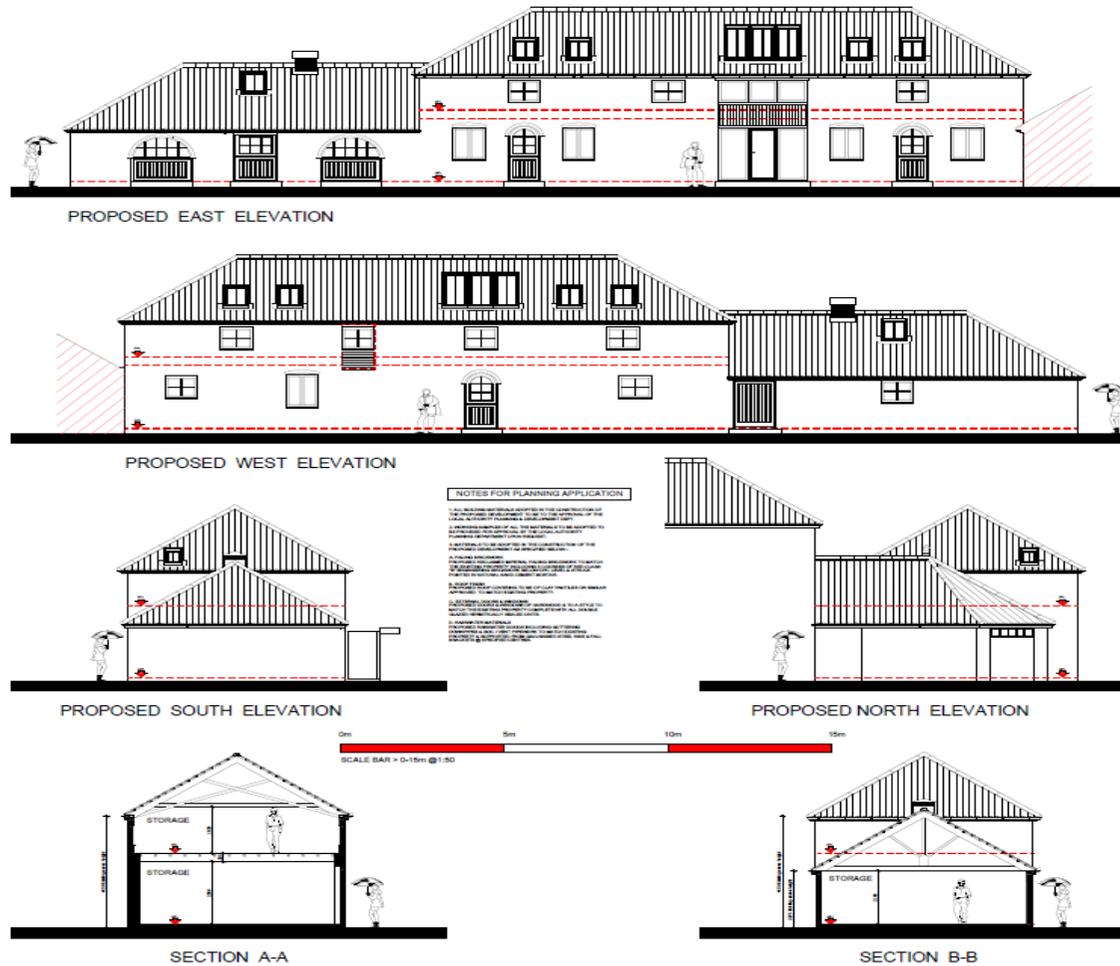
11. Appendices

Appendix 1 – Existing site layout



Appendix 2 – Proposed site layout

H.CON.04.22.04




1:11
MR & MRS D.RIMMINGTON

Site Address :
NEW BREAKS FARM,
SWINEFLEET,
NR GOOLE,
DN14 8DZ.

Project:
PROPOSED BARN CONVERSION.

Drawing Title:
PLANNING STATUS - SCHEME "A"
PROPOSED GENERAL ARRANGEMENT OF
EXTERNAL ELEVATIONS.

Drawing Scale : Date :
1:50 APRIL 2022

Drawing Number: Rev.
H.CON.04.22.04 -

Appendix 3 – Wall-mounted Bird Box

A 25mm and 32mm Opening required

- Provides a robust, long-lasting home for most common garden birds
- Made from eco-friendly recycled plastic and FSC Certified OSB
- Available with three different hole sizes



- **32mm Entrance Hole In stock**

£23.99

#241638

About this product

This nest box consists of a weatherproof outer shell made from UV stabilised 100% recycled plastic. Inside the outer shell is a wooden nest box to provide the ideal environment for birds to nest in. The wooden box has drainage holes in the base and can be removed from the plastic case. The outer shell has been precision cut and uses an ingenious system of tabs to hold it together. This further extends the lifespan by ensuring that there are no metal fixings that could rust or degrade over time.

The internal compartment is constructed from FSC-Certified Oriented Strand Board, which is made from flakes of wood waste or from saplings thinned from forests to make space for larger trees. If you need to check or clean the box, simply twist the fastening at the bottom and the wooden nesting chamber will slide out. The outer shell is made from recycled board which is itself made from discarded bale wrap, fertiliser bags and other plastic waste, gathered mostly from farms across the UK.

These nest boxes are available with a choice of three hole sizes: 25mm, 28mm and 32mm. The 25mm hole is primarily suitable for the smallest tit species such as blue tits, coal tits and marsh tits. The 28mm hole will attract all of these species as well as great tits, crested tits and tree sparrows. The larger 32mm hole will attract a large range of species including blue tits, coal tits, marsh tits, house sparrows, great tits, nuthatches and pied flycatchers.

Fixing to the wall or tree is easy using the three concealed mounting holes in the back of the box (located opposite the entrance hole for easy access). Often this is the only fixing needed, but a further hole is provided at the base if required for stability. The easiest way to mount the box is to remove the inner compartment, fix the outer shell onto the tree or wall then slide the inner roost chamber back into the box and secure it in place.

The Eco Small Bird Box is designed and manufactured in the UK.

Specification

- * Materials: Recycled LDPE plastic and FSC Certified OSB
- * Finish: Non-toxic water-based stain and preservative
- * Dimensions: 26cm x 17cm x 17xcm (H x W x D)
- * Weight: 1.1kg
- * Fixing: Three concealed keyholes and further fixing hole at base

Source – <http://www.nhbs.com/>

Please note – This is just an example of the type of suitable box. Other companies and brands are available.



Appendix 3 – Integrated bat Box

PRO UK Build-in WoodStone Bat Box

Manufacturer: [Vivara Pro](#)

- Designed to fit in wall cavities
- Matches UK brick dimensions
- Entrance sits flush with wall
- Fully FSC Certified



•  Out of stock with supplier: **order now to get this when available**

£35.99
#256321

Price:£35.99

Additional images



About this product

The Build-in WoodStone Bat Box has been specifically designed to fit into the cavity of house walls, with the entrance sitting flush with the outside bricks. It has been redesigned to match the standard brick size in the UK. Manufactured from hard-wearing woodstone and plywood with removable wooden side panels so that several boxes can be placed side by side to create one large chamber, the Woodstone Bat Box is a great choice for new-builds and renovations.

Woodstone is a mixture of sawdust from FSC wood sources and concrete, and it is designed to last for years. It is breathable so there will be no problems with condensation and woodstone maintains a consistent temperature inside, providing excellent insulation for roosting bats.

Thanks to the sloping entrance ramp, droppings will fall out of the box, creating a maintenance-free habitat for a variety of bat species. Position the box at least 2.5m above ground level and away from artificial light sources.

Specification

- Dimensions: 64cm x 21cm x 15cm (H x W x D)
- Bottom section: 14cm x 21cm x 15cm (H x W x D)
- Top section: 50cm x 21cm x 5cm
- Weight: 6.7kg
- Material: Woodstone

Source – www.nhbs.com

Please note – This is an example of a suitable box, other brands and companies are available.