Bat, Breeding Bird and Barn Owl Survey

Red House Farm, Egton

October 2021

MAB Environment & Ecology Ltd

11a Kirkgate, Thirsk, North Yorkshire, YO7 1PQ

Registered in the UK, No.6504129

Registered office: The Old Chapel, Knayton, Thirsk YO7 4AZ

Author	Nina Herbert BSc (Hons)	
Status	**Date**	**Checked by:**
Draft	07/10/2021	Jake Walker BSc (Hons)
Final	08-10-2021	Ione Bareau MCIEEM

Site:
Red House Farm
Egton
Whitby
YO21 1TY

Dates:
Scoping & emergence survey: Thursday 23rd September 2021

Client:
The Mulgrave Estate

Client's Agent:
Mr Richard Dykes
The Planning and Design Associates
Moor Lane
Stamford Bridge
North Yorkshire
YO41 1HU

Planning Authority:
Scarborough Borough Council

Our ref:
2021 - 287

Table of Contents

1 Summary

A bat, breeding bird and barn owl survey was carried out at Red House Farm to assess the buildings for potential bat roost habitat (PBRH). A previous scoping survey and subsequent dusk and dawn re-entry surveys had been undertaken on the barns in 2017 and 2019 by a different consultancy – no bats were identified roosting within any of the target buildings. These findings can be found in Section 6 and Appendix 3.

The dusk emergence survey carried out in September 2021 by MAB Ecology revealed a solitary brown long-eared bat roosting in Building A. Scattered droppings were also found on the floor of the hayloft in building A. No bats were seen emerging from Buildings B, C or D. This bat is likely to be transient but a further emergence survey post planning will inform whether a licence is required.

Bat roost and potential roost habitat lost to the development will be mitigated for via the installation of 2 long lasting professional quality woodcrete bat boxes (see Section 9: Method Statement for full information).

The proposed development of Buildings A, B, C, D, and E will result in the loss of barn swallow and passerine nesting habitat. To reduce any detrimental impacts of breeding birds we recommend that demolition works are undertaken outside of bird nesting season (March-August). If this is not possible then a check for active bird nests should be carried out immediately prior to works. Work to areas with active bird nests shall be carried out once any chicks have fledged to avoid disturbance. Lost nesting habitat will be mitigated for by the installation of two bird nest boxes and one open-sided structure.

Development of Building A will also result in the loss barn owl roosting habitat. To ensure that the site remains ecologically functional for barn owls post development, one permanent barn owl box should be installed within one of the outbuildings.

2 Introduction

MAB Environment and Ecology Ltd was commissioned by The Mulgrave Estate to undertake a bat, breeding bird and barn owl scoping survey on several barns at Red House Farm to accompany a planning application for the conversion of the buildings into residential accommodation. A site plan can be found in Appendix 4.

The site is in Egton, approximately 5 miles west of Whitby (Central grid reference: NZ8092406197). The location of the site is shown on Figure 1 below, and the surveyed buildings are shown in Figure 2.

The report was written by Nina Herbert BSc (Hons) of MAB Environment and Ecology Ltd.

The report's primary objective is to provide an impact assessment for the development on bats, define any necessary mitigation proposals, and to assess the requirement for a Protected Species Licence. A secondary objective is to assess potential impact on breeding birds.

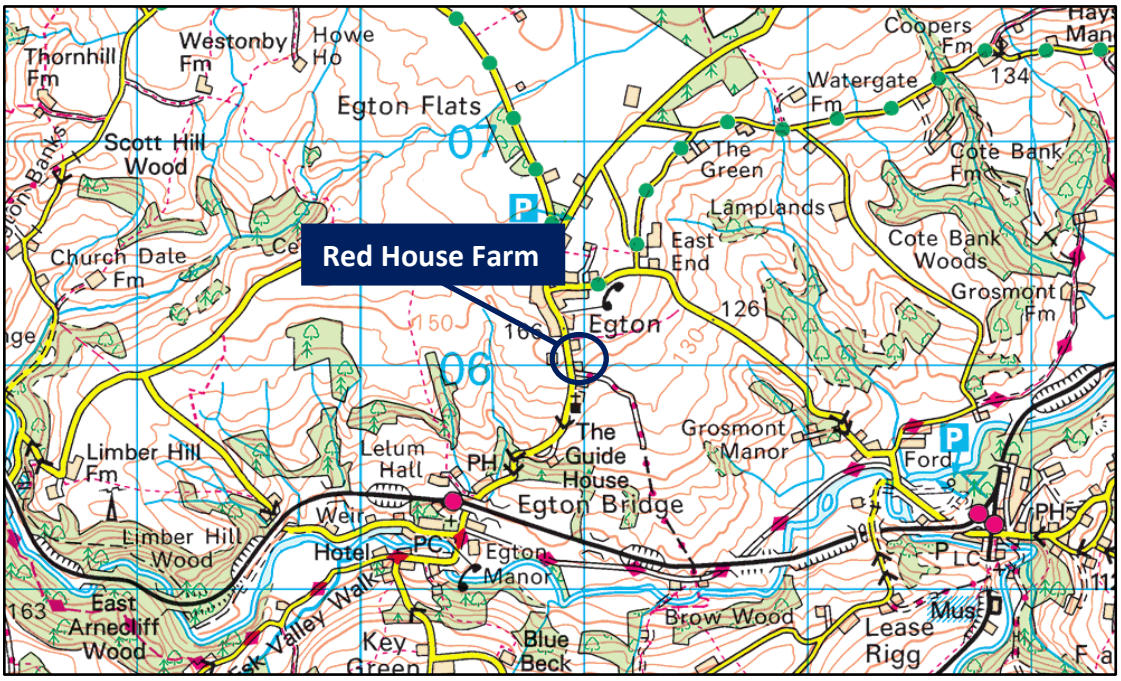

Figure 1: Site location.

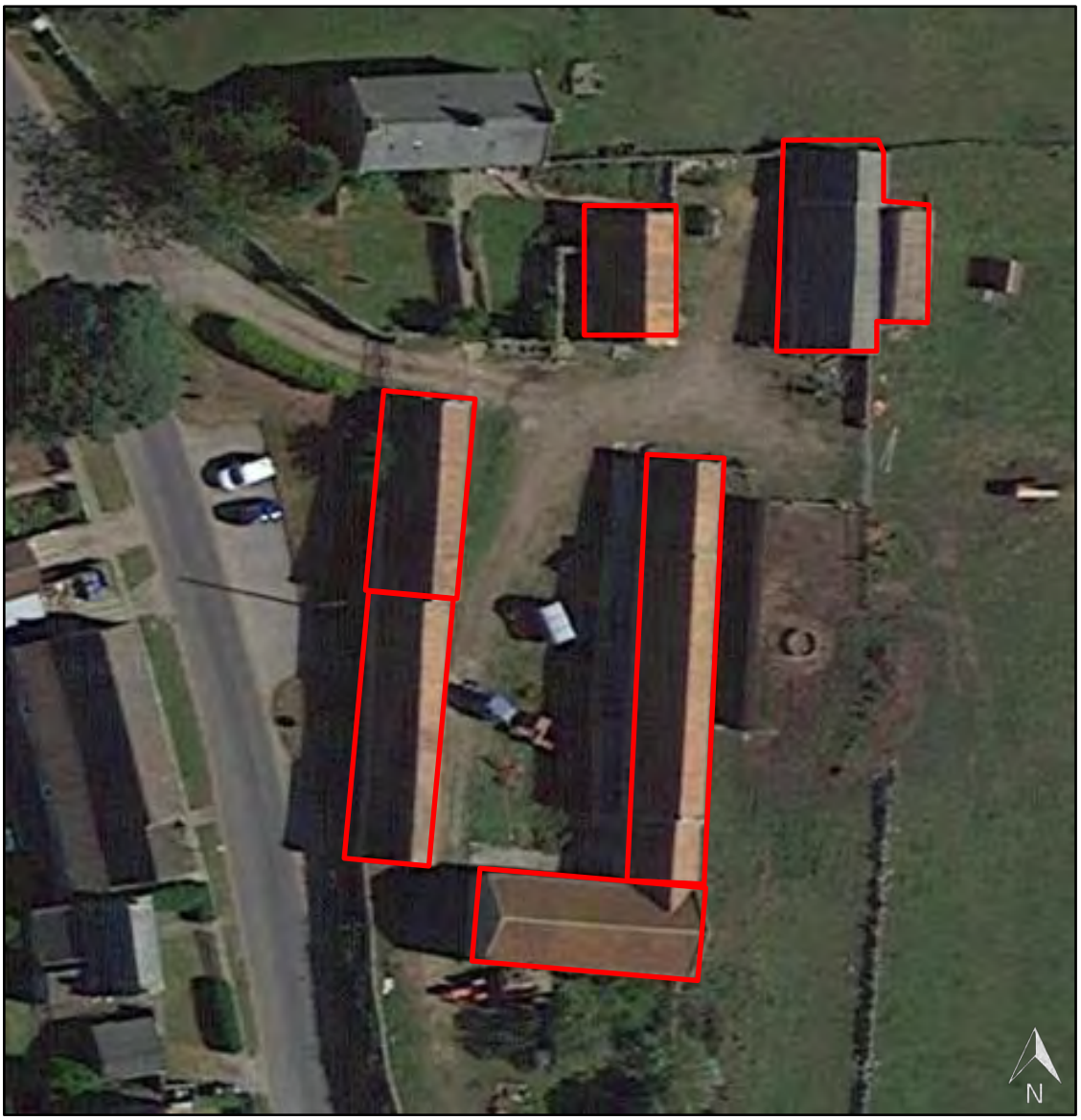

Figure 2: Surveyed buildings.

3 Methodology

3.1 Desktop Study

3.1.1 Bat roost records for a 2km radius around the site were commissioned from the North Yorkshire Bat Group (NYBG).

3.1.2 Aerial imagery from Google Earth and 'MAGIC' government website were used to assess the location of the site and the surrounding habitat for value to bats. This includes proximity of the site to good bat foraging habitat such as woodland and water bodies and if the site is linked to such habitats by linear features like hedgerows, woodland edges or rivers which bats use to commute around the environment.

3.2 Field Survey

3.2.1 The site was surveyed by Jake Walker, who is a Graduate Ecologist and has worked for MAB since 2020. He holds a Class Survey Licence WLM-A34 (Bat Survey Level 1) registration number 2021-51430-CLS-CLS. He is a Qualifying member of CIEEM and has a BSc (Hons) in Ecology and Environmental Science from the University of Hull. The surveys were carried out in accordance with the Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed).

3.2.2 The site was also surveyed by Nina Herbert BSc (Hons) who has a Physical Geography degree and is employed by MAB as an assistant ecologist. Nina has been carrying out surveys since 2020.

3.2.3 The interior and exterior of the buildings were inspected during the day using halogen torches (500,000 candle power), binoculars and a flexible endoscope (a Sea Snake LCD inspection scope). All normal signs of bat use were looked for, including bats, bat droppings, feeding waste, entry and exit holes, grease marks, dead bats, and the sounds/smells of bat roosts.

3.2.4 All signs of breeding bird activity and barn owl (*Tyto alba*) activity were looked for. Signs looked for included white droppings, often vertical down walls or beams; active nests and nesting materials; (birds flying into and out of barns: generally, summer only); bird feathers, particularly swift (*Apus apus*), swallow (*Hirundo rustica*)

and house martin (*Delichon urbica*), bird corpses, feeding waste (including pellets), and the sound/smell of birds.

3.2.5 The buildings were assessed for their degree of potential to support roosting bats. This includes assessing the building design, materials and condition. See Table 1 for more information.

Colour code	Suitability.	Roosting habitats	Commuting and foraging habitats
Grey	Negligible risk	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Yellow	Low risk	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. Unlikely to be suitable for maternity or hibernation).	Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e. Not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could only be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Amber	Moderate risk	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only-the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as a line of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Red	High risk	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Table 1: Guidelines for assessing the suitability of proposed development sites for bats. Adapted from BCT Bat surveys for Professional Ecologists, Good Practice Guidelines 2016.

3.2.6 Emergence surveys were carried out using three surveyors with ultra-sound detectors (Pettersson D240x and Elekon Batlogger). The D240x detector was set to 10x expansion with manual triggering with an Edirol R09 WAV solid state recording device for the time expansion channel, with heterodyne output through the other channel. Time expansion recordings were analysed with BatSound software.

3.2.7 Surveyors used were:

- Jake Walker (JW) as above;
- Nina Herbert (NH) as above;

- Sam Newton (SN) is a biology graduate and bat surveyor, who has carried out bat surveys for MAB since 2017.

3.2.8 Automated species-identification software was employed to assist with bat identification. Software used was Elekon's Bat Explorer Pro, BatBioacoustics, and BatClassify. Manual confirmation of any automated identification was carried out using BatSound software from Pettersson.

4 Constraints

The surveys were not constrained.

5 Site Description

The surveyed barns are stone-built with clay pantile roofs. Some are lathe-lined, and others are bitumastic-lined. Building E has a corrugated asbestos roof. A full description of all the buildings can be found in section 6.2.

6 Results

6.1 Desktop Study

The site is situated in an area of moderate quality bat foraging habitat. The immediate surroundings are largely agricultural but as you extend further out, hedgerows and small patches of deciduous woodland dominate. There are scattered established gardens in the vicinity. Approximately 1.2km south lies the River Esk. Riparian habitat found in these areas offers good foraging habitat for bats. The site is situated in the North York Moors National Park.

Figure 3. Aerial view of the surrounding landscape.

6.1.2 Bat Group Records

A full record search from North Yorkshire Bat Group (NYBG) has revealed no roost records relating directly to the site. 5 unknown individuals were however, recorded in flight over Red House Farm in 2006. The most notable record of the area is of a common pipistrelle roost at Egton Primary School, approximately 300m south of the site. Full NYBG records can be found below in Table 2.

Species	Site	Grid ref	Quantity	Date	Comment
Daubenton's Bat	The Old Mass House, Egton	NZ8005		1986	In flight
Noctule Bat	Egton Primary School	NZ810059	1	05-May-11	In flight
Common Pipistrelle	Egton Primary School	NZ810059	27	30-May-11	Roost
Common Pipistrelle	NZ824057	NZ824057	1	11-Jun-10	Dead
Brown Long-eared Bat	Honeybee Nest Cottage, Egton Grange, Whitby	NZ811048	10	28-May-02	Roost
Brown Long-eared Bat	Egton Primary School	NZ810059	8	30-May-11	Roost
Brown Long-eared Bat	NZ8205	NZ8205	1	23-Aug-07	Dead
Brown Long-eared Bat	Egton Bridge church	NZ804053	1	05-Aug-14	Grounded bat
Pipistrelle species	Egton Bridge	NZ8005	1 m	01-Jul-90	
Unknown	Grosmont	NZ8205	1	08-Jul-01	Orphaned bat
Unknown	Riverside, Egton Bridge, Whitby	NZ8005		30-Jun-86	Roost
Unknown	Red House Farm, Egton	NZ809062	5	04-Oct-06	In flight
Unknown	Dale View, Egton	NZ808064	3	08-Oct-07	Roost
Unknown	Grosmont	NZ8205		23-Aug-07	Bat Inside house
Unknown	Pear Trees House, Broomhouse Lane, Egton Bridge	NZ801052		05-Jul-07	Roost

Table 2: NYBG record search.

6.2 2017 & 2019 bat surveys

Previous dusk and dawn re-entry surveys undertaken by Enviroscope and Bagshaw Ecology from 2017 and 2019 revealed no roosts on-site. No emergences were recorded. Low numbers of common pipistrelles and myotid bats were observed commuting and foraging, predominantly around Building's C and F. A single bat dropping was found in the hayloft of Building A. Full results can be found in Appendix 3.

6.3 Visual Inspection

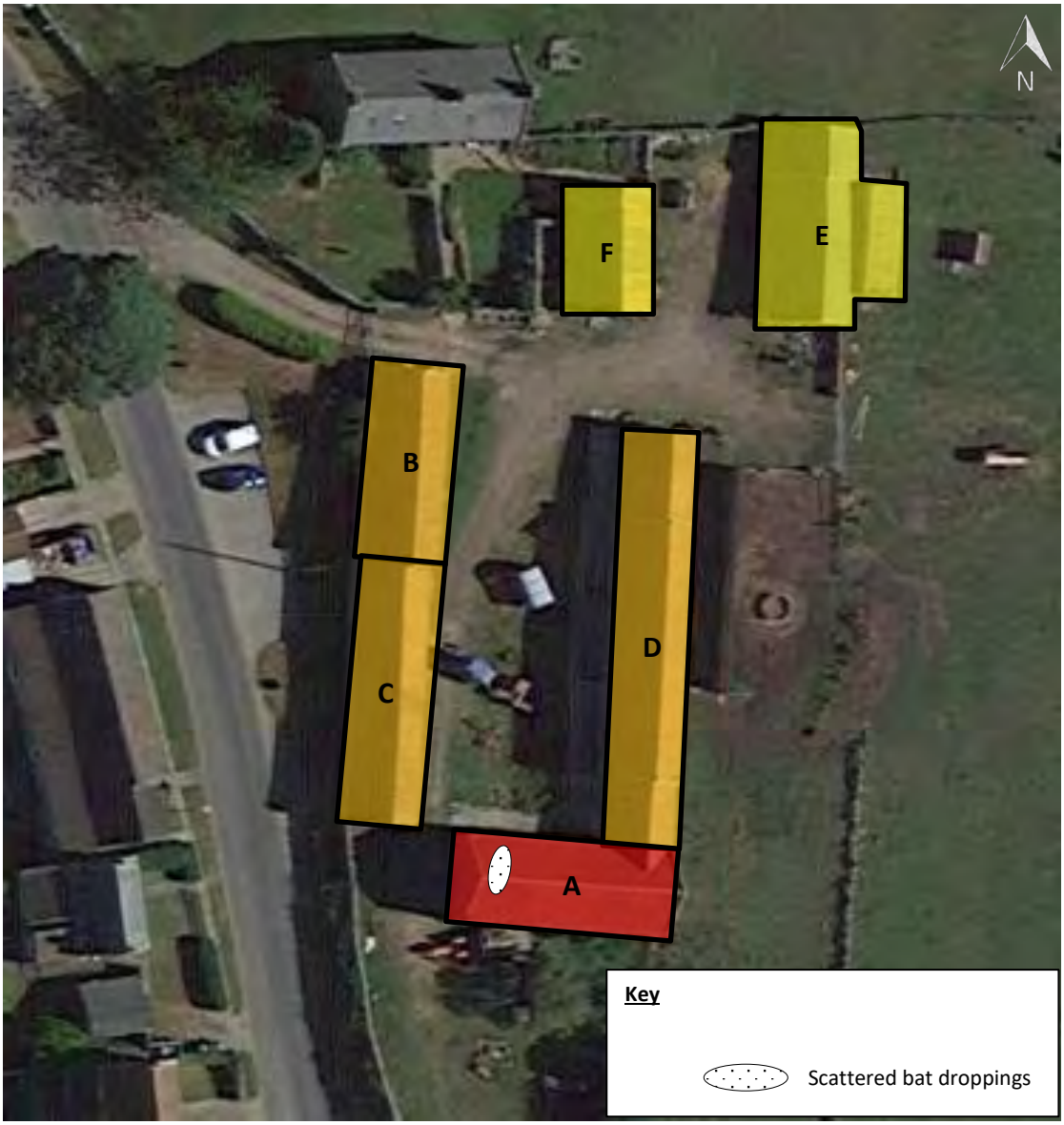

Figure 4: Visual inspection results.

Building ref.	Description	Features with potential bat roost habitat (PBRH).
Building A – High risk of supporting bats	Two-storey, stone-built barn with a clay pantile roof. Gaps exist under the eaves and some lifted roof tiles provide PBRH (Photos 3 - 8). Used as hay storage, with a hayloft located on the western side of the barn. Scattered droppings found on floor of hayloft, indicative of *pipistrellus sp.* and brown long-eared bats (Photo 9). Evidence of nesting birds and low use by barn owls (pellets) were found in the hayloft (Photo 10). 1x barn swallow nest, 1x passerine nest	High PBRH between lifted tiles and bitumastic-lined roof. PBRH for void species and limited PBRH for crevice-dwellers.
Building B - Moderate potential risk of supporting bats.	Single-storey, stone-built barn internally connected to Building C. Currently used in storage capacity. Stone walls largely intact with some missing tiles and a partly collapsing roof (Photos 11 & 12). 2 x barn swallow nests	Low PBRH between eaves, lifted tiles and liner and masonry crevices.
Building C - Moderate potential risk of supporting bats	Single-storey, stone-built barn internally adjoined with building B. Currently used in storage capacity. Cobwebbed void area, relatively undisturbed. Most the mortar is intact with few masonry gaps. No droppings were found (Photos 11 – 13). 1x barn swallow nests	PBRH between liner and roof tiles. Some crevice habitat exists in masonry gaps.
Building D – Moderate potential risk of supporting bats	Single-storey, stone-built barn with a lathe-lined clay pantile roof. The barn is divided into three inside. Draughty and damp inside. There are some loose roof tiles and gaps under coping stones and ridge tiles. Small ventilation holes exist on north gable wall. No droppings were found (Photos 14 – 19). 3 x barn swallow nest 1 x passerine nest	PBRH between lathe lining and clay pantiles. Limited crevice habitat exists in gaps in masonry.
Building E – Low potential risk of supporting bats	Stone-built building with a corrugated asbestos roof and wooden slat doors. Draughty and cobwebbed inside. No droppings were found (Photos 20 – 22).	Limited PBRH – access via a few masonry crevices.

Building F – Low potential risk of supporting bats	Stone building with a clay pantile roof. Generally well-pointed, recently re-mortared. Draughty, damp and heavily cobwebbed void space with undisturbed cobwebs. No droppings were found (Photos 23 – 26). 2x barn swallow nest	Limited PBRH between occasional lifted roof tile and liner. Few masonry crevices.

Table 3: Visual inspection results.

Site Photographs

Photo 1: North aspect of building A and eastern aspect of building C.

Photo 2: Southern aspect of building A.

Photo 3: South-west gable end of building A.

Photo 4: South-east gable end of building A and eastern aspect of building D.

Photo 5: Bitumastic-lined roof inside building A.

Photo 6: Inside building A.

Photo 7: Scattered droppings in building A.

Photo 8: Barn owl pellets on floor in building A.

Photo 9: Building's B and C from the courtyard.

Photo 10: South-west aspect of building's C and B from the road.

Photo 11: West aspect of Building C.

Photo 12: Western aspect of building D.

Photo 13: North gable end of building D.

Photo 14: Eastern aspect of building D.

Photo 15: Missing roof tiles on building D.

Photo 16: Inside building D.

Photo 17: Lathe-lined roof in building D.

Photo 18: West aspect of building E.

Photo 19: South gable end of building E.

Photo 20: Corrugated roof of building E.

Photo 21: North-eastern aspect of building F.

Photo 22: Inside building F; cobwebbed and damp.

Photo 23: Cobwebbed inside of building F.

Photo 24: Bitumastic-lined roof of building F.

6.4 Emergence Surveys

Emergence survey results – 2021

Date: 23/09/2021
Start time: 18:45 **End time:** 20:30 **Sunset:** 19:01

	Temp (°C)	Wind (BF)	Humidity (%rh)	Rain	Cloud cover (%)
Start	14.7	2	78.8	Dry	95
Finish	14.6	2	79.8	Dry	100

Table 4: Environmental conditions.

Surveyors: Jake Walker (JW); Nina Herbert (NH); Sam Newton (SN).

Equipment used: 2x Pettersson D240x time expansion ultrasound detector with Edirol R09 recorders and x1 Elekon Batlogger.

Results summary: Bat activity was low throughout the survey. One brown long-eared bat emerged from the ridge of building A. Common pipistrelles were identified foraging intermittently around the site. A noctule was heard flying overhead.

Observations:

Surveyor	Time	Species	Number	Activity	Annotation
JW	19:24	Soprano pipistrelle	1	Commuting	
SN	19:25	Common pipistrelle	1	Foraging along the side of buildings from hedge line to the south	
NH	19:26	Common pipistrelle	1	Commuting	
SN & NH	19:28	Noctule	1	Heard not seen	
SN	19:35	Brown long-eared bat	1	Emerged from ridge near corner	
NH	19:38	Common pipistrelle	2	Foraging along road	

Figure 5: Surveyor locations and bat activity recorded during survey 1 (23/09/2021).

6.5 Results Summary

Survey	Date	Roost	Species	Notes
Desktop	27/08/2017 & 27/09/2017 06/08/2019	n/a	Common pipistrelle; Brown long-eared bat	Previous surveys did not find any roosts in the surveyed buildings. A single bat dropping was found in building A.
Visual	23/09/2021	Day roost	Common pipistrelle; Brown long-eared bat	Scattered droppings found on floor of hayloft in building A.
Survey 1 - Emergence	23/09/2021	Transient/occasional roost	Brown long-eared bat	BLE emerged from ridge of building A.

Table 5: Results summary.

7 Discussion and Analysis

A detailed visual inspection of the site identified potential bat roost habitat PBRH across all the surveyed buildings. PBRH includes gaps between pantiles and liner, gaps along the ridge, and internal & external masonry crevices. Buildings B, C, and D were classed as having a moderate risk of supporting bats due to the abundance of PBRH. Buildings E & F were classified as having a low potential risk of supporting bats. No evidence of bat use (droppings/feeding remains) was found within Buildings B, C, D, E, and F. A low number of scattered brown long-eared type bat droppings were found on the floor of the hayloft in building A – therefore, this building was classed as having a high potential risk of supporting bats.

Several dusk and dawn bat activity surveys were undertaken of the site in 2017 & 2019. No bats were observed emerging from any of the surveyed buildings during these surveys; these were undertaken during the bat activity season (May-September) with two of the surveys conducted during the optimal survey season (August).

The most recent emergence survey of Buildings A, B, C, and D, undertaken during September 2021, identified a brown long-eared bat emerging from Building A. Due to the timing of the survey, and low number of droppings found within Building A, it is likely that the brown long-eared bat is utilising the building as a transient/occasional

roost. There is no evidence to suggest higher usage of the building by bats. No bats were seen to emerge from Buildings B, C or D.

There is no evidence to suggest that bats are utilising Buildings E or F to roost. No emergences were recorded during the 2017 surveys, and no droppings/feeding remains were identified during the 2021 inspection.

Evidence of breeding birds was discovered in Buildings A, B, C and D; approximately seven barn swallow nests and two passerine nests were identified. There was also evidence a roosting barn owl within the hayloft of Building A.

8 Impact Assessment

The proposed works will result in the loss of a brown long-eared bat transient/occasional roost from Building A. There is also a risk of disturbance to bats whilst works are undertaken. There is no evidence to suggest that development of Buildings B-F will impact bats; however, conversion of the buildings will result in the loss of potential bat roost habitat.

Building Ref.	Species	Count	Roost type	Impact/activity
A	**Brown long-eared bat**	**1**	**Transient/occasional roost**	**Loss of roost.**

Table 6 - Summary of impacts.

There will be a loss of barn swallow and passerine breeding habitat in Buildings A, B, C and D. Additionally, development of Building A, will result in the loss of barn owl roosting habitat.

9 Mitigation & Compensation

9.1 Mitigation Summary

Bats

Prior to commencement of works, a second dusk emergence survey will be carried out, this will inform the NE licence. Replacement crevice roosting habitat will be provided on site through the installation of two professional quality and long-lasting bat boxes on site. Due to low numbers and non-breeding status, such mitigation is considered to be proportionate to the level of bat use and will ensure that ecological functionality is maintained post-development.

An NE licence will not be required for works to Buildings B, C and D. However, to reduce the risk of detrimental impacts to bats, works to the buildings should be undertaken following standard good working practices in relation to bats (Appendix 2).

Breeding birds

If work takes place during the bird breeding season, then a check should be made prior to work for any active bird nests within buildings to be worked on. If nests are found, then no work to these immediate areas will take place until any chicks have fledged. Two bird nest boxes should be installed on site e.g. a swift brick and sparrow terrace. Barn swallow nesting habitat lost to the development should be mitigated for by the creation or retention of an open- sided structure, suitable for use by breeding swallow on site.

Barn owls

A pre-works check shall be made of buildings for any recent use by barn owl, to make sure that the level of usage has not changed.

To help safeguard the long-term use of the site and surrounding area by barn owls, at least 30 days prior to work, a temporary barn owl box will be installed within 200m of the site, in a location to be agreed by a suitably qualified ecologist; providing alternative provision whilst work is being carried out. For long term provision a permanent barn owl box will be provided within one of the buildings.

9.2 Method Statement

Bats

9.2.1 Proposed works to Building A will likely require an NE licence. The schedule of works to buildings/areas covered by a licence will be specified within the NE application and is subject to the approval of Natural England. At least one additional survey will be required to inform the NE licence.

9.2.1 Prior to any works commencing on site, workers and contractors will be informed of the protection afforded to bats and understand the method statement and procedure to be followed.

9.2.2 Prior to works, one professional quality bat box will be installed temporarily on site in a location agreed with the ecologist for the release of any bats uncovered during works.

9.2.3 Work to all roost locations, including roofing works and re-pointing will be carried out under the supervision of a suitably qualified ecologist (SQE), and when bats are active.

9.2.4 Replacement crevice roosting habitat will be provided on site through the incorporation of integral bat roost habitat features into new/rebuilt sections of the buildings and/or the installation of professional long-lasting woodcrete bat boxes on site, in suitable locations to be agreed by the ecologist. It is recommended that a total of two habitat feature's is provided. Integral bat bricks can include ibstock bat roost entrance brick (leading into a cavity wall) or enclosed bat box 'B'; or Schwegler Type 1FR bat tube. External bat boxes should be suitable bat boxes include, Schwegler 1FF, 1FQ Schwegler Bat Roost, or equivalent.

Breeding birds and barn owls

9.2.5 Works should be timed to take place outside of the breeding bird season (March-August) if this is not possible, a pre-works check of the site should be undertaken before work commences to check for the presence of nesting birds. If any active nests

are found, then work to those areas should be delayed until after any chicks have fledged.

9.2.6 A total of two bird nest boxes should be installed to mitigate the loss of bird nests and nesting habitat. Suitable bird nest boxes include, 1SP Schwegler Sparrow Terrace, and Vivara Pro Seville 32mm WoodStone Nest Box, or equivalent

9.2.7 To mitigate for the loss of barn owl roosting habitat, a temporary barn owl box should be installed within the development area. The box should be installed in a suitable location within 200m of the development site, away from disturbance and at least 30 days prior to works on site. A suitable Eco Barn Owl Nest Box – this box is constructed using recycled plastic, ensuring longevity. Permanent provision for barn owl (an internal box) within the buildings will need to be provided.

9.2.8 To mitigate for the loss of barn swallow nesting habitat, an open-sided structure (log shed or equivalent), should be constructed on-site.

10 Information concerning bat protection and the planning system

10.1 Relevant Legislation

All bat species are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), the Countryside and Rights of Way Act 2000 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

Under the WCA it is an offence for any person to intentionally kill, injure or take any wild bat; to intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; to intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; to be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.

Under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, it is an offence to (a) deliberately capture, injure or kills any wild animal of a European protected species (EPS), (b) deliberately disturb wild animals of any such species, (c)deliberately take or destroy the eggs of such an animal, or (d)damages or destroys a breeding site or resting place of such an animal. Deliberate disturbance of animals of a European protected species (EPS) includes in particular any disturbance which is likely to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

*Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used***.** In order to minimise the risk of breaking the law it is essential to work with care to avoid harming bats, to be aware of the procedures to be followed if bats are found during works, and to commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

10.2 Licences

Where it is proposed to carry out works which will damage/destroy a bat roost or disturb bats to a significant degree, an EPS licence must first be obtained from the Natural England (even if no bats are expected to be present when the work is carried out). The application for a license normally requires a full knowledge of the use of a site by bats, including species, numbers, and timings. Gathering this information usually involves surveying throughout the bat active season. The licence may require ongoing monitoring of the site following completion of the works.

Licences can only be issued if Natural England are satisfied that there is no satisfactory alternative to the development and that the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

10.3 Planning and Wildlife

National planning guidance for ecological issues is set out in the updated February 2019 National Planning Policy Framework (NPPF). The requirements are consistent with those specified in the July 2018 NPPF; which advocate biodiversity net gain and improvement where possible, as evidenced below.

Paragraph 174 refers to the requirement of plans to "protect and enhance biodiversity and geodiversity" In order to do this, "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."

In paragraph 175 the NPPF indicates that "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 incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."

The accompanying ODPM / Defra Circular 06/2005 remains pertinent; circular 06/2005 is prescriptive in how planning officers should deal with protected species, see paragraphs 98 and 99:

The presence of a protected species is a material consideration when considering a proposal that, if carried out, would be likely to result in harm to the species or its habitat (see ODPM/Defra Circular, para 98)

LPAs should consider attaching planning conditions/entering into planning obligations to enable protection of species. They should also advise developers that

they must comply with any statutory species protection issues affecting the site (ODPM/Defra Circular, para 98)

The presence and extent to which protected species will be affected must be established before planning permission is granted. If not, a decision will have been made without all the facts (ODPM/Defra Circular, para 99)

Any measures necessary to protect the species should be conditioned/planning obligations used, before the permission is granted. Conditions can also be placed on a permission in order to prevent development proceeding without a Habitats Regulations Licence (ODPM/Defra Circular, para 99).

The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances.

Further to NPPF and OPDM Circular 06/2005, Section 40 of the Natural Environment and Rural Communities Act (2006) states that '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 40(3) also states that 'conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.

10.4 Legislation in relation to barn owls

Barn owls are afforded full protection under the Wildlife and Countryside Act, 1981. Their inclusion in Schedule One protects against wilful disturbance whilst an owl is at or near the nest, and makes it an offence to carry out any of the following actions:

- Killing or injuring a barn owl
- Catching a barn owl
- Taking or destroying any egg of a barn owl
- Damaging or destroying the active nest site with eggs or young or before eggs are laid
- Disturbing the dependent young of a barn owl
- Possessing, offering for sale or selling a barn owl (but see exceptions)
- Release or allow the escape of a barn owl into the wild (but see exceptions)

These actions are punishable by a maximum fine, upon conviction, of £5,000. Nesting has been recorded in every month of the year.

Protection is also given under the Countryside and Rights of Way Act, 2000 against reckless disturbance whilst nesting.

Because of recent declines in numbers, and concern over their current status, barn owls are also listed in the EC Birds Directive and Appendix II of the Bern Convention. They are an Amber Listed species in “Birds of Conservation Concern” (RSPB).

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Appendix 1: Glossary of bat roost terms

Bat Roost Definitions:

Day roost: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

Night roost: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

Transitional / occasional roost: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.

Mating sites: where mating takes place from later summer and can continue through winter.

Maternity roost: where female bats give birth and raise their young to independence.

Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

Appendix 2: Standard good working practices in relation to bats

Bats are small, mobile animals. Individual bats can fit into gaps 14-20mm wide. They can roost in a number of places including crevices between stonework, under roof and ridge tiles, in cavity walls, behind barge boards, in soffits and fascias and around window frames. Builders should always be aware of the potential for bats to be present in almost any small gap accessible from the outside in a building. The following guidelines are provided in order to reduce the risk of harm to individual bats.

- Roofs to be replaced, or which are parts of a building to be demolished, should be dismantled carefully by hand. Ridge tiles, roof tiles and coping stones should always be lifted upwards and not slid off as this may squash/crush bats.
- Re-pointing of crevices should be done between April and October when bats are active. Crevices should be fully inspected for bats using a torch prior to re-pointing.
- Any existing mortar to be raked should be done so by hand (not with a mechanical device).
- Look out for bats during construction works. Bats are opportunistic and may use gaps overnight that have been created during works carried out in the daytime.
- If any bats are found works should stop and the Bat Conservation Trust (0845 1300 228) or a suitably qualified bat ecologist should be contacted.

If it is necessary to pick a bat up always use gloves. It should be carefully caught in a cardboard box and kept in a quiet, dark place. The Bat Conservation Trust or a suitably qualified bat ecologist should be contacted.

Appendix 3: Previous dusk and dawn re-entry results

Previous dusk emergence and dawn re-entry survey results from 2017 and 2019 can be found below.

27 August 2017 – Dawn – Positioned in field - GM

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
	04:47	C. pipistrelle	HNS.	F	1
	04:56	C. pipistrelle	HNS. Faint.	F	1
	05:01	C. pipistrelle	HNS. Faint.	F	1
1	05:33	C. pipistrelle	Bat flew over yard towards the S.	C	1
2	05:38	C. pipistrelle	Bat flew across yard heading SW across the road.	C	1

27 August 2017 – Dawn – Positioned in farmyard - CL

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
	04:37	C. pipistrelle	HNS.	F	1
	04:58	Unknown	HNS. Faint		
	05:03	Unknown	HNS. Short and very faint.		
	05:05	C. pipistrelle	HNS.	F	1
1	05:18	C. pipistrelle	Flew over building B in a SW direction.	F	1
2	05:20	C. pipistrelle	Foraging to and fro in N-S direction in yard.	F	1
	05:30	C. pipistrelle	HNS. Over road to W.		
3	05:38	C. pipistrelle	Flew S across yard and over field.	C	1
4	05:38	C. pipistrelle	Flew S along road to W of site.	C	1

31 August 2017 – Dusk – Positioned in farmyard – GM

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	20:21	C. pipistrelle	Bat flew from W of Building D toward Building E / F.	C	1
2	20:22	C. pipistrelle	Bat entered yard from between Building E and D and circled round yard several times, feeding.	F	1
3	20:22–20:25	C. pipistrelle	Bat feeding in circles in farmyard continuously.	F	1
3	20:25-20:27	C. pipistrelle	A second bat foraging continuously in farmyard.	F	1

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
3	20:27 – 20:32	C. pipistrelle	A single bat foraging in the farmyard.	F	1
	20:32 – 20:34	C. pipistrelle	Second bat returns and two bats foraging continuously in farmyard.	F	2
4	20:34-20:55	C. pipistrelle	Two bats foraging in an E-W direction at northern end of farmyard	F	2
	20:55 – 21:00	C. pipistrelle	HNS. Intermittent social calls. Foraging.	F	1
4	21:00-21:10	C. pipistrelle	One bat foraging in an E-W direction, multiple passes.	F	1
	21:14-21:30	C.pipistrelle	HNS. Faint and intermittent.	F	1

31 August 2017 – Dusk –Positioned on High Street – CL

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	20:22	Unknown	SNH. Bat flew over Building A		1
2	20:24	C. pipistrelle	Bat circling over yard, foraging.	F	1
	20:33	C. pipistrelle	HNS.	F	1
3	20:34	C. pipistrelle	Two bats flew over towards yard from Rose Cottage.	C	2
4	20:35	C. pipistrelle	One bat flew over hay barn from yard.	C	1
5	20:37	C. pipistrelle	One bat flew over towards hay barn from Rose Cottage.	C	1
3	20:39	C. pipistrelle	Another bat flew over from Rose Cottage towards farmyard.	C	1
	20:48	C. pipistrelle	HNS. Foraging over village hall.	F	1
6	20:56	C. pipistrelle	Bat flew from the barns over to Rose Cottage.	C	1
	21:09	C. pipistrelle	HNS.	F	1
7	21:14-20:18	C. pipistrelle	Two bats foraging over village hall.	F	2
	21:21-21:34	C. pipistrelle	HNS.	F	1

31 August 2017 – Dusk – Positioned in field – AH

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	20:29	C. pipistrelle	SNH. Flying from field, S of building A.	C	1
1	20:29	C. pipistrelle	SNH. Flying from field, S of building A.	C	1
2	20:30	C. pipistrelle	Foraging to S of Building A	F	1
3	20:32	C. pipistrelle	Bat flew from road direction towards Building A, passing to its S.	F	1
3	20:33	C. pipistrelle	Bat flew from road direction towards rear of Building A.	C	1
3	20:34	C. pipistrelle	Bat flew from road direction towards rear of Building A.	C	2
3	20:35	C. pipistrelle	Bat flew from road direction towards rear of Building A. Foraging.	F	1
4	20:40	C. pipistrelle	Bat flew S to N over Building A and back into field.	F	1
5	20:40 – 21:17	C. pipistrelle	Almost continuous foraging around Building A.	F	1
	21:24	C. pipistrelle	HNS.	F	1
	20:29	C. pipistrelle	HNS.	F	1
	20:37	C. pipistrelle	HNS.	F	1

27th September 2017 – Dusk – Positioned E of farmhouse– GM

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	19:15	C. pipistrelle	Bat flew from S across the farmyard towards N and across field.	C	1
	19:19	C. pipistrelle	HNqS. Loud.		1
2	19:20	C. pipistrelle	Bat flew from S across the yard towards N, foraging in the field.	F	1
	19:33	C. pipistrelle	HNS. Loud.	F	1
	20:04	Myotis sp.	HNS		

27 September 2017 – Dusk – Positioned in farmyard – DH

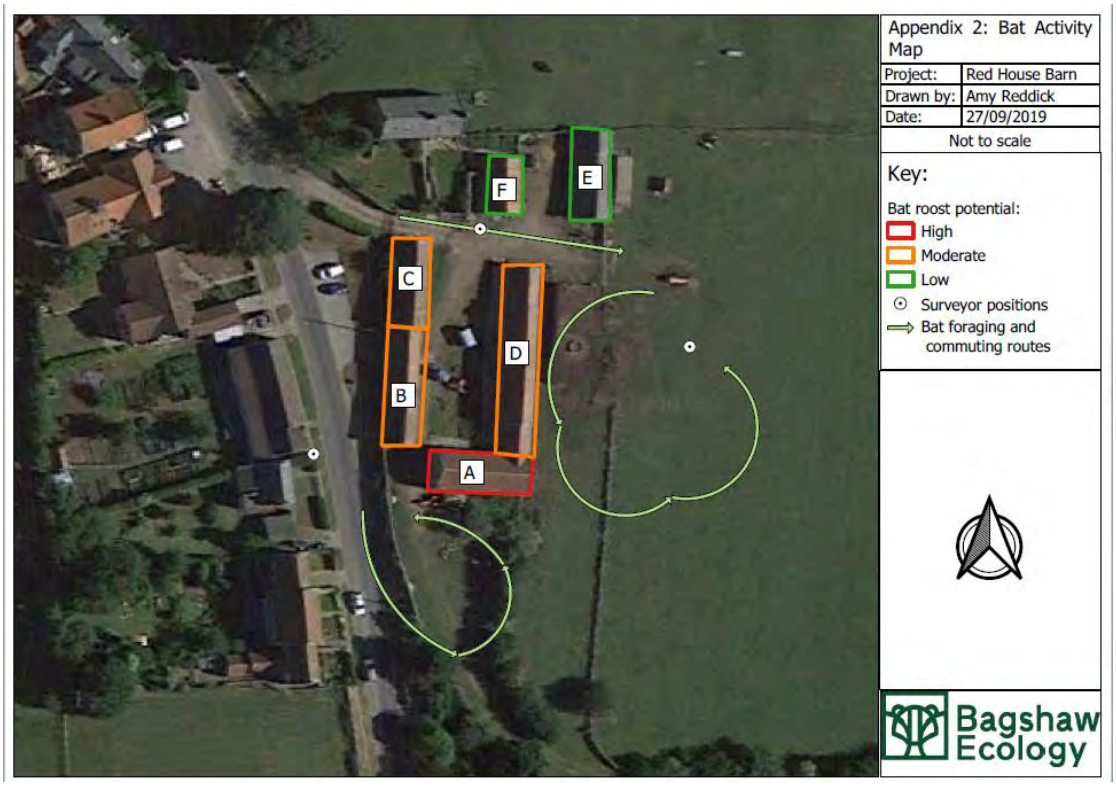
Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	19:17 – 19:18	C. pipistrelle	HNS initially S near AH. Then 3 passes over yard.	F	1
	19:21	C. pipistrelle	HNS.	C	1

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
2	19:22	C. pipistrelle	Bat flew from AH location across yard toward GM location – S to N.	C	1
3	19:23	C. pipistrelle	Bat flew over ridge of Building D from E to W	F	1
	19:37	C. pipistrelle	HNS. Social calls.		1
	20:00	C. pipistrelle	Social calls. 1 bat flew over.	C	1
	20:15	Myotis sp.	HNS.	C	1

27 September 2017 – Dusk – Positioned in field to S – AH

Map Ref.	Time	Species	Direction of Flight / Notes (see bat survey plan)	Roosting/ Foraging/ Commuting	No. of bats
1	19:17	C. pipistrelle	Bats flew from trees to E of Building A and then into farmyard, entering between Building A and Building C.	C	2
2	19:22	C. pipistrelle	Bat flew from S over field, entering farmyard between Building A and C.	F	1
2	19:26	C. pipistrelle	Bat flew from S over field, entering farmyard between Building A and C.	F	1
	19:46	C. pipistrelle	HNS.	F	1
	20:15	C. pipistrelle	HNS. Very faint.	F	1

Key: Com.Pip. – Common Pipistrelle, Sop.Pip. – Soprano Pipistrelle, Pip.sp. – Pipistrelle species, HNS – Heard not seen, SNH – Seen not heard.



Appendix 4: Site Plans

CLOSE, GRANGER, GRAY & WILKIN

BUILDING AND CIVIL ENGINEERING CONSULTANTS,
SURVEYORS AND ARCHITECTURAL TECHNOLOGISTS

28 MARKET PLACE, GUISBOROUGH, CLEVELAND, TS14 6HF

STRUCTURAL

APPRAISAL REPORT

Outbuildings
at
Red House Farm,
Egton.

Ref: 19/116/gh.

Jeff Granger ICIOB Geoff Hodgson BSc(Hons), ICIOB
Emma Taylor BA(Hons), MSAI, TCIAT

Consultants:-Tim Close MA, CEng, MInstRE, MRICS, MCInstCES, MCIAT Colin Fenby CEng, FICE, MIStructE
Paul West MRICSDave Leighton BEng(Hons), Tech IOSH Ian WilkinACIOB

CLOSE, GRANGER, GRAY & WILKIN Ltd. Registered Office:- 28 Market Place, Guisborough, Cleveland, TS14 6HF
Registered in England No. 2754571 V.A.T. Reg. No. 602 1705 91

THE REPORT

1.0 INTRODUCTION

1.1 A structural survey was carried out to the outbuildings at Red House Farm, Egton on Wednesday 17th July 2019 for Mulgrave Estates, Lythe at the request of Mr. Robert Childerhouse of Mulgrave Estates.

1.2 The outbuildings are a range of farm buildings constructed in a traditional manner, i.e. timber roof structure bearing on masonry rubble fill walls. The outbuildings comprise of 5 units with 3 surrounding a courtyard area and a separate 2 units to the head of the courtyard.

1.3 The purpose of the survey is to inspect the outbuildings to establish whether any structural distress is present and determine whether the buildings are suitable for conversion to domestic dwellings under a planning application to the N. Yorkshire Moors National Parks by Mulgrave Estates.

1.4 For the purpose of this report, the North elevations of the buildings are deemed to be the elevations facing the farmhouse. This position is for reference within the report only and may not bear any resemblance to the actual position of the building on the site.

1.5 This structural survey is based on the elements of the property that can affect the structural stability of the building only. We have not inspected steelwork, woodwork, or other areas that were covered, unexposed or inaccessible and have not inspected for damp or asbestos. Any areas of such that are noted during the course of the survey however have been reported on.

2.0 EAST RANGE

2.1 The east range of the outbuildings comprise of 6 separate units with stone cross walls between. This runs down the East side of the site and incorporates 2 units to the South. These will incorporate plot 3 and 4 in the scheme.

2.2 The units are mainly single storey with a 2 storey section to the South unit. Construction is timber rafter and purlin bearing on to stone walls. Intermediate trusses are incorporated in places.

2.3 The roof covering to the units are in a good condition and are providing good weathertightness to the internal structures. Timbers are in a good condition generally with only slight deterioration to the timber in places.

2.4 To the North gable, a section of the stonework to the top peak of the gable is displaced with some deteriorated mortar courses noted. Peak course to the stonework is missing. Gable itself is in a good condition generally with no evidence of movement noted.

2.5 To the West elevation of the East unit, slight deterioration of the mortar to the stonework adjacent to the door access to the top unit was noted.

2.6 Cracking was noted to the separating cross wall between the Northern units. This cracking ran from ground level to ridge height. The cracking did not appear recent in nature and no evidence of more recent cracking was noted.

2.7 Further cracking was noted to crosswalls to the Southern end of the range. These also ran from ground level vertically upwards to ridge height. These did not appear recent in nature and no evidence of more recent cracking was noted.

2.8 Some cracking was noted between the separating cross walls and the East elevation in places. This cracking appeared to be due to some pulling away of the external wall in

places with a lack of tying in of the stonework to the external wall noted. This movement was only slight and did not appear recent in nature. No evidence of recent movement was noted.

2.9 To the south section of the East outbuildings, a doorway leads to the first floor of the adjacent unit at a higher level. Cracking to the gable wall was noted running below the doorway and above to the ridge. This was associated with a further crack running down the adjacent North corner between the cross wall and the front elevation wall.

2.10 To the end South unit, the inspection of the upper floor timbers was limited however these appeared to have some evidence of deterioration in places.

2.11 Door and window heads are a mixture of stone and timber. All appeared to be in a good condition with no distress noted.

2.12 To the South elevation, guttering was in a poor condition with some sections missing or coming away from the wall in places.

3.0 WEST RANGE

3.1 The West range of the outbuildings comprise of 7 separate units with stone crosswalls between. This runs down the West side of the site and will incorporate plot 1 and 2 of the scheme.

3.2 The units are mainly single storey. Construction is timber rafter and purlin bearing on to stone walls. Intermediate trusses are incorporated in places.

3.3 The roof covering to the units are in a good condition and are providing good weathertightness to the internal structures. Timbers are in a good condition generally with only slight deterioration to the timber in places.

3.4 The stonework to the West range of outbuildings was in a good condition with very little evidence of distress noted to the brickwork. Some evidence of slight cracking was noted in places however this range appeared to be in good condition.

3.5 Inspection of some internal areas of the West Range was limited due to the stored goods within the unit.

3.6 The external elevation of the West elevation appeared to have been repointed in the past and was in a good condition.

3.7 Door and window heads are a mixture of stone and timber. All appeared to be in a good condition with no distress noted.

4.0 NORTH RANGE

4.1 The north unit stands alone to the North East corner and incorporates plot 5 of the scheme. This is currently divided into 3 units with double garage doors to the front elevation. Access was limited at the time of the survey.

4.2 The north unit to the site comprised of stone work to the walls and a corrugated tin roof covering. Roof appeared weathertight.

4.3 Generally, the unit is structurally secure with the walls being stable enough to ensure they will not require a major taking down and renewing exercise. Taking the property as whole, it is considered that structure will be suitable for renovation without any major rebuilding of the structure.

4.4 The roof timbers to the unit is in a good condition and these do not require replacing in their entirety however some sections may require replacement as the works continue and this would involve splicing new timber into existing where required.

4.5 Door and window heads are a mixture of stone and timber. All appeared to be in a good condition with no distress noted.

5.0 NORTH COW BYRE.

5.1 The north cow byre is located to the North West of the site close to the farmhouse and is stone built with a timber roof structure covered in clay pantiles. The building has a central corridor through the length of the building and the cowbyres are located either side of the corridor.

5.2 Externally to the South East corner of the unit, slight deterioration of the mortar to the stonework was noted. This was only minimal and no evidence of distress was noted.

5.3 To the East elevation externally, slight cracking was noted close to the South East corner. This cracking ran up vertically from ground level to eaves height. Cracking appeared to taper open as it ran. Cracking did not appear recent in nature.

5.4 Internally to the dividing crosswall, 2no. tiebars were noted, these being threaded bar with steel plate washers and nuts. These ran through the crosswall providing stability to the wall. These appeared to be effective as no evidence of recent structural distress was noted.

5.5 Door and window heads are a mixture of stone and timber. All appeared to be in a good condition with no distress noted.

5.6 Internally the timbers to the roof structure appeared to be in a good condition and the unit appeared weathertight.

6.0 CONCLUSIONS

6.1 The outbuildings are in a good condition generally and it is obvious that they have been maintained to some extent as evidence of repointing and repair was noted in places. It is apparent that the cracking as noted is not of a substantial nature and the worst areas of cracking and distress can be can be dealt with by incorporating a tying in system to provide lateral stability to the stonework during the conversion. This can be either galvanised steel L straps fixed across the stonework before any internal finish structure is applied or an internal bar system built into the mortar courses themselves. As such it is considered that demolition and rebuild should not be required.

6.2 The timbers to the roof appear to be in good condition generally however it should be noted that during conversion some areas of deterioration may be discovered. If this is the case, the areas of deterioration should cut out and the affected sections replaced by introducing new timbers which would be spliced into the existing as required.

6.3 Taking into account the findings of the above survey, all the ranges are structurally secure with the walls being stable enough to ensure they will not require a major taking down and renewing exercise. Taking the property as whole, it is considered that structure will be suitable for renovation without any major rebuilding of the structure.

Signed

Date 30/7/19