

Design and Access Statement



Conversion of Redundant Farm Buildings
to form 2 Holiday Cottages & 1 Annexe

Beacon Farm, Limestone Road, Scalby, YO13 0RB



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1.0 General

1.1 The Statement

This statement is submitted to accompany an application to North York Moors National Park Authority, for the conversion of existing redundant barns into two self-contained Holiday Cottages and an Annexe immediately adjacent to the Farmhouse.

Details of the proposals are shown on drawings: -

- D12243-01 Location & Block Plan
- D12243-02 Proposed Block Plan
- D12243-03 Existing Plan and Elevations
- D12243-04 Proposed Plans
- D12243-05 Proposed Elevations

Other documents provided with this application are: -

- Bat Scoping Survey, by Wold Ecology
- Structural Report of the Building, by Richard Birdsall I.C.E

1.2 Property & Background

Beacon Farm is a traditional farmstead. It consists of a range of buildings which create an enclosed yard.

These buildings are predominantly stone and pantile but some roofs have been covered with profiled sheet.

To the north of the traditional building is a large range of more modern steel framed agricultural buildings. It is this range of buildings which serve the agricultural needs of the farm.

The older buildings have relative utility and ad hoc storage uses.

The range to be converted form the east side of the farmstead and wrap around the north to join the farmhouse.

The ridge of the subject building is horizontal for the full length, although the ground drops towards the north, increasing the height.

The inner faces which look onto the farmyard, have a number of door openings, ventilation slots and 2 small windows.

The south gable has a cart opening, with a stone arched lintel and hayloft window above.

The long east facing elevation has a number of random openings on both levels.

Adjacent to the farmhouse, the north facing elevation, has a window and larger vehicle opening.

The following pictures illustrate the above descriptions.



Photograph 1
West elevation, into Farmyard



Photograph 2
South elevation abutting farmhouse



Photograph 3
South elevation, gable end



Photograph 4
East elevation



Photograph 5
North elevation abutting farmhouse

2.0 Proposals

2.1 Design and Proposals

Consideration is requested for the creation of 2 holiday cottages and an annex. The annex will be within the part of the buildings which abuts the main house.

The accommodation will comprise of: -

- An annexe immediately adjacent to the farmhouse, which will have 2 bedrooms, one of restricted height on a mezzanine level, the other forming the main living area on the ground floor, with an open plan lounge and kitchen.
- Cottage 1, intended for holiday use, with an open plan living/kitchen space and bedroom on the ground floor and a mezzanine bedroom with ensuite.
- Cottage 2, a 2-storey single bed roomed cottage with shower room, bedroom and gallery at first floor level.

The shell of the buildings are to remain as existing, with current openings re-used, including the small ventilation 'slits' in the walls.

A small number of rooflights (5) are to be inserted. When viewed on the elevations, they are modest in terms of scale when compared to the roof.

A previous opening currently walled up will be re-used in the annexe bedroom.

In addition to the principle of the proposals, we request that consideration be given to the insertion of 2 No. cart openings in the long east elevation.

These will be relatively modest in terms of 'cart openings,' at 2m wide and 2.1m high.

They will be infilled with a plain glazed frame. The frame will be set 0.5m in reveal to ensure a strong shadow line and the glazing will be treated with a film to prevent excess light spillage.

Externally the current levels of amenity for the farmhouse will be retained by the careful orientation and positioning of parking, access and amenity space.

The parking is situated to the south east corner of the site, with access to each cottage via the doors to the south west elevation, separated from the Farm Yard by a new stone wall.

Amenity space for all 3 units will be to the north east, where a field boundary delineates the extent of ground which can be used.

In terms of bio-diversity, no trees or hedge will be removed or reduced and a new native species hedge will be planted along the north east boundary.

2.2 Requirement

As with most rural former farmsteads, diversification is a requirement to create income.

Tourism is a major part of the sustainability of the National Park as a whole and the reuse of existing buildings is an ideal use for buildings which, due to their age, do not often provide suitable spaces for modern commercial uses.

Our clients have continued forward planning for their property to ensure its survival and create facilities which benefit the area in general.

The two holiday cottages will complement the existing activity on the site and provide the required commercial input.

The annexe will allow flexibility for family and persons associated with the farm to live on the farm.

3.0 Context/Policies

3.1 Context & Policies

It is intended that the proposals will comply with the following Local Plan Policies: -

Strategic Policy C	Quality & Design of Development
Policy ENV11	Historic Settlements & Built Heritage
Policy CO12	Conversion of Existing Buildings in Open Countryside
Policy CO18	Residential Annexes
Policy UE1	Location
Policy UE4	New Holiday Accommodation

These policies all seek to protect the special qualities of the National Park, by allowing development like this proposal but within a framework.

The provision of the cottages will not lead to harm of the local landscape. The conversions will be kept within the shell of the existing building.

The cottages are to be located on a site which will continue to be dominated by other existing traditional uses, agriculture and the farmhouse.

It is set within an area of substantial space so that there will not be harm to the neighbourhood.

Policy UE1 supports the development of tourism spaces such as the cottages where it involves the conversion of an existing building.

As the property is within the curtilage of our client’s other buildings, UE4 should also be considered. Again, it recommends the use of existing buildings which are of architectural or historical interest, which in the case of the subject building, is correct.

Should the existing building be classed as sited in open countryside, then Policy CO12 becomes relevant.

This supports such development provided change is kept to a reasonable level without extension and that the building is structurally sound.

4.0 Access

4.1 External

External access is via the country lanes running around Scalby. Once on the site the access which already exists is good, with clear visibility and a wide entrance. It is used by only a small number of vehicles as it sits towards the end of the tarmacked lane.

Parking is provided immediately adjacent to the cottages.

4.2 Internal

The cottages have good level access from the parking areas and internally the open plan space creates a very accessible environment. This is compliant with Building Regulations Part M.



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Beacon Farm, Scalby, North Yorkshire

Bat Survey, November 2020.

NYMNP

20/06/2022

	Staff Member	Position
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Notes :	This report contains sensitive information concerning protected species and caution should be exercised when copying and distributing to third parties.	

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1.0 EXECUTIVE SUMMARY

1.1 In August 2020, Wold Ecology was commissioned by Paul Cass to undertake a bat survey at Beacon Farm. The site is located at approximate National Grid Reference SE 99093 92504 in Scalby, North Yorkshire.

1.2 The field surveys during June 2019, August 2020, September 2020 and November 2020 revealed the following roosts:

Date	Spp.	Roost type	Structure Reference	Roost Location	Access points (including #)	Dimension of roost or explanation where the roost is
04/06/19 (emergence)	Common pipistrelle x 13 bats	Day	Barn 1 Roost 1	Located in a gap in the external stonework on the north elevation.	External roost x 1 access point	Missing mortar in the stonework approximately 20mm x 30mm.
24/08/20 (emergence)	Whiskered x 1 bat	Day	Barn 1 Roost 5	Located in a gap above the ridge of the internal west gable	Internal roost, the bat did not exit the barn	Gap approximately 30mm x 50mm.
22/09/20 (return)	Brown long-eared bat x 1 bat	Day	Barn 1 Roost 3	Located in a gap above an internal partition wall	Internal roost x 1 access point. The bat entered the building via an open door on the west elevation	Gap approximately 30mm x 50mm.
	Soprano pipistrelle x 9 bats	Day	Barn 1 Roost 4	Located in a gap in the external stonework on the south gable.	External roost x 2 access points	Missing mortar gaps in the stonework approximately 20mm x 30mm.
17/11/20 (endoscope)	Common pipistrelle x 1 bat	Transitional	Barn 1 Roost 2	Located in a gap in the external stonework on the west elevation	External roost x 1 access point	Missing mortar in the stonework approximately 30mm x 40mm.

1.3 The field survey results are summarised below:

		Application Site Status
<p>Natural England Development License Required prior to building works – Barn 1</p>	<p>Bats</p>	<p>As barn 1 supports a common pipistrelle, soprano pipistrelle, whiskered and a brown long-eared day roosts and a common pipistrelle transitional roost, any works that will disturb, modify or permanently lose the roost <u>will</u> require a development licence from Natural England. It is also possible that individual bats could turn up roosting in other parts of the barn and or wider site at other times of year. A licence will be obtained prior to the following works commencing on the barn:</p> <ul style="list-style-type: none"> • Exclusion of bats and destructive searches by a bat licensed ecologist • Roof stripping and maintenance work • Erection of scaffolding adjacent to the barn and within 5m of a roost • Pointing of masonry • Soft strip • New windows and doors • Internal conversion <p>The roosts will be disturbed and destroyed as part of the proposed conversion and structural repair work to the barn. Details of appropriate mitigation to be included in the Natural England licence application are outlined in section 7.0.</p>
<p>Proceed with caution, timing constraints</p>	<p>Birds</p>	<p>Birds are afforded various levels of protection and levels of conservation status on a species by species basis. The most significant general legislation for British birds lies within Part 1 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation, it is an offence to, kill, injure or take any wild bird, take, damage or destroy the nest of any wild bird while that nest is in use or being built, take or destroy an egg of any wild bird. All nests should remain undisturbed and intact until after the breeding bird season – mid February to early September. Planning consent for a development does not provide a defence against prosecution under this act. Bird's nests were observed in the building.</p>
<p>No constraints</p>	<p>Barn owl</p>	<p>There was no evidence of barn owls <i>Tyto alba</i> roosting in the barn. No further surveys recommended.</p>

1.4 **Bat roosts are protected throughout the year, whether bats are present or not.**

1.5 All bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and are further protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Should any bats or evidence of bats be found prior to or during development, work must stop immediately, and Natural England contacted for further advice. This is a legal requirement under the aforementioned acts and applies to whoever carries out the work.

1.6 Planning consent for a development does not provide a defence against prosecution under this act.

1.7 Habitat enhancement for bats should be implemented as outlined in section 7.0, in order to improve foraging opportunities to bats in the local area.

1.8 The data collected to support the output of this report is valid for one year. This report is valid until **November 2022**. After this time, additional surveys need to be undertaken to confirm that the status of the barn, as a bat roost, has not changed.

- 1.9 Species list within this report will be forwarded to the local biodiversity records centre to be included on their national database. No personal information will be sent. Please contact Wold Ecology if you do not wish the species accounts and 10 figure grid references to be shared.

Date	Taxon Name	Common Name	Location	County	Grid reference	Record Type	Abundance
04/06/19	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	Beacon Farm, Scalby	N. Yorkshire	SE 99093 92504	Day	13
24/08/20	<i>Myotis mystacinus</i>	Whiskered bat	Beacon Farm, Scalby	N. Yorkshire	SE 99093 92504	Day	1
22/09/20	<i>Pipistrellus pygmaeus</i>	Soprano pipistrelle	Beacon Farm, Scalby	N. Yorkshire	SE 99093 92504	Day	9
22/09/20	<i>Plecotus auritus</i>	Brown long-eared bat	Beacon Farm, Scalby	N. Yorkshire	SE 99093 92504	Day	1
17/11/20	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	Beacon Farm, Scalby	N. Yorkshire	SE 99093 92504	Transitional	1

2.0 INTRODUCTION

2.1 Background Information

2.1.1 In August 2020, Wold Ecology was commissioned by Paul Cass to undertake a bat survey at Beacon Farm. The site is located at approximate National Grid Reference SE 99093 92504 in Scalby, North Yorkshire.

2.1.2 The Application Site comprises the following building:

- Barn 1

2.1.3 The proposed development includes the conversion of barn 1 into accommodation.

2.2 Survey Objectives

2.2.1 The site was visited and assessed on 24th August 2020, 22nd September 2020 and 17th November 2020; this was to determine whether the building on site contained bat roosts. The work involved the following elements:

Survey objective	Yes/No	Comments
Determine presence/absence of roosting bats	Yes	A daytime, visual inspection for bat roosts and roosting bats. Internal inspection of all roof voids. An assessment of the on-site potential for bats and the likelihood of their presence. Desktop study.
Determine bat usage e.g.s maternity roost, summer roosts	Yes	An assessment of whether bats are a constraint to the development. Emergence (dusk) survey. Return (dawn) survey. Hibernation survey.
Identify swarming, commuting or mating sites	Yes	The survey looked at commuting routes from the roost to foraging grounds to ensure works did not impact these.
Other	Yes	The production of a non-technical summary of the legal implications behind bat presence. Report the findings of the field survey work and identify recommendations for a potential mitigation strategy.



Scale: 1:25,000

Drawing title:
Location Map

KEY



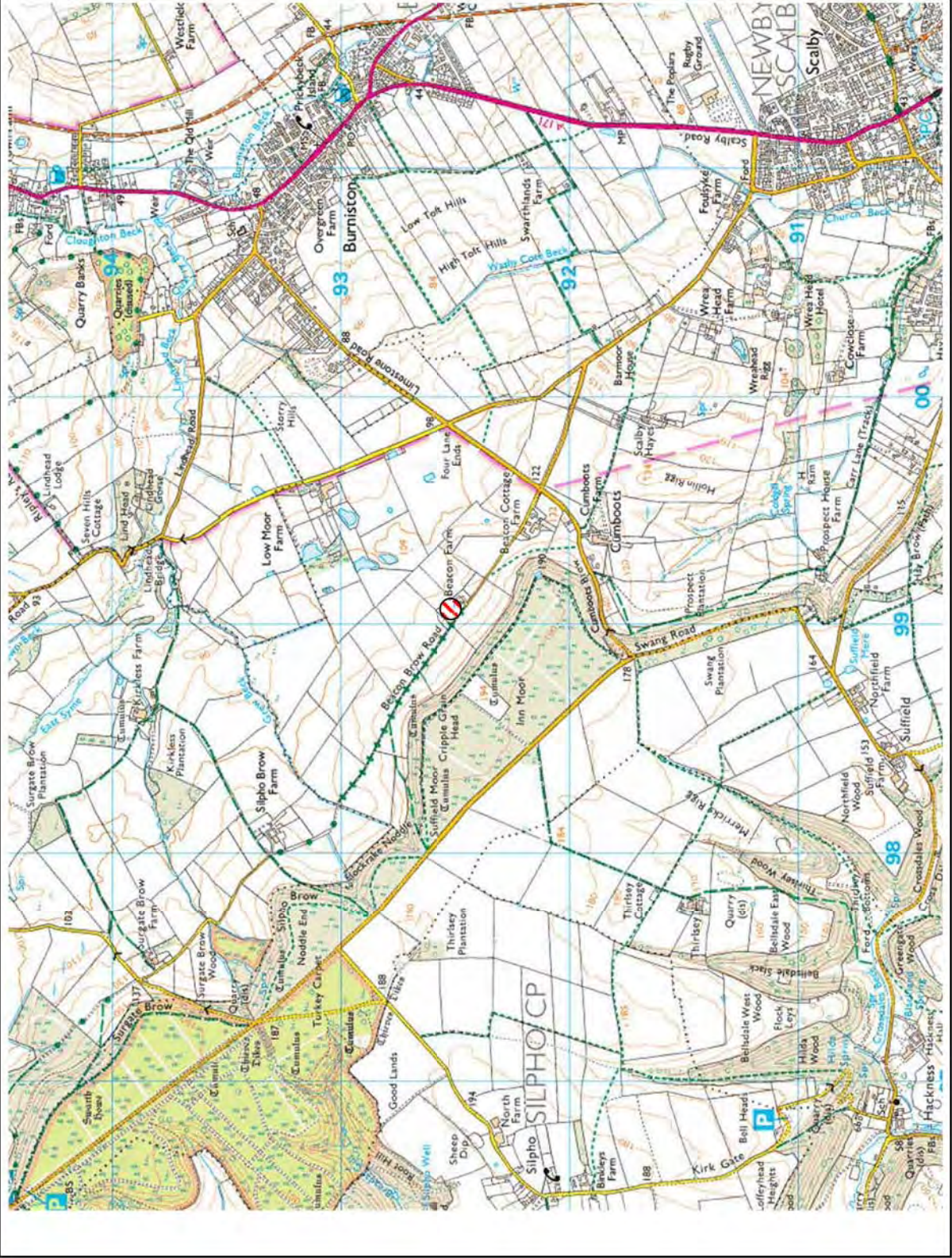
Application Site

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3.0 BACKGROUND TO SPECIES

3.1 Ecological overview

3.1.1 There are seventeen species of bat that currently breed in the UK. There is a wide variety of roost type and ecological characteristics between species and for this reason it is necessary to determine the species of bat and the type of roost resident in a structure prior to development. Roosts are utilised by different species of bat, at different times of year for different purposes i.e. summer, breeding, hibernating, and mating etc. (for more detailed information see section 9.0).

3.1.2 Bat populations have undergone a significant decline in the latter part of the 20th century; the main factors cited for causing loss and decline include:

- A reduction in insect prey abundance, due to high intensity farming practice and inappropriate riparian management.
- Loss of insect-rich feeding habitats and flyways, due to loss of wetlands, hedgerows, and other suitable prey habitats.
- Loss of winter roosting sites in buildings and old trees.
- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

3.2 Legal Framework

3.2.1 A bat survey is required prior to planning permission being granted for a development, in order to prevent the potential disturbance, injury and /or death of bats and the disturbance, obstruction and/or destruction of their roosting places. This is in compliance with the Conservation of Habitats and Species Regulations 2017 (as amended), provision 41 states an offence is committed if a person:

- (a) Deliberately captures, injures, or kills any wild animal of a European protected species (i.e. bats),
- (b) Deliberately disturbs wild animals of any such species,
- (c) Deliberately takes or destroys the eggs of such an animal, or
- (d) Damages or destroys a breeding site or resting place of such an animal.

3.2.2 Section 9 of the Wildlife and Countryside Act (1981) states:

- It is an offence for anyone without a licence to kill, injure, disturb, catch, handle, possess or exchange a bat intentionally. It is also illegal for anyone without a licence to intentionally damage or obstruct access to any place that a bat uses for shelter or protection.

3.2.3 Bat roosts are protected throughout the year, whether or not bats are occupying a roost site.

3.3 Planning Policy Guidance

3.3.1 A bat survey is a requirement of the Local Planning Authority (LPA), as part of the planning application process. This is specified in the following legislation:

- National Planning Policy Framework (NPPF): Conserving and Enhancing the Natural Environment.

- 3.3.2 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.
 - 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.
- 3.3.3 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.
- 3.3.4 The LPA has to assess whether the development proposal would breach Article 12(1) of the Habitats Directive. If Article 12(1) would be breached, the LPA would have to consider whether Natural England was likely to grant a European protected species licence for the development; and in so doing the LPA would have to consider the three derogation tests:
- a) ‘Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment’.
- In addition, the LPA must be satisfied that:
- (b) ‘That there is no satisfactory alternative’
 - (c) ‘That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range’.
- 3.3.5 Relevant Case Law
- Woolley v Cheshire East Borough (2009).
 - R. (Morge) v Hampshire County Council (2011).
 - Prideaux v. Buckinghamshire County Council and Fcc Environmental UK Limited (2013).

- 3.3.6 The rulings summarise that if it is clear or perhaps very likely that the requirements of the Directive cannot be met because there is a satisfactory alternative or because there are no conceivable ‘other imperative reasons of over-riding public interest’ then the authority should act on that and refuse permission.’
- 3.3.7 The conclusion of the judgement is that LPAs must ensure that the option/alternative that best takes into account all the relevant considerations (not just EPS) should be the preferred option assuming that the other two tests specified in Article 16 (1) are also met.
- 3.3.8 The judgements also clarified that it was not sufficient for planning authorities to claim that they had discharged their duties by imposing a condition on a consent that requires the developer to obtain a licence from Natural England. Natural England considers it essential that appropriate survey information supports a planning application prior to the determination. Natural England does not regard the conditioning of surveys to a planning consent as an appropriate use of conditions.

4.0 ASSESSMENT METHODOLOGY

4.1 Status of species present in Yorkshire

Bat Specie	UK Status	UK Distribution	Yorkshire Distribution
Common Pipistrelle	Not threatened	Common & widespread	Common & widespread.
Soprano pipistrelle	Not threatened	Common & widespread	Less common than common pipistrelle but fairly widespread.
Nathusius's pipistrelle	Rare	Restricted. Throughout British Isles.	Scarce, bat detector records only.
Brown long-eared	Not threatened	Widespread	Widespread.
Daubenton's	Not threatened	Widespread	Widespread.
Natterer's	Not threatened	Widespread (except N & W Scotland)	Present
Brandt's	Endangered	England and Wales	Few confirmed records.
Whiskered	Endangered	England, Wales, Ireland & S Scotland.	Present.
Noctule	Vulnerable	England, Wales, S Scotland.	Widespread
Leisler	Vulnerable	Widespread throughout the British Isles, except N Scotland.	Rare (locally common in West Yorkshire).
Barbastelle	Rare	England.	No records since 1950's.

Source - <http://www.nyorkbats.freeseve.co.uk/bats.htm>

4.2 Data Review and Desk Study

- 4.2.1 Wold Ecology surveys in 2019 identified no bat roosts in the old piggery and outbuilding on site. However, 13 common pipistrelle bats were recorded emerging from the north elevation of barn 1; no other elevation of barn 1 was observed during the bat activity surveys.
- 4.2.2 Wold Ecology employees, field surveyors and network of associate ecologists have recorded brown long-eared *Plecotus auritus*, noctule *Nyctalus noctula*, Natterer's *Myotis nattereri*, Daubenton's *Myotis daubentonii*, Brandt's *Myotis brandtii*, whiskered *Myotis mystacinus*, soprano pipistrelle *Pipistrellus pygmaeus* and common pipistrelle *Pipistrellus pipistrellus* within 5km of the Application Site. Wold Ecology bat records date from 2006 and include over 1000 bat activity surveys.
- 4.2.3 There are no known Natural England development licenses relating to bats within 1km of the Application Site (source – www.magic.gov.uk).

4.2.4 Wold Ecology have recorded the following roosts within 5km of Beacon Farm:

Date	Taxon Name	Common Name	Location	County	Grid reference	Record Type	Abundance
March 2020	Pipistrellus pipistrellus	Common Pipistrelle	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Hibernation	2
June/July 2019	Pipistrellus pipistrellus	Common Pipistrelle	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Day x 9	48
June/July 2019	Pipistrellus pipistrellus	Common Pipistrelle	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Maternity	47
June/July 2019	Plecotus auritus	Brown long-eared	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Maternity	19
June/July 2019	Plecotus auritus	Brown long-eared	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Day	1
June/July 2019	Pipistrellus pygmaeus	Soprano pipistrelle	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Day x 2	4
June/July 2019	Myotis Brandt's	Brandt's	Highdales Farm, Hackness	N. Yorkshire	SE 94971 93028	Day	1
May 2018	Plecotus auritus	Brown long-eared	Thirley Coates	N. Yorkshire	SE 97596 95092	Day x 2	5
May 2018	Pipistrellus pipistrellus	Common pipistrelle	Thirley Coates	N. Yorkshire	SE 97596 95092	Day	4
June 2018	Pipistrellus pygmaeus	Soprano pipistrelle	Thirley Coates	N. Yorkshire	SE 97596 95092	Day x 3	3
June 2018	Pipistrellus pygmaeus	Soprano pipistrelle	Thirley Coates	N. Yorkshire	SE 97596 95092	Maternity	144
June 2018	Pipistrellus pygmaeus	Soprano pipistrelle	Thirley Coates	N. Yorkshire	SE 97596 95092	Satellite	36
June 2018	Plecotus auritus	Brown long-eared	Thirley Coates	N. Yorkshire	SE 97596 95092	Maternity	10
May/Aug 2018	Pipistrellus pipistrellus	Common Pipistrelle	St Marks Church, Newby	N. Yorkshire	TA 02333 89877	Day	5
May 2018	Plecotus auritus	Brown long-eared	St Marks Church, Newby	N. Yorkshire	TA 02333 89877	Day	1
May 2016	Pipistrellus pipistrellus	Common Pipistrelle	Roadside Farm	N. Yorkshire	SE 98054 95368	Day	1

4.3 Daytime and Visual Inspection

4.3.1 The daytime assessment identified whether the area had any signs of occupancy and/or bat usage. This took the form of a methodical search, both internally and externally, for actual roosting bats and their signs. Specifically, the visual survey involved:

- Assessment for droppings on walls, windowsills and in roof spaces
- Endoscope survey.
- Hibernation survey.
- Scratch marks and staining on beams, other internal structures and potential entrance and exit holes.
- Wing fragments of butterfly and moth species underneath beams and other internal structures.

- The presence of dense spider webs at a potential roost can often indicate absence of bats.
- Assessment of crevices and cracks in the buildings to assess their importance for roosting bats.
- The duration of the daytime, visual inspection was 60 minutes.

4.3.2 Summary of daytime inspection and visual survey

Date of each survey visit	Structure reference/location	Equipment used/available	Weather
24/08/20	Barn 1	Binoculars, 1million candle power clu-lite torch, micro Dart endoscope, Dewalt DW03050 Laser Measure. 3.9m telescopic ladders	16°C, 20% cloud. Beaufort 1, E. No recent rain.
Comments (to include # of surveyors used for each visit): 1 surveyor undertook the visual inspection.			
22/09/20	Barn 1	Binoculars, 1million candle power clu-lite torch, micro Dart endoscope, Dewalt DW03050 Laser Measure. 3.9m telescopic ladders	12°C, 0% cloud. Beaufort 1, SW. No recent rain.
Comments (to include # of surveyors used for each visit): 1 surveyor undertook the visual inspection.			
17/11/20	Barn 1	Binoculars, 1million candle power clu-lite torch, micro Dart endoscope, Dewalt DW03050 Laser Measure. 3.9m telescopic ladders	12°C, 80% cloud. Beaufort 0. No recent rain.
Comments (to include # of surveyors used for each visit): 1 surveyor undertook the visual inspection.			
Personnel: Chris Toohie (Class 2 bat license - 2019-44215-CLS-CLS and RC027) – 17 th November 2020 Daniel Lombard (Class 1 bat licence – 2015-11490-CLS-CLS) – 24 th August & 22 nd September 2020			

4.4 Activity Surveys

- 4.4.1 Emergence surveys are used to determine bat presence in a building and can also give a good estimate of the numbers present. Bats can emerge up to 15 minutes before sunset and 2 hours after sunset. The survey times ensured that bats would have emerged from their roost sites and would be foraging (see section 9.4 and 9.5).

4.4.2 Summary of emergence survey(s)

Date of each survey visit	Start/end times and times of sunset	Structure reference/location	Equipment used/available	Weather
24/08/20	Sunset: 2010 Start: 1940 Finish: 2210	Barn 1	Cluson CB2 1 million candle power lamps Digital thermometer Heterodyne bat detectors Anabat Walkabout Wildlife Acoustics EM Touch 2 PRO EM3 Anabat Express Night vision scope	16°C - 14°C, 20% cloud. Beaufort 1, E. No recent rain.
Comments (to include # of surveyors used for each visit): 2 surveyors were positioned around the site so that all potential access points, identified in the daytime, visual inspection, could be observed.				
Personnel: Daniel Lombard (Class 1 bat licence – 2015-11490-CLS-CLS) – 24 th August 2020 Craig Hullah – 24 th August 2020				

4.4.3 Return surveys conducted at sunrise are particularly useful as bats tend to swarm outside their roosts for up to 2 hours before entering, thus allowing the surveyor more time to identify the bat and entrance locations. Bats will return to roosts approximately 90 minutes before sunrise and 15 minutes after. The timing of the survey ensured that returning bats would be recorded (see section 9.4 and 9.5).

4.4.4 Summary of return survey(s)

Date of each survey visit	Start/end times and times of sunrise	Structure reference/location	Equipment used/available	Weather
22/09/20	Sunrise: 0645 Start: 0445 Finish: 0710	Barn 1	Cluson CB2 1 million candle power lamps Digital thermometer Heterodyne bat detectors Anabat Walkabout Wildlife Acoustics EM Touch 2 PRO EM3 Anabat Express Night vision scope	10°C - 12°C, 10% cloud. Beaufort 1, SW. No recent rain.
Comments (to include # of surveyors used for each visit): 2 surveyors were positioned around the site so that all potential access points, identified in the daytime, visual inspection, could be observed.				
Personnel: Daniel Lombard (Class 1 bat licence – 2015-11490-CLS-CLS) – 22 nd September 2020 Josh Saunders (Class 1 bat licence – 2020 – 46828 – CLS-CLS) 22 nd September 2020				

4.5 Summary of personnel

Personnel	Experience	Licence No.
Chris Toohie MCIEEM	Project Manager of Wold Ecology with over 11 years' experience surveying bat roosts for development licences. Chris has conducted over 850 bat surveys since 2006, held over 120 development licenses and is one of only 186 (January 2020) Natural England Registered Consultants who can hold a Bat Mitigation Class Licence.	RC027 and 2019-44215- CLS-CLS
Daniel Lombard MCIEEM	Experienced bat surveyor since 2010, Daniel has assisted with over 300 bat surveys for Wold Ecology and is currently working towards his bat handling license.	2015-11490- CLS-CLS
Josh Saunders	Experienced Wold Ecology Ltd bat surveyor, Josh has conducted over 100 bat activity surveys for Wold Ecology since 2017.	2020 – 46828 – CLS-CLS
Craig Hullah	Wold Ecology Ltd associate with bat activity survey experience undertaken under the tuition of Wold Ecology licensed bat ecologists.	N/A

5.0 RESULTS

5.1 Habitat description

5.1.1 The Application Site is located 2km north west of Scalby village, in a rural location. The farm yard and associated buildings are less than 1ha and the building footprint of barn 1 is less than 0.1ha; barn 1 is immediately surrounded by shot grassland and the concrete farm yard. The adjoining farm buildings also have bat roosting potential.

5.1.2 Adjacent Landscapes

5.1.2.1 Beacon Farm is surrounded by mixed agricultural land dominated by arable with grazed pastures. Woodland cover within 2km is good and occurs as shelterbelts adjacent to farms and small holdings, semi natural woodland, and plantations. Habitat connectivity within 500m is provided by hedgerows that bound most arable fields and woodland cover.

5.1.2.2 Wold Ecology concludes that the adjacent and continuous high-quality habitats that include woodland, tree lines, hedgerows, scrub, and waterbodies connect the Application Site to the wider countryside. These habitats are likely to be used regularly by foraging and commuting bats. Consequently, the Application Site and adjacent habitats are considered to be integral to the favourable conservation status of local bat populations.

5.1.3 Habitat Summary

5.1.3.1 A summary of the surrounding habitat is (radius of < 2km from the site):

- Buildings – farm buildings and residential properties
- Hedgerow
- Hedgerows with trees
- Mature trees and woodland
- Broxa Forest
- Thirsley Wood
- Bellsdale Slack
- Thirsley Plantation
- Kirkless Plantation
- Surgate Brow Plantation
- Arable
- Mature private gardens
- Ponds and watercourses
- Brown Beck
- Grew Beck
- East Syme
- Lindhead Beck
- Quarry Beck
- Washy Cote Beck
- Grazed pasture



NORTH

Scale: 1:25,000

Drawing title:
Aerial Photograph

KEY



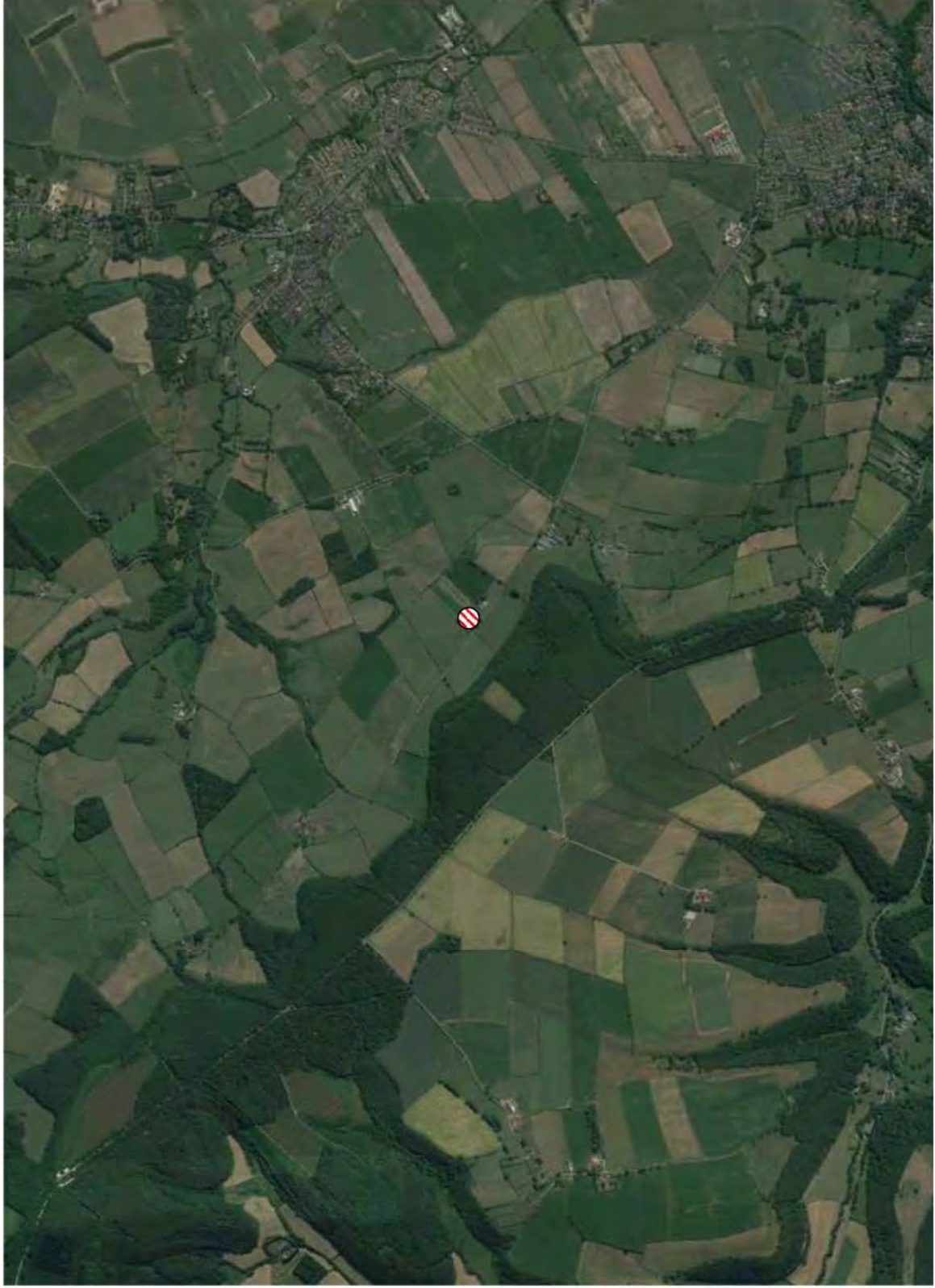
Application Site

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5.2 Building description

- 5.2.1 The bat survey and assessment targeted the following (see section 5.5):
- a. **Barn 1** - the two-storey barn comprises local stone walls and a pitched roof covered with pan tiles. The roof is supported by smooth sawn timbers and is underdrawn with bitumen felt product. The barn is used for storage.
- 5.2.2 **Barn 1** (see 5.5 plates 1 - 7) - the following roosting opportunities were present within the fabric of the barn:
- Gaps beneath the ridge tiles where mortar has been displaced.
 - There are no missing ridge tiles.
 - Loose fitting pan tiles with gaps beneath.
 - Gaps in missing mortar below gable tiles.
 - Gaps above the eaves.
 - Missing mortar in the stonework.
 - Gaps adjacent to timber doors and timber windows.
 - Gaps adjacent to timber lintels.
 - Gaps above the internal wall plates.
 - Gaps above the ridge beam.
 - Gaps between felt and pan tiles above.
 - Gaps in the internal stonework.
 - Access into the building is provided by open doors and windows.
 - The barn was assessed (August 2020) as having a MODERATE SUITABILITY to support bats.
- 5.2.3 During the 17th November 2020 endoscope survey, a single common pipistrelle bat was observed in a gap in the stonework on the west elevation of barn 1 (**Roost 2**).
- 5.2.4 Based on the field survey and the criteria in table 4.1 (Bat Surveys for Professional Ecologists – 3rd Edition, p35. Bat Conservation Trust, 2016), the Application Site and studied building has the following suitability for bats:

	Negligible	Low	Moderate	High
Application Site habitats (<2km)				X
Barn 1			X	

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	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.
Low	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 ^a 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 ^b). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ^c	Habitat that could be used by small numbers of commuting bats such as a 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 be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a 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 lines 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.
High	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 ^a 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.

Source - Bat Surveys for Professional Ecologists – 3rd Edition, p35. Bat Conservation Trust, 2016.

5.3 Justification of activity surveys

5.3.1 The level of survey to give confidence in a negative result is summarised as (Bat Surveys for Professional Ecologists, 3rd Edition. Bat Conservation Trust, 2016):

Low Roost Suitability	Moderate Roost Suitability	High Roost Suitability
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence survey and a separate dawn re-entry survey.	Three separate survey visits. At least one dusk emergence survey and a separate dawn re-entry survey. The third visit could either be dusk or dawn.
May to August.	May to September with at least one survey between May to August.	May to September with at least two surveys between May to August.
Activity surveys should be at least 2 weeks apart. Moderate buildings will be assessed according to site location and habitats within the locality and if there is a possibility that late emerging bats are present, a dawn survey will be more appropriate.		

5.3.2 The Application Site requires the following surveys between May and late September:

	Emergence (dusk)			Re-entry (dawn)		
	LOW	MOD	HIGH	LOW	MOD	HIGH
Barn 1		x 1			x 1	

5.4 Results of Activity Surveys

5.4.1 Emergence Survey

5.4.1.1 24th August 2020

- The first common pipistrelle bat was detected at 2016. This was close to the anticipated (< 30 minutes after sunset) emergence time and suggests that the bat emerged from a roost close by.
- Common pipistrelle, whiskered and noctule bats were detected and/or observed foraging and commuting around the site in low numbers.
- The following bat roosts were observed:
 - **Roost 5** – whiskered bat roost located in a gap above the internal ridge on the west gable of barn 1. The roost contains 1 bat (see 5.5 plate 6).

5.4.1.2 For survey results see appendix 9.4 and 9.5.

5.4.2 Return Survey

5.4.2.1 22nd September 2020

- Bat activity was good throughout much of the survey with the site used by common pipistrelle, soprano pipistrelle, Brandt's and brown long-eared bats.
- The following bat roosts were observed:
 - **Roost 3** – brown long-eared bat roost located in a gap above the internal partition wall plate inside barn 1. The roost contains 1 bat.
 - **Roost 4** – soprano pipistrelle roost located in a gap in the external stone work on the south gable of barn 1. The roost contains 9 bats (see 5.5, plate 3).

5.4.2.2 For survey results see appendix section 9.4 and 9.5.

5.5 Photographs of key features

Plate 1 – north elevation.



Plate 2 – west elevation.



Plate 3 – south gable.

Roost 4 – soprano pipistrelle
day roost x 9 bats.



Plate 4 – east elevation.



Plate 5 – internal roof void



Plate 6 – internal west gable



Roost 5 – Whiskered day roost
x 1 bat.

Plate 7 – common pipistrelle located inside roost 2 – November 2020.












Not to Scale



Drawing title:

Layout plan of the Application Site and summary of bat surveys.

KEY

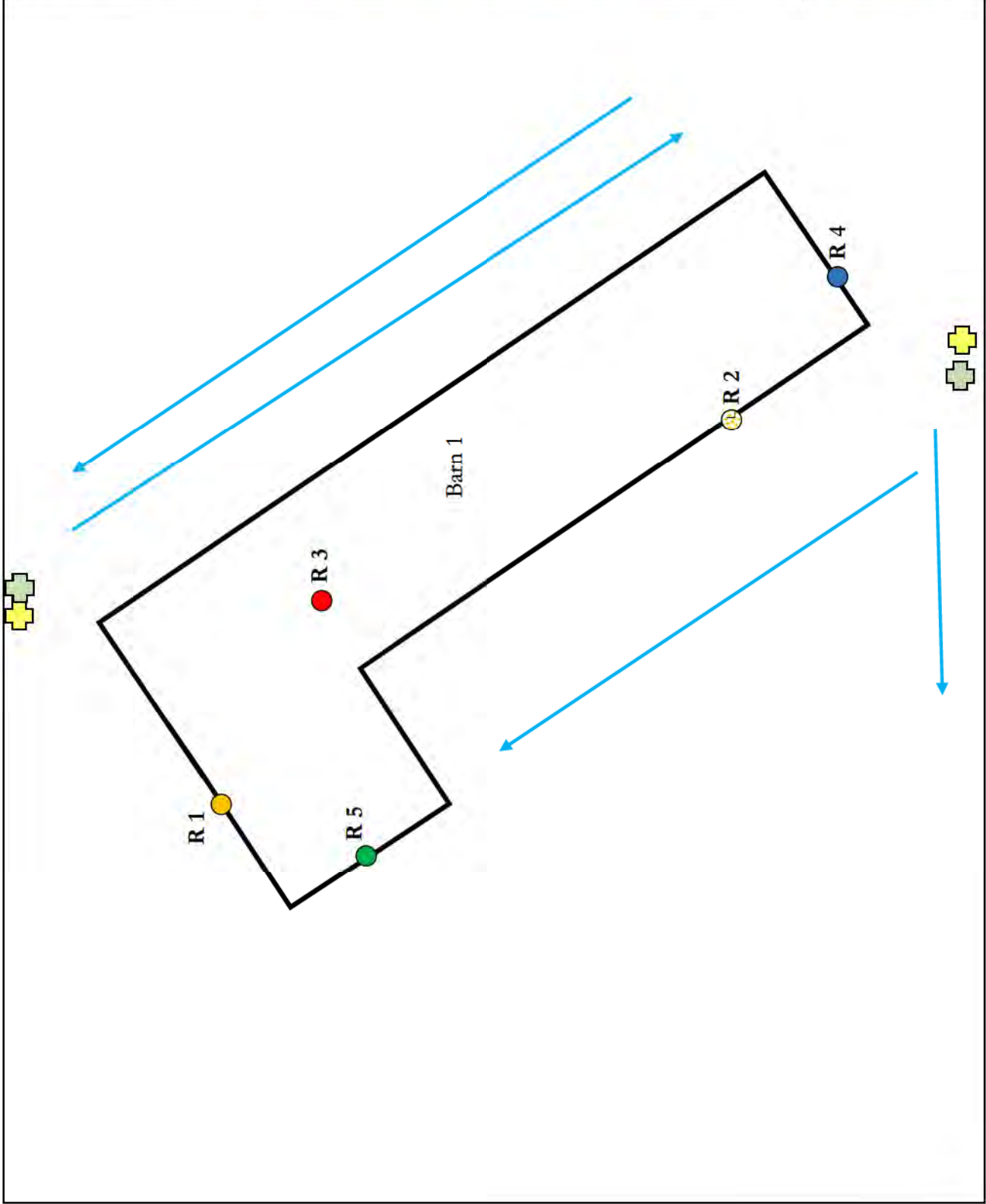
-  Primary commuting route
-  Location of surveyor – 24th August 2020
-  Location of surveyor – 22nd September 2020
-  Common pipistrelle day roost
-  Common pipistrelle transitional roost
-  Soprano pipistrelle day roost
-  Whiskered bat day roost
-  Brown long-eared day roost
-  Roost

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5.6 Summary of field surveys conducted in 2020

Date	Type of survey	Results			Building Dimensions (m)		
					L	W	H*
24/08/20	Habitat assessment	Wold Ecology concludes that the adjacent and continuous high-quality habitats that include woodland, tree lines, hedgerows, scrub, and waterbodies connect the Application Site to the wider countryside. These habitats are likely to be used regularly by foraging and commuting bats. Consequently, the Application Site and adjacent habitats are considered to be integral to the favourable conservation status of local bat populations.					
	Visual inspection.	<i>Barn 1</i> There were no signs of roosting bats or bat activity inside the building, but due to the presence of features with potential to provide roosting opportunities for bats, the barn has been assessed as having a MODERATE SUITABILITY to support bats (see 5.3 plates 1 - 7).			27	6.5	5.5
Date	Spp.	Roost type	Structure Reference	Roost Location	Access points (including #)	Dimension of roost or explanation where the roost is	
04/06/19 (emergence)	Common pipistrelle x 13 bats	Day	Barn 1 Roost 1	Located in a gap in the external stonework on the north elevation.	External roost x 1 access point	Missing mortar in the stonework approximately 20mm x 30mm.	
24/08/20 (emergence)	Whiskered x 1 bat	Day	Barn 1 Roost 5	Located in a gap above the ridge of the internal west gable	Internal roost, the bat did not exit the barn	Gap approximately 30mm x 50mm.	
22/09/20 (return)	Brown long-eared bat x 1 bat	Day	Barn 1 Roost 3	Located in a gap above an internal partition wall	Internal roost x 1 access point. The bat entered the building via an open door on the west elevation	Gap approximately 30mm x 50mm.	
	Soprano pipistrelle x 9 bats	Day	Barn 1 Roost 4	Located in a gap in the external stonework on the south gable.	External roost x 2 access points	Missing mortar gaps in the stonework approximately 20mm x 30mm.	
17/11/20 (endoscope)	Common pipistrelle x 1 bat	Transitional	Barn 1 Roost 2	Located in a gap in the external stonework on the west elevation	External roost x 1 access point	Missing mortar in the stonework approximately 30mm x 40mm.	

* Height from ground floor to ridge

5.7 Interpretation and Evaluation of Survey Results

5.7.1 Presence/absence

5.7.1.1 The site has been visited three times by Wold Ecology during 2020, with previous surveys on an adjacent building during 2019. The data provides an insight into how bats utilise the site during mid and late summer and early winter months. The surveys were conducted in optimum conditions with fine weather for a period of 48 hours prior to the surveys. Therefore, bat activity would not have been affected by adverse weather conditions i.e. not emerging or returning to the roost site earlier than usual. The confidence in the results is therefore high.

5.7.1.2 Based on activity surveys conducted during June 2019, August 2020, September 2020 and November 2020, it has been determined that the studied barn at Beacon Farm contains the following bat roosts (see 9.3):

Structure/reference	Species	Count/estimate	Roost location	Site status assessment	Conservation significance of roost	Use and importance of the site throughout the year
Barn 1 Roost 1	Common pipistrelle	13	Gap in external mortar	Day roost	LOW	No evidence to suggest a maternity roost or significant numbers of bats.
Barn 1 Roost 2	Common pipistrelle	1	Gap in external mortar	Transitional roost	LOW	Possibly used at other times of year. Unlikely to be a hibernation roost.
Barn 1 Roost 3	Brown long-eared	1	Gap above a partition wall	Day roost	LOW	No evidence to suggest a maternity roost or significant numbers of bats.
Barn 1 Roost 4	Soprano pipistrelle	9	Gap in external mortar	Day roost	LOW	
Barn 1 Roost 5	Whiskered	1	Gap above the ridge	Day roost	LOW	

5.7.2 Site Status Assessment

5.7.2.1 Based on building inspections, endoscope survey, an emergence and return survey, it has been determined that the site supports:

- A single common pipistrelle day roost.
- A single common pipistrelle transitional roost.
- A single whiskered bat day roost
- A single brown long-eared day roost.
- A single soprano pipistrelle day roost

5.7.2.2 All roosts are located adjacent to surrounding favourable foraging habitat which will play a role in the ecology of the local bat population.

5.7.2.3 The survey results are based on survey work conducted in June 2019, August 2020, September 2020 and November 2020. The barn on site has features which have moderate suitability to support roosting bats, there remains the possibility that bats could roost in other parts of the site at various times of the year.

- 5.7.2.4 Wold Ecology concludes that Beacon Farm is unlikely to support a maternity roost for the following reasons:
- Bat activity was low throughout the surveys.
 - No accumulation of droppings or staining's conducive of significant numbers of bats was observed (although these are sometimes hard to detect).
 - Roost 1 was not used during the 2020 surveys.
 - Roost 4 was not used during the dusk survey in August 2020.
- 5.7.2.5 Wold Ecology considers that roost 2 is unlikely to support hibernating bats due to the wide cavity being open and exposed to fluctuating temperatures that will not ensure that consistent temperatures of between 0°C and 5°C during cold periods. Prior to the November survey, night time temperatures had remained mild with no significant frosts or prolonged periods of cold weather. No other bats were observed during the endoscope survey during the mild November of 2020.
- 5.7.2.6 Although thirteen common pipistrelle bats emerged from roost 1 and nine soprano pipistrelle bats returned to roost 4, there was no accumulation of droppings or high numbers of droppings on the wall below the roosts. In addition, common pipistrelle maternity roosts range from 20 – 223 (C. Lever, 1977) and soprano pipistrelle roosts tend to be larger. Consequently, Wold Ecology concludes that based on current information, roost 1 and 2 are not maternity roosts.
- 5.7.2.7 The field surveys on site did not suggest that a maternity roost or significant number of bats are present in an adjacent farm building.
- 5.7.3 Constraints**
- 5.7.3.1 An activity survey covering all elevations of barn 1 and between the months of May and July has not been undertaken.

6.0 IMPACT ASSESSMENT

6.1 Barn 1 supports a common pipistrelle, soprano pipistrelle, whiskered and brown long-eared day roost. The proposed development to barn 1 will involve the conversion of the building into accommodation. Unsupervised structural work, erection of scaffolding, removal of tiles, re-roofing, re-pointing, new glazing, internal refurbishment and soft strip will result in major disturbance to the roosts. Bats are susceptible to disturbance as a result of a development affecting a roost site. The pre-construction period of the development will result in significant alterations and disturbance to the roost sites.

6.2 **Initial impacts: disturbance** (human presence, noise, vibration, dust, lighting, access obstruction due to scaffolding and plastic sheeting etc.)

- The construction of scaffolding against the roof of the barn which will cause an obstruction to the access points = minor negative at a site level.
- Roof stripping could kill/injure bats if they are resting between tiles and the contractor steps on the tiles to gain higher access = major negative at a site level.
- Lighting during night working could lead to disturbance of emerging and foraging bats, potentially leading to roost abandonment in the short term = moderate negative impact at site level.
- Vibration, noise and dust from building works may impact on roosting bats that may be present and this may lead to roost abandonment = moderate negative at a site level.
- The works involve re-roofing the roof under which the bats are roosting, if bats are resting on the ridge beam, there is the potential for disturbing bats = moderate negative at a site level.

6.3 **Long-term impacts: roost modification**

6.3.1 No modification of roosts will occur.

6.4 **Long-term impacts: roost loss**

- Based on current information and in the absence of mitigation, the conversion of barn 1 will involve the permanent loss of 4 separate day roosts and a transitional roost.
- The removal of the roofing and roof timbers will result in major disturbance to the roosts located in the roof structure and there is potential for killing/injuring bats if heavy force is used to remove the roof components = major negative at a site level.
- The works involve re-roofing the roof under which the bats are roosting, if bats are found beneath tiles or if they are roosting on or above the ridge beam, there is the potential for killing/injury of bats = major negative at a site level.
- The sealing up of the access points during pointing up of the external stone work and internal plastering could kill/injure bats through entombment if bats are roosting within the crevice = major negative at a site level.
- New glazing could trap bats inside the building, and this could kill/injure bats that are roosting in the internal structure = major negative at a site level.
- Removal of windows/doors could kill/injure bats if they are resting in gaps adjacent and heavy force is used to remove the frames = major negative at a site level.

- Removal of stonework/lintels could kill/injure bats if they are resting in gaps adjacent and heavy force is used to remove the masonry = major negative at a site level.

6.5 Long term impacts: fragmentation and isolation of roost

6.5.1 There are no plans to alter the habitat on site and consequently, there will be no fragmentation and isolation during the development as the surrounding, supporting habitat will not be affected.

6.6 Post development: interference impacts

6.6.1 An increase in lighting through the installation of security lighting on the external walls of buildings will affect bat activity in the location of the roost sites. Low level security lighting will be installed on the new buildings on site however this will not shine into the adjacent foraging habitat or bat box locations.

6.6.2 Based on current data, the impact from lighting to bat species foraging and commuting around the Application Site is likely to be negligible.

6.7 Predicted scale of impacts

6.7.1 The current information obtained is based on a desk top study, visual inspection and activity surveys conducted in June 2019, August 2020, September 2020 and an endoscope survey in mid November 2020.

6.7.2 The common pipistrelle and soprano pipistrelle day roosts in barn 1 are of low conservation significance to Yorkshire. The roosts each contain less than 15 individual bats and are most probably occupied by male bats or none breeding females. Male summer roosts of a common and widespread species are of low conservation significance and therefore, the loss of the roosts will not have a significant impact at a local, regional or national level.

6.7.3 The common pipistrelle transitional roost and the brown long-eared day roost in barn 1 are also of low conservation significance to Yorkshire. The roosts each contain less than 2 individual bats. Day/transitional roosts of a common and widespread species in low numbers are of low conservation significance and therefore, the loss of the roosts will not have a significant impact at a local, regional or national level.

6.7.4 On a site level, the whiskered roost is important as “open barns” with adequate provision of roost sites and un-obstructed flight space are not common in the local area. Nationally whiskered bats are an endangered species. Regionally they are present but there are few confirmed records. The roost contains less than 2 individual bats and is most probably occupied by male bats or none breeding females. Male day roosts of a common and widespread species are of low conservation significance and therefore, the loss of the roosts will not have a significant impact at a local, regional or national level.

6.8 Summary of predicted scale of impacts - in the absence of mitigation

Species and numbers	Roost type	Predicted Scale of Impact			Notes
		Site	County	Regional	
Common pipistrelle x 13	Day	X			In the absence of mitigation, the building works would cause the loss of a day roost used by 13 bats. No evidence to suggest a maternity roost or significant numbers of bats.
Common pipistrelle x 1	Transitional	X			In the absence of mitigation, the building works would cause the loss of a transitional roosts used by bat.
Brown long-eared x 1	Day	X			In the absence of mitigation, the building works would cause the loss of a day roosts used by bat.
Soprano pipistrelle x 9	Day	X			In the absence of mitigation, the building works would cause the loss of a day roost used by 9 bats. No evidence to suggest a maternity roost or significant numbers of bats.
Whiskered x 1	Day	X			In the absence of mitigation, the building works would cause the loss of a day roosts used by bat.

6.8.1 Based on the survey data, assessment and guidance from the Bat Mitigation Guidelines (page 39, English Nature 2004) the overall accumulative impact of the development on bat populations is considered to be **low**.

6.8.2 Bat activity surrounding the buildings was also low, with a total of 6 species of bats observed foraging and commuting.

7.0 MITIGATION & COMPENSATION

7.1 Legal Protection

7.1.1 Legal obligations towards bats are generally concerned with roost protection. All developments, known to contain bat roosts, require a development licence from Natural England. Under the Wildlife and Countryside Act (1981) and the Habitats and Species Regulations 2017 (as amended), it is an offence for anyone without a licence to:

- Deliberately take, injure or kill a wild bat
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a place used by bats for breeding or resting (roosts) (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat of a species found in the wild in the EU (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

7.1.2 Planning consent for a development does not provide a defence against prosecution under these acts.

7.1.3 **Bat roosts are protected throughout the year, whether bats are present or not.**

7.1.4 **As barn 1 supports a common pipistrelle, soprano pipistrelle, whiskered and a brown long-eared day roosts and a common pipistrelle transitional roost, any works that will disturb, modify or permanently lose the roost will require a development licence from Natural England. It is also possible that individual bats could turn up roosting in other parts of the barn and or wider site at other times of year.** A licence will be obtained prior to the following works commencing on the barn:

- Exclusion of bats and destructive searches by a bat licensed ecologist
- Roof stripping and maintenance work
- Erection of scaffolding adjacent to the barn and within 5m of a roost
- Pointing of masonry
- Soft strip
- New windows and doors
- Internal conversion

7.1.5 Mitigation is required to avoid or reduce the impact of a development on roosting and feeding bats present on site. Mitigation is designed to meet the requirements of the bat species present in the roost. The Bat Mitigation Guidelines (2004) defines the key principles which will be required in mitigation proposals. These are: modifying the scheme design, altering the timing of the works and the creation of replacement roosts and/or habitats.

7.1.6 The licence application process currently requires the input of a qualified bat ecologist/consultant and includes:

- A walk over survey/check must be undertaken within 3 months prior to the Natural England application submission to ensure that conditions have not changed since the most recent survey was undertaken. Details of any changes to conditions and habitats and/or structures on site since the surveys were undertaken will be documented.

- The submission of a licence to capture, disturb and/or destroy the roosts or resting places of bats.
- The production of a detailed Method Statement to support the application. **This will** include a proposed work programme. One copy will be sent to a Natural England wildlife adviser for assessment. It should be noted that the Method Statement will be appended to any licence granted. The Method Statement will include the necessary mitigation required of the development. This will include:
 - A work timetable which must be followed. This will include completing works when bats are not present in their roost (winter) or when bats are less vulnerable to disturbance (spring/autumn).
 - A suitable mitigation plan allowing bats to be able to roost in a like for like replacement for any closed roost (this can be allowing bats back into the roof void).
 - Additional bat boxes placed as habitat improvement.
 - Bats must not be left without a roost during the active season (April to September inclusive).
- The production of a Reasoned Statement of Application to support the application. This will provide a rational and reasoned justification as to why the proposed activity meets the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended), Regulations 53(2) (e-g) and 53(9) (a-b).
- The usual timescale expected for the process of an application is approximately 30 working days from the date of acknowledgement of receipt. Natural England wildlife advisers are given 20 working days to fulfil requests for information. This timescale will also apply to requests for licence amendments.
- Additional on-site surveys, watching brief and implementation of license by a bat ecologist.
- For additional information on licences please refer to Natural England Guidance Leaflet WML-G12 (see www.naturalengland.org).


7.1.7 The site does not meet the criteria for a Natural England Bat Mitigation Class Licence due to the number of bats and or number of roosts present.

7.2 Mitigation Strategy

- 7.2.1 Natural England requires mitigation and compensation to be proportionate to the size of the impact and the importance of the population affected and as a principle:
- There should be no net loss of roost sites and that compensation should provide an enhanced resource since the adoption of new roost sites by bats is not guaranteed.
 - Compensation should ensure that the affected bat population can continue to function as before, so attention may need to be given to surrounding habitats.
 - The strategy should be considered to ensure that the bat populations at the site are maintained at a favourable conservation status.
 - English Nature (page 39, Bat Mitigation Guidelines 2004) provide guidance on proportionate mitigation depending on the number, species and conservation status of bats observed.

- 7.2.2 The common pipistrelle, soprano pipistrelle, whiskered and brown long-eared roosts in barn 1 at Beacon Farm are of low conservation significance and therefore requires 'more or less like for like' replacement with no constraints on timing.
- 7.2.3 As the barn supports only a single whiskered and brown long-eared bat, a bat loft has not been recommended for this site.

English Nature (2004) guidelines for proportionate mitigation. The definition of common, rare and rarest species requires regional interpretation.

Low	Roost status	Mitigation/compensation requirement (depending on impact)
Conservation significance 	Feeding perches of common/rarer species Individual bats of common species Small numbers of common species. Not a maternity site	Flexibility over provision of bat-boxes, access to new buildings etc. No conditions about timing or monitoring
	Feeding perches of Annex II species	Provision of new roost facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species' requirements. Minimal timing constraints or monitoring requirements
	Small numbers of rarer species. Not a maternity site	
	Hibernation sites for small numbers of common/rarer species	Timing constraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for 2 years preferred.
	Maternity sites of common species	
	Maternity sites of rarer species	Timing constraints. Like-for-like replacement as a minimum. No destruction of former roost until replacement completed and usage demonstrated. Monitoring for at least 2 years.
	Significant hibernation sites for rarer/rarest species or all species assemblages	
	Sites meeting SSSI guidelines	Oppose interference with existing roosts or seek improved roost provision. Timing constraints. No destruction of former roost until replacement completed and significant usage demonstrated. Monitoring for as long as possible.
High	Maternity sites of rarest species	

7.3 Method Statement

7.3.1 The method statement has been produced based on current survey data. The information will guide any modifications required to the scheme design, outline necessary timing of the works and recommend the creation of replacement roosts and/or habitats. The information contained within the following method statement will be used as **guidance** to support any subsequent Natural England development license.

7.3.2 Timing

7.3.2.1 It is recommended that the initial start date of the development should avoid late October – early March. This will prevent disturbance to potentially hibernating bats. If the initial start day is programmed for the winter, a hibernation survey must be conducted prior to works commencing.

7.3.2.2 There are no other mandatory timing constraints when low numbers of summer roosting bats are observed.

7.3.2.3 A late discovery plan will need to be included in the final method statement to outline measures to be implemented in the event that bats are discovered during the development.

7.3.2.4 The building works must be carefully programmed so that roosting opportunities are permanently available during the development. Permanent and/or temporary roost sites will be provided prior to building works. Bat boxes will be placed on trees or buildings within 50m of the existing roost sites to ensure roosting opportunities are available throughout the development period.

7.3.3 Site Induction

7.3.3.1 Prior to works commencing on site, the bat ecologist will present a tool box talk to the license holder, client, site manager, contractors and those involved with site works that may impact upon bats. The toolbox talk, and accompanying method statement will include, but not restricted to the following:

- Introduction to bats on site
- Background to bats
- Legislation relating to bats
- Description of bat roost locations as described in table 5.6.
- Licensable activities
- Method Statement
- Mitigation*
- What to do if bats are discovered
- Figure E2a – Location of roost sites.
- Figure E3 – Location of mitigation*.
- Figure D – Impacts Plan and licensable works.
- Work Schedule.
- Natural England Annex License*.

* If applicable

7.3.3.2 The toolbox talk will only be presented by the named bat ecologist on the Natural England license documentation and the method statement and license will be kept on site at all times.

7.3.4 Pre-Works Surveys

7.3.4.1 A dusk survey (under suitable weather conditions ($>6^{\circ}\text{C}$)) will be undertaken to assess activity.

7.3.4.2 An endoscope will be used to conduct a thorough inspection of all features with bat roosting potential including known roost sites, internal roof timbers, roof structures and masonry of the barn; this is in order to detect any roosting bats, prior to works. Empty crevices and gaps will be blocked immediately with pieces of foam prior to disturbance works.

7.3.4.3 A safe working platform will be required so that a thorough and safe inspection can be undertaken. This will be either scaffolding, mobile elevated work platform or similar.

7.3.5 Exclusion of Roosts

7.3.5.1 To enable the exclusion to take place in the barn, an assessment will be made to determine the current level of bat activity. If bats are roosting, an exclusion of roosts will be undertaken. The method to be implemented will aim to exclude bats from the roost by closing access points and allow for them to leave un-stressed on their own accord but not enabling their return, therefore eliminating the chance of bats being present during the development. Capture and removal by hand will only be used where absolutely necessary and possible. The capture of bats is not planned as a method during the exclusion of bats from the barn and will only be required as an absolute last option.

7.3.5.2 A device will be used to exclude roosts 1 - 5. Exclusion of bats will be undertaken if suitable weather conditions prevail (night time temperatures for four consecutive nights are $> 6^{\circ}\text{C}$).

7.3.5.3 The exclusion devices will either be constructed from a plastic sheet (or similar material) or a section of smooth drainage pipe (or similar) with a diameter of 50mm. This will be secured around the roost in order to allow the bat to leave the roost but prevent its return, exclusion devices will remain for 5 days under suitable weather conditions or remain longer until suitable weather conditions prevail.

7.3.5.4 Once the bat ecologist is satisfied that the roosts are empty, the roost access points will then be blocked immediately. Gaps and cracks with potential to be used as roosts will also be checked with an endoscope and blocked during exclusion.

7.3.5.5 If necessary, the internal roosting whiskered and brown long eared bats will be excluded by blocking the access to the barn through the west elevation opening. A timber framed, plywood board will be constructed and fitted to the door to ensure there are no gaps. Other openings that have potential points of access into the barn will also be sealed during the exclusion process. The west door will be opened 30 minutes prior to sunset until the bats have left the interior of the barn. At the end of this period an emergence survey (under suitable weather conditions ($>8^{\circ}\text{C}$)) will

be undertaken to assess whether the bats have vacated the barn. Anabat will be left in the barn to monitor activity and help confirm exclusion.

- 7.3.5.6 After successful exclusion, the following will take place:
- Doorways will remain blocked from 30 minutes before sunset until sunrise whilst the work is in progress, or until the barn no longer provides potential roosting habitat. This will be determined by the bat ecologist.
 - All exclusion devices will be removed, and roosts blocked using expanding foam or a similar substance.

7.3.6 Destructive Search

7.3.6.1 In order to further reduce any unnecessary disturbance, injury, or death of any late discoveries of individual bats roosting in the barn, all external fittings and fixtures with bat roosting potential (roof coverings, roof timbers, masonry, doors/window frames, timbers etc.) will be carefully removed, by hand under the watching brief of a bat ecologist.

7.3.6.2 All roof coverings with bat roosting potential will be removed by hand. During the spring, summer and autumn period, only half of the roof should be removed on the first day and the second half 24 hours later. This will create unfavourable conditions for any bats still roosting within the roof structure and encourage the bats to leave on their own accord.

7.3.7 Late discoveries

- 7.3.7.1 In the event that bats are discovered, the following will be implemented:
- Immediately stop the work that you are undertaking.
 - Do not expose the bat or cause it to fly out of the roost on its own accord.
 - Contact Wold Ecology on 01377 200242 or 07795 071504 for advice.
 - Advise colleagues in the vicinity of your work why you have stopped and advise them to be aware of the potential for bats being disturbed, injured or killed.
 - Immediately report the matter to your site manager/line manager who will inform relevant personnel.
 - Grounded bats must be carefully placed in a lidded, ventilated box with a piece of clean cloth and a small shallow container with some water. The box must be kept in a safe and quiet location.
 - Any underweight or injured bats must be taken into temporary care by an experienced bat carer and looked after until such time that the bat can be transferred to a suitable replacement roost at the same site, or weather conditions are suitable for release at the same site.
- 7.3.7.2 Bats should only be handled by a licensed bat ecologist, wearing gloves, who has received a rabies vaccination. The bat will be placed either into a holding box, with water provided and re-released close to the site at dusk or placed into a bat box located on site.
- 7.3.7.3 Injured bats will be taken into care (as directed by the Bat Workers Manual, section 7.3, pages 64 – 66: 3rd edition 2004) and fed and cared for until such time when conditions are suitable (night time temperature are $>6^{\circ}\text{C}$) for them to be released at dusk on site. Bats will only be handled by an ecologist, licensed to handle bats.

- 7.3.7.4 If building and re-roofing work is taking place during winter, there remains the low possibility of encountering hibernating bats. The capture of bats is not planned as a method of exclusion during winter months and will only be required as an absolute last option i.e. if the bat is at risk of injury and death.
- 7.3.7.5 In the event that hibernating bats are discovered, a minimum buffer area of 3m² will be created around the roost. If applicable, all work lighting will face away from the roost to ensure that light contamination and heat do not disturb the bat. The bat will be left undisturbed in situ until night time temperatures are >6°C consistently for approximately four nights and the bat can either move by its own accord or can be excluded from the roost.
- 7.3.7.6 If any torpid bats are disturbed and aroused, they will be placed in a Schwegler 1FW hibernation box on site. The 1FW bat box will be located within 50m of the roost and at an accessible height (<5m above ground level) for the bat ecologist to access easily. Four temporary hibernation boxes will be available so that different species can be placed in separate boxes.
- 7.3.7.7 If the night time temperature is above 6°C and the bat is active, it will be first placed in a holding bag and transferred to a Schwegler bat box that will be located within 50m of the bat roosts and at an accessible height (<5m above ground level) for the bat ecologist to access easily.

7.4 Mitigation

- 7.4.1 This mitigation strategy is based on survey data currently held. The mitigation strategy will ensure that the bat populations on site are maintained at a favourable conservation status by the retention of the original roost sites where possible. In addition, new roosting opportunities will be created through the provision of bat boxes and roosting opportunities. There should be a net gain in roosting opportunities post development.

7.5 In situ retention of bat roosts

- 7.5.1 There will be no in situ retention of bat roosts.

7.6 Modification of existing roosts

- 7.6.1 There will be no modification of existing bat roosts.

7.7 New Roost Creation

- 7.7.1 It is usually recommended that the original roost site is re-created and in addition, new roosting opportunities will be created. However, the design of the building and building control restrictions, re-creation of the original roost sites is not possible for this site.

7.8 Bat boxes

- 7.8.1 Wold Ecology recommends that two 1WI hibernation bat boxes are located on the south and north elevations of the barn. The 1WI bat tubes will be erected behind the outer stone and a 20mm x 40mm gap in the mortar will remain open to allow bat access into the bat box. The bat box will not be visible and therefore satisfies the requirements of the planning department. John Drewett (North Yorkshire Bat Group) stated that this has worked on previous schemes and ensures that the bats are contained within a designated location within the barn structure.
- 7.8.2 Two open bottomed, rough sawn, slot boxes will be sited within the internal roof structure of existing open barns at Beacon Farm; the exact location will be determined by the bat ecologist. These will be constructed from rough sawn soft wood measuring 300mm deep by 450 – 600mm long leaving a narrow space about 30mm wide (see plate 8).

Plate 8 - Example of an open bottomed slot box (Wold Ecology Ltd)

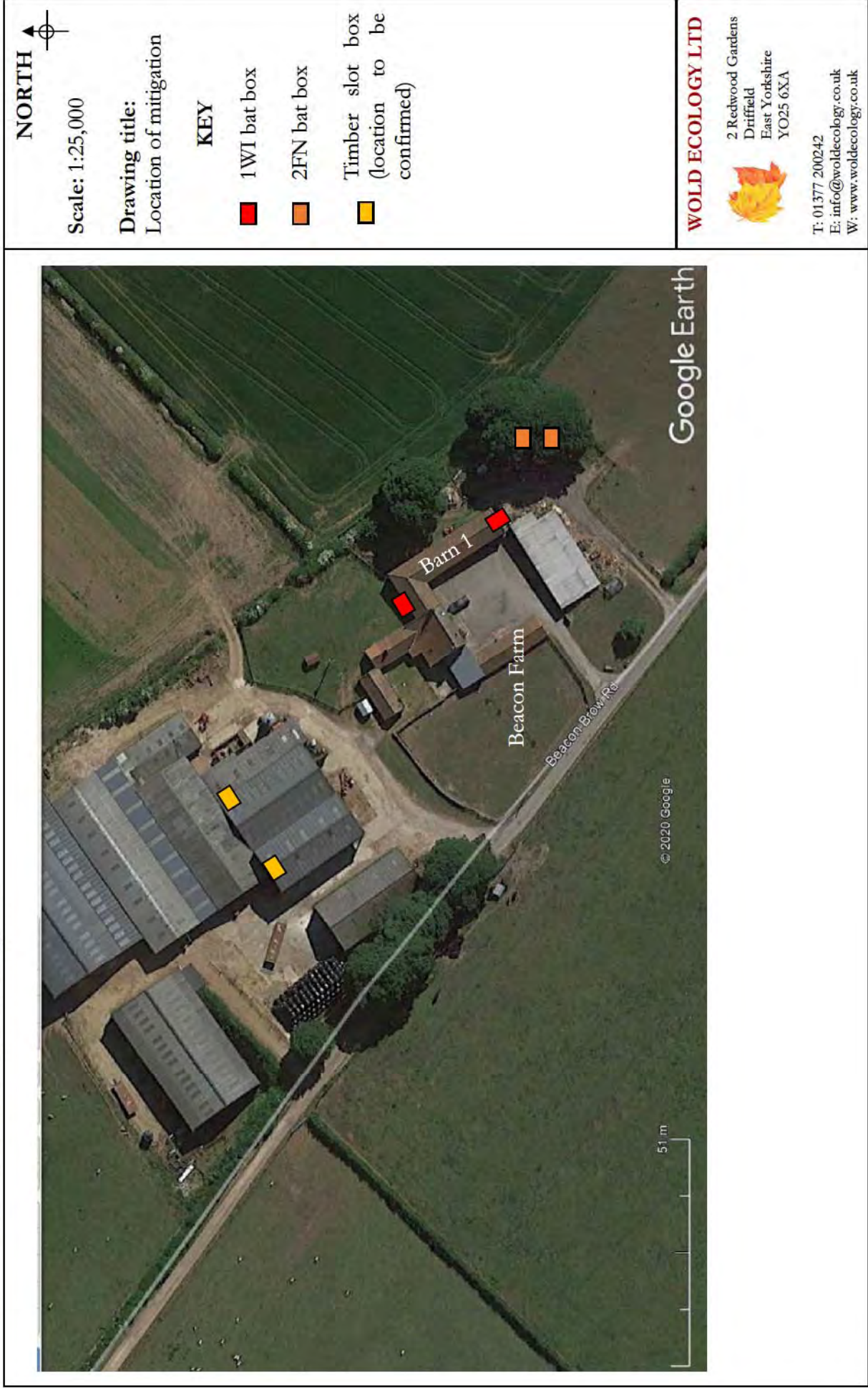


- 7.8.3 Wold Ecology recommends that two Schwegler 2FN bat boxes are sited on trees within the grounds of Beacon Farm as biodiversity gains. Schwegler Bat Boxes are recommended and well tested boxes and should be erected on south, east or west aspects of the trees; 3-5 metres above ground level. The 2FN bat box has two entrances - one at the front and one at the rear against the tree. Bats often creep into the rear entrance but leave by the front. It has a domed roof to allow the bats to form roosting clusters for warmth and this bat box is also designed to be effective against small predators and excludes draughts and light. Due to the opening on the bottom, this bat box does not require cleaning.
- 7.8.4 The bat boxes are self-cleaning as they are designed so that the droppings fall out of the entrance. This reduces the possibility of smell during the summer months. For more information on designs and installation of bat boxes see: www.schwegler-natur.de and www.bct.org.uk.

- 7.9 Lighting
- 7.9.1 Lighting has a detrimental effect on bat activity; many bats will actually avoid areas that are well lit. Lighting can cause habitat fragmentation by preventing bats from commuting between roosts and foraging grounds (A.J Mitchell-Jones 2004).
- 7.9.2 It is recommended that a lighting consultant is employed to design a lighting plan based on the following principles:
- Luminaire and light spill accessories - Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only.
 - If applicable, the height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting, this can take the form of low level lighting that is as directional as possible and below 1 lux at ground level.
 - Aim for lighting column of 5m or less, hooded and cowled to prevent light spill, for main lighting columns.
 - All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
 - LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
 - A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
 - Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
 - Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill.
 - The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered.
 - Only luminaires with an upward light ratio of 0% and with good optical control should be used.
 - Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
 - Any external security lighting should be set on motion-sensors and short (1min) timers.
 - As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
 - Light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding
- 7.9.3 At this site, new lighting design will ensure lights will **not** be mounted where they will shine directly on to bat boxes or the surrounding woodland/hedgerows habitat used by foraging and commuting bats. A light intrusion lux level besides woodland edges/hedgerows along the eastern boundary will be 1 lux or below.
- 7.10 Timber treatment
- 7.10.1 It is good practice, where bats may come into contact with roof timbers, to carry out timber treatment using Permethryn type chemicals on the Natural England list of approved safe chemicals. New pre-treated timbers i.e. tanalised timber will be

allowed to dry thoroughly before use, if applicable. A list of Natural England approved paints and timber treatments is available at <https://www.gov.uk/guidance/bat-roosts-use-of-chemical-pest-control-products-and-timber-treatments-in-or-near-them>

7.11 Location of recommended mitigation



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www.bats.org.uk

9.0 APPENDICES

9.1 Background to Bats - Bat Biology.

- 9.1.1 Bats roost in a variety of places such as caves, mines, trees, and buildings. Woodlands, pasture, ponds and slow flowing rivers or canals provide suitable feeding areas for bats as they support an abundance of suitable insect forage. Bats tend to feed during the first two to three hours after sunset and again before dawn, when insect activity is at its most intense (JNCC 2004).
- 9.1.2 Bat activity over the course of a year reflects the seasonal climate and the availability of food as follows (The Bat Conservation Trust, undated):
January - March - insect prey is scarce, and bats will hibernate alone or in small groups.
April - May - insects are more plentiful and bats will become active. They may become torpid (cool and inactive) in bad weather. Females will start to form groups and will roost in several sites.
June - July - females gather in maternity roosts and give birth to young, which are suckled for several weeks. Males roost alone nearby.
August - September – mothers leave the roost before the young. Bats mate and build up fat for the winter.
October - December – Bats search for potential hibernacula. They become torpid for longer periods and then hibernate.
- 9.1.3 Bats do not stay in the same roost throughout the year. They have different requirements of roosts at different times of the year. During late April/May the bats leave their winter roosts and the females come together to form ‘nursery roosts’, these usually consist of pregnant females along with a few non-breeding and immature females. At this time, the males roost either singly or in small numbers. The single offspring is born during late June early July and can fly within 3-5 weeks.
- 9.1.4 Typical roost sites are cracks and crevices in buildings and other structures but more typically under hanging tiles, slates, soffits and cavity walls of fairly modern buildings or holes and splits in trees.
- 9.1.5 The conditions needed by bats for hibernation require the maintenance of a relatively stable low temperature (2 – 6°). Suitable sites include; old trees, caves, cellars, tunnels, and icehouses.
- 9.1.6 Whilst the summer roosts consist of single species (although 2 – 3 species can be found within one large structure but occupying separate roost sites), winter sites often consist of 4 – 6 different species of bat, although there is often niche separation.
- 9.1.7 Bats have a complex social structure based on ‘meta populations’ and also utilise other transitional or intermediate roost sites. The several different types of roost, which bats occupy throughout the year, are as follows:
- **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:** 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. These have to be cold and free from any temperature fluctuation with high humidity. The coldness enables bats to lower their body temperature and become torpid. This saves a lot of energy, enabling them to survive on the fat stores within their bodies that they have built up throughout the summer.
- **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.

9.1.8 The main threats to bats include:

- Habitat loss (e.g. deforestation)
- Loss of feeding areas as a result of modern forestry and farming practices.
- Use of toxic agrochemicals and remedial timber treatment chemicals.
- Disturbance and damage to bat roosts.

9.1.9 Bats have been in decline both nationally and internationally during the latter part of the 20th Century. Bats require a variety of specific habitats in order to meet the basic needs of feeding, breeding, and hibernating and are therefore extremely vulnerable to change such as the loss of flight lines through the removal of hedgerows. It is thought that even the two most common and widespread bats, the common pipistrelle and the soprano pipistrelle, have declined by an estimated 70% (1978-1993 figures). There are a number of bat species, which are now considered seriously threatened with one species, the greater mouse-eared bat being classed as extinct as it is no longer breeding in the U.K.

9.1.10 All European bats are listed in Annex IV of the EC Directive 92/94/EEC ‘The Conservation of Natural Habitats and of Wild Fauna and Flora’ as needing “strict protection”. This is translated into British Law under the Habitats and Species Regulations 2017 (as amended). British bats are included under Schedule 5 of the Wildlife & Countryside Act 1981. They can therefore be described as a ‘fully protected’ or ‘protected’ species.

9.1.11 A summary of the legal protection afforded to bats under both European and British law is provided by the Bat Conservation Trust (BCT, 2010): ‘All European bat species and their roosts are listed in Annex IV of the EC Directive 92/94/EEC ‘The Conservation of Natural Habitats and of Wild Fauna and Flora’ as needing “strict protection”. This is implemented in Britain under the Conservation of Habitats and Species Regulations 2017 (as amended) which has updated the Conservation (Natural Habitats &c.) Regulations (as amended). In summary, in the UK, it is an offence to:

- Deliberately capture, injure, or kill a bat;
 - Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young, hibernate or migrate or significantly affect the local distribution or abundance of the species;
 - Damage or destroy a roost (this is an absolute offence); and
 - Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.’
- 9.1.12 The species is also listed in Appendix II of the Bonn Convention (and its Agreement on the Conservation of Bats in Europe) and Appendix II of the Bern Convention (and Recommendation 36 on the Conservation of Underground Habitats). Although these are recommendations and not statutory instruments.
- 9.1.13 Natural England is the Government body responsible for nature conservation. Local planning authorities must consult them before granting planning permission for any work that would be likely to result in harm to the species or its habitat. Natural England issue “survey” licenses for survey work that requires the disturbance or capture of a species for scientific purposes. They also issue “conservation” licenses that are required for actions that are intended to improve the natural habitat of a European protected species or to halt the natural degradation of its habitat.
- 9.1.14 ‘Development’ licences are issued by Natural England for any actions that may compromise the protection of a European protected species, including bats, under the Conservation of Habitats and Species Regulations 2017 (as amended). This includes all developments and engineering schemes, regardless of whether or not they require planning permission.
- 9.1.15 The UK Biodiversity Action Plan states that although the pipistrelle is one of the most abundant and widespread bat species in the UK, it is still thought to have undergone a significant decline in the latter part of this century. The main factors cited for causing loss and decline include:
- A reduction in insect prey abundance, due to high intensity farming practice and inappropriate riparian management.
 - Loss of insect-rich feeding habitats and flyways, due to loss of wetlands, hedgerows, and other suitable prey habitats.
 - Loss of winter roosting sites in buildings and old trees.
 - Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.
- 9.2 Significance of bat roosts, appraising the nature conservation value;**
- 9.2.1 The significance of bat roosts should be appraised against the following table. Where the extent of the bat roost is unclear a precautionary approach should be taken in evaluating the significance of the roost and the highest potential category should be selected.

Table 9.2.1 Appraisal of significance of bat roosts.

Scale	Summary	Examples
International	Any significant roosting sites for European Annex 2 species	Barbastelle bat roosts are only known applicable feature in East Anglia.
National	Any roosts qualifying as SSSI under the EN criteria.	Details of criteria are given in 9.1.2 Site Selection Guidelines for Biological SSSI's.
Regional	Any significant bat roosts and features, equivalent in interest to qualifying a site as a Country Wildlife Site.	Breeding and hibernation roosts of most species.
Local	All other sites supporting feeding bats as Wildlife and Countryside Act protected species.	Bats foraging within a structure, night roosts and minor transition roosts.

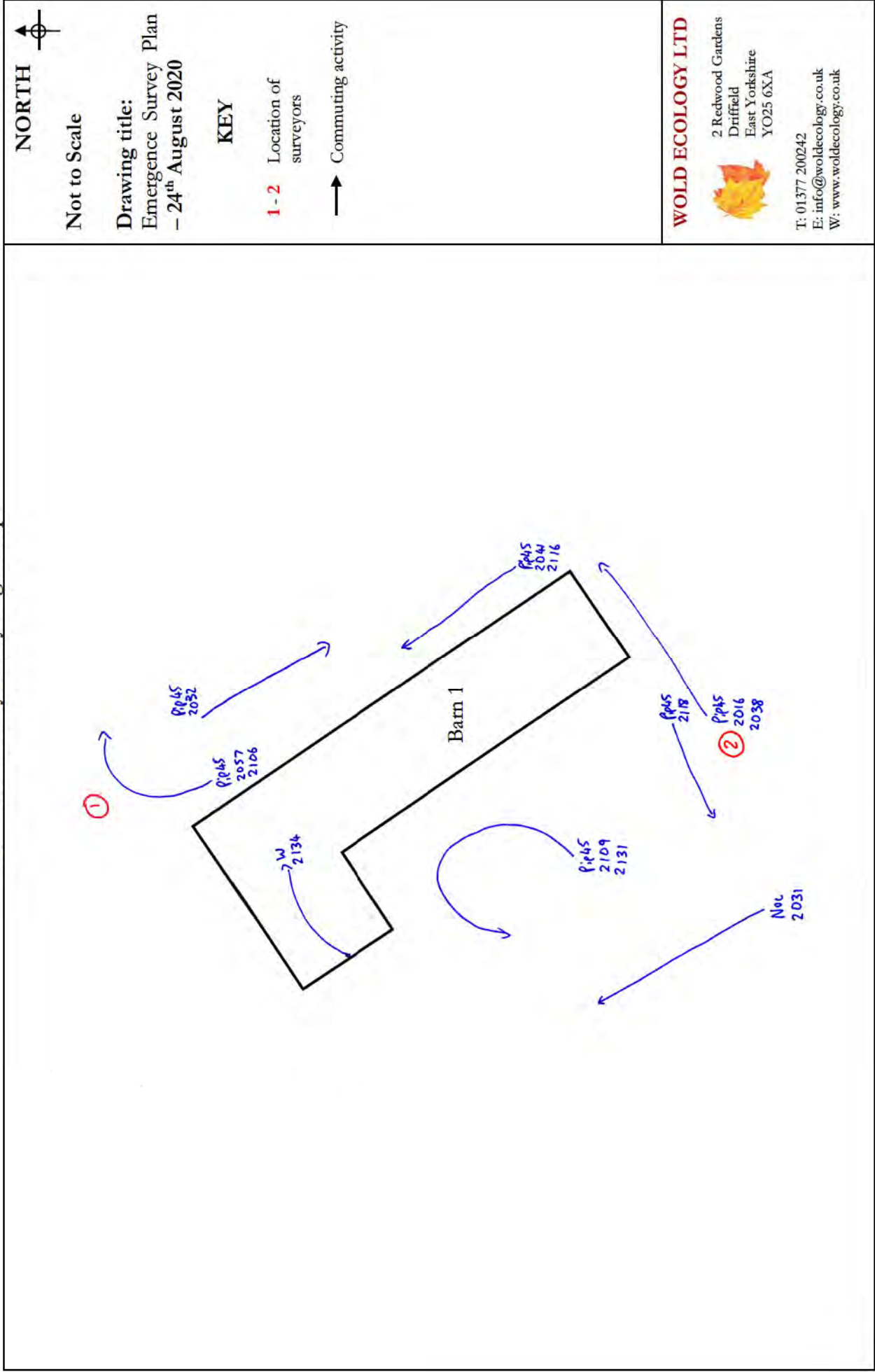
9.3 Summary of conservation significance of roost types (Bat Mitigation Guidelines, 2004).

Roost type	Development effect	Scale of impact		
		Low	Medium	High
Maternity	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction; modification		✓	
	Temporary disturbance outside breeding season	✓		
	Post-development interference			✓
Major hibernation	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction; modification		✓	
	Temporary disturbance outside hibernation season	✓		
	Post-development interference			✓
Minor hibernation	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction, modification		✓	
	Modified management		✓	
	Temporary disturbance outside hibernation season	✓		
	Post-development interference		✓	
	Temporary destruction, then reinstatement	✓		
Mating	Destruction		✓	
	Isolation caused by fragmentation		✓	
	Partial destruction	✓		
	Modified management	✓		
	Temporary disturbance	✓		
	Post-development interference	✓		
	Temporary destruction, then reinstatement	✓		
Night roost	Destruction	✓		
	Isolation caused by fragmentation	✓		
	Partial destruction	✓		
	Modified management	✓		
	Temporary disturbance	✓		
	Post-development interference	✓		
	Temporary destruction, then reinstatement	✓		
<p>NB This is a general guide only and does not take into account species differences. Medium impacts, in particular, depend on the care with which any mitigation is designed and implemented and could range between high and low.</p>				

9.4 Bat records for activity surveys conducted in 2020

Date – 24 th August 2020					
Loc.	Time	Species	kHz	Direction	Comment
2	2016	C. Pipistrelle	45	E	Commuting
2	2031	Noctule	20	N	Commuting
1	2032	C. Pipistrelle	45		Commuting
2	2038	C. Pipistrelle	45	E	Commuting
2	2041	C. Pipistrelle	45	N	Commuting
1	2057	C. Pipistrelle	45	N	Commuting
1	2106	C. Pipistrelle	45	N	Commuting
2	2109	C. Pipistrelle	45	N	Commuting
2	2116	C. Pipistrelle	45	N	Commuting
2	2118	C. Pipistrelle	45	W	Commuting
2	2131	C. Pipistrelle	45	N	Commuting
2	2134	Whiskered	47	-	Emerged from inside barn 1 Roost 5
Date – 22 nd September 2020					
1	0450	Brandt's	47	S	Commuting
2	0456	Brown long-eared	39	-	Returned to a gap above the internal partition wall Roost 3
2	0516	C. Pipistrelle	45	W	Commuting
2	0521	S. Pipistrelle	55	N	Commuting
2	0537	C. Pipistrelle	45	N	Commuting
N	0550	S. Pipistrelle	55	N	Commuting
1	0559	S. Pipistrelle	55	W	Commuting
1	0614	S. Pipistrelle	55	W	Commuting
2	0621- 0640	S. Pipistrelle x 9	55	-	Returned to a gap in the external stonework on the south gable Roost 4

9.5 Bat Activity Survey Flight Maps





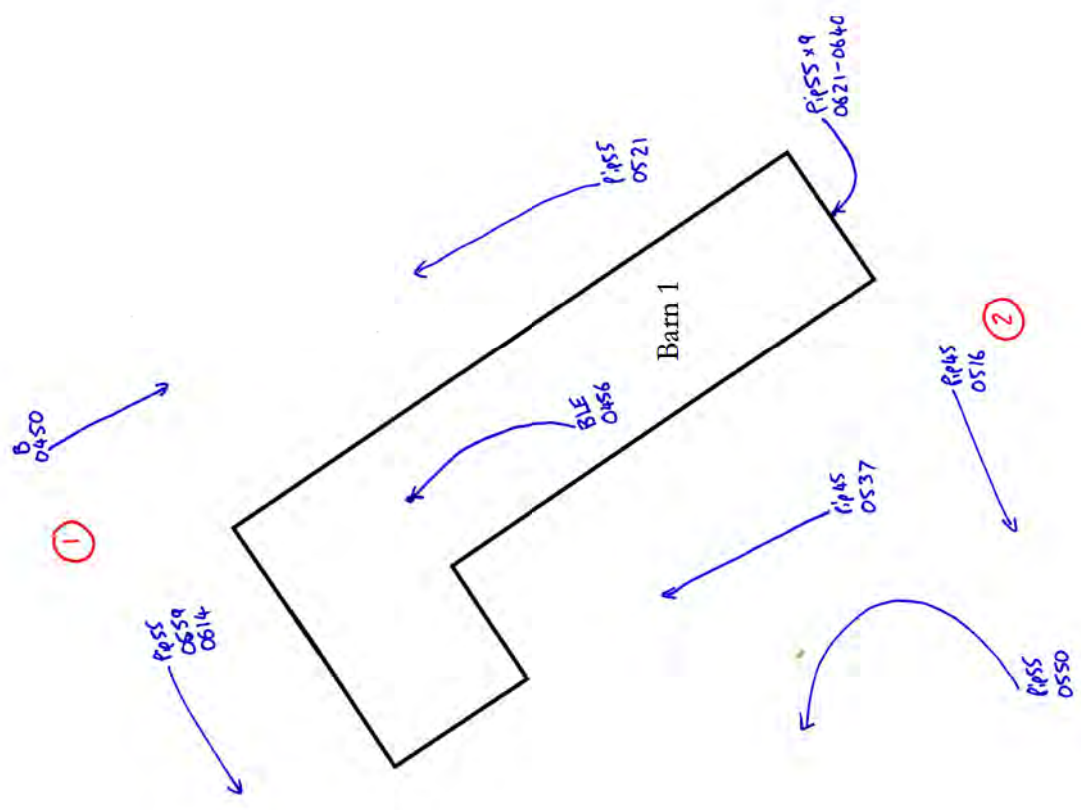
Not to Scale

Drawing title:
Return Survey Plan -
22nd September 2020

KEY

1-2 Location of
surveyors

→ Commuting activity



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NYMNPA

20/06/2022

Inspection of
Beacon Farm, Limestone Road, Scalby, YO13 0RB

for

Mr. Paul Cass

By R.O. Birdsall M.Sc, M.I.C.E

Chartered Engineer



TM
bhd
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1.0 Introduction

- 1.1 We confirm that we made an inspection of Beacon Farm, Limestone Road, Scalby, on 25th May 2022.
- 1.2 The inspection and report is confined to matters directly affecting structural stability.
- 1.3 The walls all consist of sandstone, approximately 450mm wide.
- 1.4 It is intended to remove the pantiles and overhaul the roof before replacing the pantiles.

2.0 Observations

- 2.1 The north-west facing elevation can be seen in photograph 1. The wall is in reasonable condition except for some weathering of the face of some stone blocks, particularly in the eastern corner, see photograph 2. Also, there are timber lintels over the openings, see photographs 3 and 4.
- 2.2 The south-west facing elevation next to the farmhouse can be seen in photograph 5. The wall is in reasonable condition except for some weathering of the face of some stone blocks, see photograph 6.
- 2.3 The south-west facing elevation at the end of the long beams can be seen in photograph 7.

The wall is in reasonable condition except for a slight defect at the right corner of the arch and some infill stonework immediately above the centre of the arch, see photograph 8. Also, there is a timber lintel over the upper window with a lack of mortar in the joints above, see photograph 9.

- 2.4 The south-east facing elevation can be seen in photograph 10. Most of the wall is similar construction to the other walls except for the wall at the eastern end which was obviously built at a different time. The wall at the southern end can be seen typically in photograph 11. It can be seen that this wall is in reasonable condition except for some weathering of the face of some stone blocks. There are also timber lintels over all openings. The wall at the eastern end can be seen in photograph 12. This wall is not bonded to the next section of wall and the face of the stonework is weathered throughout.

- 2.5 The north-east facing elevation can be seen in photograph 13. This wall has also some weathering and there is cracking around the upper opening, see photograph 14. Also, the lintel over the large opening is showing signs of movement, see photograph 15.
- 2.6 There is an existing first floor at the southern end, see photograph 16. There is also some cracking in the party wall. The remainder of the barns can be seen in photograph 17.
- 2.7 We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect.

3.0 Conclusions and Recommendations

- 3.1 We are satisfied that the barns can safely be converted to residential use subject to the conditions set out below.
- 3.2 The external walls should be lined with an internal skin of blockwork supported on a reinforced concrete floor slab. This blockwork should support the roof and any first-floor joists thus relieving the existing walls of loading.
- 3.3 The roof pantiles should be removed and the roof timbers overhauled to ensure that they comply with current Building Regulations. Similarly, the existing first-floor joists should be checked to ensure that they also comply.
- 3.4 There is a varying amount of weathering to the external face of the stonework. Although this is unsightly, the blocks are so thick that the structural stability is not impaired. However, some local repairs will be needed and the joints need to be repointed. Also, we recommend that the lack of bonding on the south-east facing elevation (where barns were built at different times) should be improved by adding Helifix bars between at approximately 450mm centres.
- 3.5 All timber lintels should be replaced with hidden steel lintels and the slight defect on the stone arch should be carefully repaired. The lintel over the large opening on the north-east facing elevation should be replaced.
- 3.6 All of the work should comply with current Building Regulations.

4.0 Photographs



Photograph 1
Beacon Farm, Limestone Road, Scalby



Photograph 2
Beacon Farm, Limestone Road, Scalby



Photograph 3
Beacon Farm, Limestone Road, Scalby



Photograph 4
Beacon Farm, Limestone Road, Scalby



Photograph 5
Beacon Farm, Limestone Road, Scalby



Photograph 6
Beacon Farm, Limestone Road, Scalby



Photograph 7
Beacon Farm, Limestone Road, Scalby



Photograph 8
Beacon Farm, Limestone Road, Scalby



Photograph 9
Beacon Farm, Limestone Road, Scalby



Photograph 10
Beacon Farm, Limestone Road, Scalby



Photograph 11
Beacon Farm, Limestone Road, Scalby



Photograph 12
Beacon Farm, Limestone Road, Scalby



Photograph 13
Beacon Farm, Limestone Road, Scalby



Photograph 14
Beacon Farm, Limestone Road, Scalby



Photograph 15
Beacon Farm, Limestone Road, Scalby



Photograph 16
Beacon Farm, Limestone Road, Scalby



Photograph 17
Beacon Farm, Limestone Road, Scalby