Ecological Appraisal and Bat Preliminary Roost Assessment

Bridge End Farm, Wood House Lane, Slaidburn

Anser Ecology Limited

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Project: **Bridge End Farm, Slaidburn**

Report Reference: **AE66-R01**

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SUMMARY

- This report has been prepared by Anser Ecology Limited in relation to the site at Bridge End Farm, Woodhouse Lane, Slaidburn, Clitheroe, BB7 3AH. It sets out the findings of a bat Preliminary Roost Assessment (PRA) and extended Phase 1 survey completed on 29th March 2023. The site comprises several buildings, including the main farmhouse, adjoining barns, detached barn, areas of hard standing, bare ground and adjacent pasture and deciduous tree lines. Lanshaw Brook and associated riparian habitat runs along the western boundary of the farmstead.
- Proposals for the site are to restore and modernise the farmhouse, repair the barns and all buildings will require re-roofing and other structural repairs.
- The bat PRA identified **'High'** roosting potential on the house (B1) and adjoining barns (B2a) & (B2b). The detached, stand-alone barn (B3) was determined to have **'Moderate'** roosting potential, The Nissen Hut garage B4 has **'Low**' roosting potential, specifically for cavity bats, it was negligible for crevice bats. All other buildings within the development were classified as having negligible roosting potential.
- Follow-up nocturnal surveys, appropriate to the level of roosting potential, and conducted during the active bat season (core period May to August, inclusive) will be required prior to any structural or roofing works on the buildings. Surveys should be undertaken in accordance with the *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd Edition).
- The walkover also identified evidence of various nesting birds utilising the buildings in previous years, including barn swallow. The detached barn (B3) also has limited (non-breeding) potential for roosting barn owl. If impacts to this building are proposed then further survey to determine any current use by barn owl can be completed concurrently with bat surveys.
- Any future re-development of the site should include enhancement features for roosting bats and nesting birds, irrespective of the outcomes of the required further surveys.
- Impacts to habitats are likely to be negligible, providing that the extent of proposals is limited to areas of bare ground, hardstanding and semi-improved grassland in the immediate vicinity of the farm buildings. No impacts to Lanshaw Brook are anticipated and any such impacts should be avoided.
- The proposed works should also implement due diligence with respect to other protected species, comprising badger, hedgehog, and nesting birds, which have potential to be present on the site. Appropriate measures to avoid impacts to these species are detailed in Section 5.

1. INTRODUCTION

1.1. Anser Ecology Limited was commissioned by Andrew Shorten (the Client) to undertake ecological survey work in relation to the site at Bridge End Farm, Woodhouse Lane, Slaidburn, BB7 3AH (approximate site centroid SD 70309 53608).

1.2. The entire land holding extends to 31 acres of land, comprising mostly meadows and pasture (see **Appendix 1**).

1.3. It is understood that the immediate plans for Bridge End Farm are due to comprise complete renovation of the farmhouse and adjoining barns. Therefore, the surveys detailed in this report focused on the farmstead buildings and land immediately adjacent, including a detached stone barn to the northeast, and a Nissen hut to the south.

1.4. A separate planning application has also recently been submitted to Ribble Valley Borough Council (RVBC) for the construction of a cattle shed on the pasture field northeast of the farmhouse.

1.5. The site (survey area) comprises of several buildings, areas of hard-standing, grass pasture immediately to the rear of the property and a stone wall boundary to the front. This stone wall runs the length of a pasture field to the detached barn. **Plan 1** (at the end of this report) shows the current layout of the site, and approximate extent of the survey area.

1.6. The purpose of this report is to:

- Detail ecological survey work undertaken to date including an 'extended' Phase 1 and bat Preliminary Roost Assessment.
- Identify any ecological constraints to future development and requirements for further surveys.
- Make recommendations for ecological mitigation and enhancement measures to guide the design proposals.

2. LEGISLATION AND LOCAL PLANNING POLICY

LEGISLATION

2.1. Certain UK species and habitats are afforded legal protection in accordance with the following legislation, which require consideration:

- The Wildlife and Countryside Act (WCA) 1981 (as amended)
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (The Habitat Regulations)
- The Countryside and Rights of Way (CRoW) Act 2000
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Hedgerows Regulations 1997
- The Protection of Badgers Act (PBA) 1992.

2.2. The NERC Act 2006 also places a duty on planning authorities to have a regard for biodiversity when considering planning applications.

Bats

2.3. All UK bat species and their roosts are legally protected in England under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, The Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- Deliberately capture, injure or kill a bat
- Intentionally or recklessly disturb a bat in its roost, or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost.

2.4. Several UK bat species are listed as Species of Priority Importance for the conservation of biodiversity under Section 41 of the Natural Environment and Rural Communities Act 2006. As such, planning authorities must have due regard for the conservation of these species during the planning process.

Badger

2.5. Under the PBA 1992, badgers *Meles meles* and their setts have the following protection. It is an offence to:

- wilfully kill, injure, ill-treat or trap badgers
- intentionally or recklessly damage, destroy or obstruct setts which show signs of current use by badgers, including seasonal use
- disturb badgers whilst they are occupying a sett, or cause a dog to enter a sett.

Birds

2.6. All birds are protected during nesting under the WCA 1981 (as amended). It is an offence to:

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

- Possess, control or transport live or dead wild birds, or parts of them, or their eggs
- Sell wild birds or put them on display for sale
- Use prohibited methods to kill or take wild birds.

LOCAL PLANNING POLICY

Ribble Valley Borough Council - Core Strategy 2008 – 2028

2.7. The current local plan core strategy for Ribble Valley includes the following planning policies which are relevant to ecology and biodiversity:

- Key statement EN3: Sustainable Development and Climate Change – which seeks to ensure that new development in areas vulnerable to climate change minimise such risks through the conservation of biodiversity, improvement of ecological networks and provision of green infrastructure.
- Key statement EN4: Biodiversity and Geodiversity – which seeks to ensure that development results in an enhancement of biodiversity and to avoid negative impacts, particularly in relation to protected sites.

3. METHODOLOGY

DESK STUDY

3.1. A review of publicly available data was undertaken to compile a preliminary understanding of the site in the local context, including information which is unlikely to be apparent from a site visit alone. This included consultation of the following resources:

- Lancashire Environment Record Network (LERN) for biological records, and details of non-statutory designated sites within 1km.
- The Multi-Agency Geographic Information Centre (MAGIC) interactive mapping website[1] for details of internationally designated statutory sites within 5km, nationally designated statutory sites within 2km and previous Natural England (NE) Protected Species Licences (PSL) for bats within 2km.

SITE SURVEYS

3.1. An ecological survey of the site was undertaken on 29th March 2023 by Jeff Clarke and Laura Dennis (Co-Directors, Anser Ecology Limited), both being suitably qualified and experienced field ecologists.

3.2. The weather conditions during the survey were mild (10°C) and dry, with a light breeze (Beaufort scale 2-3) and partial cloud (5 oktas).

3.3. The survey comprised the following:

- Bat Preliminary Roost Assessment (PRA) of the buildings.
- 'Extended' Phase 1 habitat survey.

Preliminary Roost Assessment (PRA)

Buildings

3.2. A full internal and external inspection of the buildings was successfully completed as part of this assessment. The PRA inspections were undertaken by Jeff Clarke, assisted by Laura Dennis, Principal Ecologists and Co-Directors of Anser Ecology Limited.

3.3. Jeff Clarke's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats,* prepared by the CIEEM (August 2011), and he holds a Natural England licence (2022-10428-CL18-BAT).

3.4. The PRA was carried out in accordance with the standard methodology included in the following: Bat Mitigation Guidelines*,* Bat Workers Manual and Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition), hereafter referred to as the Guidelines.

3.5. The PRA involved an external and internal inspection of all buildings on the site. Evidence of roosting can include bats, droppings, urine stains and feeding remains (i.e., moth wings). Potential roost features (PRF) in buildings include (but are not limited to) gaps between/under roof tiles or lead flashing, gaps in mortar-work which may provide access cavity walls, gaps in soffits and loft spaces or upper floors with external access.

[1] Available at: http://www.natureonthemap.naturalengland.org.uk

Trees

3.6. Several mature trees are also present in the vicinity of the farmhouse and other buildings, and these trees were subject to a ground level PRA, to assess their potential for roosting bats. This involved a visual search from ground level, using binoculars and a high-powered torch to identify evidence of roosting bats or suitable PRF, which can include woodpecker holes, knot holes, cleaved bark, splits, and natural cavities.

Equipment List

3.7. The following list of the equipment was available for use during this survey:

- 8.5 x 42 Swarovski EL binoculars.
- Samsung S10 lite camera phone
- Clulite Clubman CB2-L2 high power focussed LED beacon
- Stanley Inspection Camera
- Helion 2Pro Thermal Camera
- Sectional ladders.

Barn Owl

3.8. During the PRA, an assessment of roosting and nesting potential for barn owl *Tyto alba* was also undertaken. The survey followed guidelines set out by Shawyer (2011) and involved an external and internal inspection of the buildings to record presence of, or potential for, barn owl nesting (or roosting). Evidence of roosting or nesting may include pellets, feathers, droppings (whitewash), or eggs. Suitable access points or nesting opportunities were also recorded. The equipment used to aid the survey and weather conditions are as listed above in respect of the bat PRA.

3.9. The scoping survey was led by Laura Dennis, a NE-licensed barn owl surveyor (Licence CL29/00354), assisted by Jeff Clarke, a highly experienced ornithologist.

'Extended' Phase 1 Habitat Survey

3.10. The survey was based on standard Phase I survey guidance (JNCC, 2010) and involves mapping the distribution of habitat types and recording dominant plant species present. The relative abundance of species was also estimated (where possible, given the time of year) on the DAFOR scale where D – dominant, A – abundant, F – frequent, O – occasional and R – rare.

3.11. The 'extended' element involves identifying the presence of, or potential for, protected and priority species e.g., great crested Newt (GCN), badger, bats etc.

3.12. The extended Phase 1 survey focused on land in the immediate environs of the farmstead and other buildings, as this is the current focus of renovation proposals.

SURVEY LIMITATIONS

3.13. The surveys were conducted at a sub-optimal time of year for locating roosting bats and signs of bat occupation, or nesting birds, given the elevation above sea level. No other significant limitations were encountered.

4. SURVEY RESULTS AND EVALUATION

DESK STUDY

4.1. A summary map of the LERN data search is provided at **Appendix 2**.

Bat Records

4.2. The LERN data search (which includes records from South Lancashire Bat Group) did not return any records of bats within 1km of the site. This is not surprising given the very rural location and confirms that it is a very under recorded area with regards to bat records.

Previous Natural England (NE) European Protected Species (EPS) Licences

4.3. There are two records of previous NE EPS licences for bats within 2km of the site:

- 2015-8642-EPS-MIT – relating to impacts to non-breeding roosts of common pipistrelle, soprano pipistrelle and brown long-eared bats – approximately 1.8km southeast of the site.
- EPSM2009-1323 – relating to impacts to a breeding roost of brown long-eared bat – approximately 1.2km southeast of the site.

Other Local Records

4.4. Records of other protected and priority species occurring during the last 20 years provided by LERN, are summarized below:

- Birds (all records within same 2km tetrad, within 1km of site):
    - Lesser redpoll *Acanthis cabaret*
    - Common redstart *Phoenicurus phoenicurus*
    - Common redshank *Tringa tetanus*
    - Common swift *Apus apus*
    - Eurasian curlew *Numenius arquata*
    - Grey partridge *Perdix perdix*
    - Lapwing *Vanellus vanellus*
    - Pied Flycatcher *Ficedula hypoleuca*
    - Spotted flycatcher *Muscicapa striata*
- Terrestrial mammals:
    - Brown hare *Lepus europaeus* – seven records, closest record 200m from site.
    - Hedgehog *Erinaceus europaeus* – one record, 921m from site.
- Invertebrates:
    - Small heath butterfly *Coenonympha pamphilus* – one record, 919m from site.
    - Chimney sweeper moth *Odezia atrata* – one record, 870m from site.

Protected Sites

4.5. There are two internationally designated sites within 2km of the site, which both also have a national designation:

- North Pennine Dales Meadows Special Area of Conservation (SAC) / Mytton Meadows Site of Special Scientific Interest (SSSI) – 245m south
- North Pennine Dales Meadows SAC / Bell Sykes Meadows SSSI – 1.4km southeast.

4.6. There are no other nationally designated sites within 2km of the site boundary.

4.7. There are six locally designated sites within 1km of the site:

- Pages Front Meadow Biological Heritage Site (BHS) – 580m south
- Shay Wood and Lent Bank Wood BHS – 788m southeast
- Proctor's Cow Pasture BHS – 796m northwest
- Poorhill Pasture BHS – 861m northwest
- Davison's Pasture BHS – 963m west
- Roadside Verge, Woodhouse Gate, Slaidburn – Bentham Road BHS – 987m east.

4.8. The entire land holding also falls within the Bowland Fells Important Bird Area (IPA).

4.9. Due to the scale of proposals, which will primarily involve renovation of existing buildings, no impacts to protected sites are expected.

Priority Habitats

4.10. There is no habitat listed on the Priority Habitats inventory on or adjacent to the site.

SITE SURVEYS

Preliminary Roost Assessment of Buildings and Trees

4.11. The buildings within the site were examined in detail and any potential roost features (PRFs) were logged and photographed. Photographs of the buildings and examples of PRFs are provided in **Appendix 3**, and **Plan 1** shows a map of the site.

B1 (Farmhouse)

4.12. A three storey, double-fronted, stone building with a pitched slate roof to the front and a York stone roof to the rear. There are chimney stacks at each gable apex and porch features to the front and rear.

4.13. There are multiple roost features on the roof to the front, including gaps underneath ridge tiles, lifted face tiles, gaps around lead flashing on chimneys, gaps around skylight fittings. On the front face of the building there are suitable gaps around the lintel casings for the windows.

4.14. On the east facing side of the building there were gaps in the gable end roof mortar, and gaps in stonework where the render had broken away.

4.15. On the north face of the building there are large numbers of PRFs on the roof created by gaps under the York stone tiles, gaps in the lead flashing of the chimney stacks, and multiple gaps in the stonework where there are cracks and dislodged stones etc.

4.16. On the west face there are cracks and gaps in the chimney stack and a gap on the apex lip.

4.17. Internally there is a cellar with potential access but there is no evidence of bats present. The loft floor has been used as living space with windows and skylights providing daylight illumination. There is no enclosed loft area. At the time of the survey extensive debris clearance had been conducted internally and there were no visible signs of bats.

4.18. Based on the evidence from the PRA survey, due to the existence of a high number of suitable PRFs and good habitat connectivity, the main farmhouse (B1) was classified as having **'High'** bat roosting potential and following the standard guidance requires three nocturnal surveys.

B2a (barn directly adjoining main farmhouse)

4.19. A small barn with access front and rear. Simple apex-style roof with ridge tiles and York stone roof tiles to the front and rear. The roof adjoins the mid-level of the house, but due to a change

in ground level the barn is the equivalent of two-storey building. Externally there are multiple gaps for crevice bats on the roof to the front and rear due to uneven roof tiles. At the rear, the building extends out beyond the line of the adjoining barn (B2b) where there are clear gaps along the edge tiles.

4.20. Internally, building B2a has a high buttressed roof with natural timbered crossbeams. There is no loft area, and the roof tiles are unlined. There are gaps between the door and frame at the front which could allow access for bats and birds. The barn is suitable internally for cavity bats, though no obvious signs were present. There was evidence of use by barn swallow *Hirundo rustica*.

4.21. Based on the evidence from the PRA survey due to the existence of a high number of suitable PRFs and good habitat connectivity, building B2a was classified as having **'High'** bat roosting potential and following the standard guidance requires three nocturnal surveys.

B2b (western barn, adjoining B2a)

4.22. Building B2b is another stone-built barn directly attached to the western end of building B2a. It is a two-storey structure, but in contrast to the other buildings it has a pitched, asbestos-cement corrugated roof. The render on the stonework walls has become detached in many parts exposing the stone blocks underneath on the south side. It is unrendered on the north side. PRFs include gaps under the ridge, gaps underneath fascias at the gable end, and holes in the stonework.

4.23. Internally, the lower floor of building B2b is separated into two areas by a half-height stone wall, above which at the eastern end is a hayloft. At the western end, the lower floor has been divided into several livestock stalls.

4.24. There are original trusses supporting the roof and more modern beams running the length of the roof. There are gaps in the stonework internally which could provide suitable PRFs for bats. No direct evidence of bat presence was found internally but there was a small scattering of old butterfly wings which could be the feeding remains of brown-long-eared bat or barn swallow, The barn is suitable internally for cavity-dwelling bat species. There was also evidence of barn swallow nests.

4.25. Based on the evidence from the PRA survey due to the existence of a high number of suitable PRFs and good habitat connectivity, building B2b was classified as having **'High'** bat roosting potential and following the standard guidance requires three nocturnal surveys.

B3 (traditional stone barn)

4.26. A traditional stone barn (B3) which is located approximately 100m northeast from the main house across a field. The building is aligned north/south with the main access on the east side. The double door access has a large open porch feature extending from the main building with a sloped, clay-tiled roof. The main roof has slate tiles to the front and rear. There are multiple lifted tiles with gaps suitable for bats on all the roof faces. Additionally, there are a small number of external cracks in the walls and gaps along the edge tiles suitable for crevice bats.

4.27. Internally, the concrete floor has recently been removed. There is a large crack in the end wall to the north suitable for bats to roost. There is also a vent hole suitable for bat and owl access. The roof is unlined and supported by relatively modern trusses and beams. The barn has suitability for cavity and crevice bats, but it has limited habitat connectivity.

4.28. Based on the evidence from the PRA survey building B3 was classified as having '**Moderate**' bat roosting potential (and if works are proposed which will affect the roof or structure of the building) will require two nocturnal surveys.

B4 (Nissen hut)

4.29. To the south of the farmhouse, across the farmyard, is an old 'Nissen' hut-style building (B4), with a corrugated sheet roof. The end walls are a combination of brick, stone and timber with timber double door to the front (north), and an inset window to the rear (south). The windows are broken. There are no obvious PRFs on the external areas of the building. The interior has negligible scope for roosting crevice bats, but cavity bats, such as brown long-eared, could potentially hang from the internal roof structure. There was no evidence of bats internally at the time of the survey.

4.30. Based on the evidence from the PRA survey, the Nissen hut (B4) was classified as having **'Low'** bat roosting potential for cavity bats. Standard guidance would require one nocturnal survey (if demolition or structural works to building B4 are proposed). However, it is considered that it would be more effective to undertake repeat internal inspection surveys in combination with the nocturnal surveys of the other buildings on the site.

Other buildings/structures

4.31. Within the farmyard complex are some derelict, roofless livestock stalls/stables (B5). These have '**negligible**' bat roosting potential, but several old bird nests were noted, including those of wren and blackbird.

4.32. Access to the farm off Wood House Lane is via a bridge over Lanshaw Brook. This comprises an original stone bridge which has more recently been reinforced with a steel structure, which sits above the original structure. The original stone bridge may have suitability for roosting bats, and this should be a consideration if any works pertaining to the bridge are required in the future.

Trees

4.33. A line of large sycamore *Acer pseudoplatanus* trees extends eastwards along a field boundary wall, away from the farmhouse. Another mature sycamore tree is located adjacent to the traditional stone barn (B3). These trees are not expected to be impacted by the proposed restoration/refurbishment works but were examined during the survey on a precautionary basis.

4.34. All trees in this area were examined from ground level. No potential roost features (PRFs) for bats were found and all have '**negligible**' bat potential to support roosting bats. Therefore, no further survey or mitigation is required in this respect.

OTHER ECOLOGICAL CONSTRAINTS

Habitats

4.35. The site is accessed off Wood House Lane via an unsurfaced farm track. Habitats immediately adjacent and surrounding the farmhouse and adjoining barns (B1 and B2a/b) comprise mostly hardstanding and bare ground, with dry stone walls forming most field boundaries.

4.36. The field immediately north of the farmstead, between the farmhouse (B1) and stone barn (B3) comprises species-poor semi-improved pasture (F1), which was presumably used as cattle/sheep grazing pasture. The sward is dominated by palatable grasses including Yorkshire fog *Holcus lanatus,* perennial rye *Loium perenne,* and fescue *Festuca sp.* Other species present include

common sorrel *Rumex acetosa* (f) creeping buttercup *Ranunculus repens* (f) tufted hair-grass *Deschampsia cespitosa* (o) and lesser celandine *Ficaria verna* (o). The grassland has a significant proportion of bare earth amongst the sward, an indication of regular grazing pressure.

4.37. As mentioned with respect to bats, there is a line of mature sycamore trees running eastwards from the farmhouse, and another mature sycamore tree adjacent to the stone barn B3.

4.38. Lanshaw Brook and associated riparian habitat runs roughly north/south close to the western boundary of the farmyard. At this point in time, there are no known works that are associated with the client's proposals that will impact on the riparian habitat.

Badger

4.39. No badger *Meles meles* setts, or other evidence of badgers was recorded on or adjacent to site during the walkover survey. However, there is some potential for badger sett-building within 30m of the site, along Lanshaw Brook, and badgers are likely to be active in the local area.

Barn Owl

4.40. No evidence of barn owl was recorded in any of the buildings on site (B1 – B5).

4.41. Building B3, the stone barn, has some limited potential for roosting barn owl as access to the interior is possible via vent holes in the stone wall at each gable end. The concrete floor of B3 has recently been removed, which may have disturbed any evidence, such as owl pellets, if they were previously present. However, building B3 only has potential internally for non-breeding barn owl roosting activity (such as on the timber cross beams). There is no potential for barn owl breeding activity due to the absence of any suitable nesting ledges or cavities.

4.42. Other buildings on site (B1, B2a/b and B5) have negligible potential for barn owl due to lack of suitable access points to the interior of each building, or lack of shelter from the weather (B5). Building B4, the Nissen hut, has a broken window which could technically provide access for a barn owl to the interior. However, due to its location facing the edge of the riparian habitat, and lack of suitable perches inside, it is also considered to have negligible potential for barn owl.

Nesting birds (generally)

4.43. All the buildings on site have potential to support nesting birds. During the PRA survey, direct evidence of nesting birds including barn swallow, blackbird and wren was recorded in the adjoining barns (buildings B2a and B2b), the detached stone barn (building B3) and the derelict livestock stalls (building B5). The mature trees and riparian habitat are also likely to support various nesting species.

4.44. With respect to ground nesting birds, although the wider land holding may hold potential for these species, the immediate environs of the farmstead have negligible potential to support any ground nesting species.

Great Crested Newt (& other amphibians)

4.45. There are no ponds within 250m of the site (based on OS mapping and Google satellite imagery), Therefore the likelihood of great crested newt (GCN) being present is negligible and no further consideration is required with respect to this species.

4.46. Other widespread amphibians, such as common toad *Bufo bufo,* are more likely to present around the site.

Hedgehog

4.47. The site and adjacent habitats including grassland and the riparian corridor provide good habitat for hedgehog *Erinaceus europaeus* and this species is likely to be present in the local area. No evidence was found during the site surveys but presence, at least in a foraging context, is presumed.

5. ECOLOGICAL CONSTRAINTS, RECOMMENDATIONS AND REQUIREMENTS FOR FURTHER SURVEYS

PROPOSED WORKS

5.1. It is understood that the Client intends to undertake a complete renovation of the farmhouse and adjoining barns (B1 and B2a/b), and it is presumed that this will include structural repairs and re-roofing works.

5.2. It is not known whether works will include demolition or structural repairs to B3 (stone barn) or B4 (Nissen Hut), but ecological constraints and further survey requirements in relation to these buildings has been included below if this will form part of proposals.

ECOLOGICAL CONSTRAINTS AND REQUIREMENTS FOR FURTHER SURVEY

4.49. The recommendations set out below aim to ensure that the development is implemented in accordance with all wildlife legislation, Natural England guidance, principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.

Habitats

5.3. It is understood that proposals for the site will include works to the existing buildings and immediate environs (such as to create a new driveway and garden area). Therefore, impacts on existing habitats are likely to be limited to hardstanding, bare earth, and small areas of semi-improved grazing pasture and will not require any specific mitigation.

5.4. No impacts to other ecologically important habitats such as the brook and associated riparian corridor or mature trees, are anticipated.

Bats

5.5. Based on the evidence from the PRA survey the buildings were classified as follows with respect to bat roosting potential:

- B1 (farmhouse) – **'High'**– many external PRFs suitable for crevice bats (such as pipistrelles) and good habitat connectivity.
- B2a & B2b (adjoining barns) – **'High'** – many external and internal PRFs and suitability for crevice or cavity (such as brown long-eared) bats, and good habitat connectivity.
- B3 (detached stone barn) – **'Moderate'** – External and internal PRFs suitable for crevice and cavity bats but limited direct habitat connectivity.
- B4 (Nissen hut) – '**Low**' – limited internal suitability for cavity bats.
- B5 (livestock stalls) – '**Negligible**'. No further work required.

5.6. Therefore, prior to any works commencing on buildings B1 B2a, B2b, B3 or B4, that impact on the roofs or external structure/stonework, further surveys for bats must be conducted in accordance with the Guidelines and identified level of roosting potential.

5.7. Bats are a European Protected Species (EPS) which makes them a material consideration in planning terms. Therefore, nocturnal surveys must also be completed prior to any planning determination.

Nocturnal Survey Requirements

5.8. The Guidelines state that buildings with high bat roosting potential require three nocturnal surveys, moderate potential buildings require two nocturnal surveys and low potential buildings require one nocturnal survey. All nocturnal surveys should be undertaken in the appropriate season (core period May to August, inclusive), with a minimum two-week gap between each survey.

5.9. The minimum number of survey visits and surveyors required to cover each building during nocturnal surveys is as follows:

- Buildings B1, B2a and B2b – three survey visits – all surveyed simultaneously, using four surveyors, plus a Night Vision Aid (NVA) (i.e., thermal) camera on an area of restricted view.
- Building B3 – two survey visits – using three surveyors (or two surveyors plus a NVA camera).
- Building B4 – one survey visit – using two surveyors (standard practice). However, due to the limited scope for roosting, and ease of visual inspection, it is recommended that follow-up work is instead undertaken as repeat visual inspections prior to other nocturnal surveys.

5.10. If demolition, structural works, roof repairs or other renovation/change of use works to the detached stone barn (B3) and Nissen hut (B4) are not proposed, then further nocturnal bat surveys of these buildings will not be required at this time. These surveys only become a requirement if such works are planned that will impact on potential bat roost features.

Badger

5.11. There is currently no evidence of badger activity or setts in proximity of the site. However, badgers can regularly excavate new setts, and there is suitable habitat for sett building within 30m. Therefore, if the presence of a new badger sett is suspected on the site at any time prior to, or during, the construction, work should stop, and a suitably qualified ecologist (SQE) contacted for advice.

Barn Owl

5.12. Building B3, the stone barn, has limited potential for roosting (non-breeding) barn owl. If structural works or renovations to this barn are required, it is recommended that an update survey and/or inspections are undertaken to provide confidence regarding the current use of the building by barn owl. This can be undertaken in conjunction with any bat surveys (such as a dusk observational survey).

5.13. The other buildings on site have negligible potential to support barn owl, and no further surveys or mitigation are required.

Nesting Birds (Generally)

5.14. It was recorded during the PRA survey that both adjoining barns B2a and B2b have previously been used by nesting birds, notably barn swallow. It was too early in the season to assess the annual usage as barn swallows had not returned from migration at the time of the survey.

5.15. It is recommended that further survey and assessment of the nesting bird activity across the site is conducted in conjunction with the nocturnal bat surveys. Once the scope of usage is better understood a mitigation strategy to compensate for any likely impacts can be devised via liaison between the Client (or their architect) and the ecologist.

5.16. All active bird nests are protected by law, this includes nests within or on buildings. Ideally, works should be timed to occur during the autumn/winter period (September to February) to avoid the bird nesting season (core nesting period March to August, inclusive).

5.17. Where works during the nesting period cannot be avoided, pre-commencement checks will be required by a Suitably Qualified Ecologist (SQE). If active nests are found work must cease in areas where disturbance is likely. The SQE will advise on permitted activities and exclusion zones.

Hedgehog & Amphibians

5.18. There is some potential habitat for hedgehog and widespread amphibians such as common toad and given the proximity to farmland and the riparian corridor along Lanshaw Brook, these species are likely to be active around the site.

5.19. Hedgehog and common toad are both listed as priority species under the NERC Act 2006 due to habitat loss and fragmentation, and declines in population numbers. It is recommended that potential impacts to hedgehog and widespread amphibians during the construction period can be avoided through the implementation of simple precautionary measures including:

- Filling in, or sealing, excavations so that they are not left open overnight. Where leaving an excavation open overnight is necessary, a means of escape for any wildlife that falls in should be put in place (such as a timber ramp). Any such excavations should be checked for animals before the start of work each morning.
- Stored materials or waste associated with the construction should be elevated off the ground where possible (i.e., on pallets or in skips).

ENHANCEMENT MEASURES FOR BATS AND BIRDS

5.20. Even if the above detailed bat surveys do not identify any bat roosts on the impacted buildings, it is good practice to provide enhancements for roosting bats and nesting birds which rely of buildings, e.g., barn Owl, common swift, House Sparrow etc. as part of the proposed renovation works.

5.21. It is recommended that the client commits to providing enhancements where practicable and discusses options for bat and bird enhancements with the consulting ecologist.

REFERENCES

Collins, J., 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd Edition). London: The Bat Conservation Trust.

Government Circular (Office of the Deputy Prime Minister): Biodiversity & Geological Conservation - Statutory Obligations & their impact within the Planning System (16/08/2015). Part IV, Conservation of Species Protected by Law.

JNCC, 2010. Handbook for Phase 1 habitat survey - a technique for environmental audit. Peterborough: Joint Nature Conservation Committee (JNCC).

MAGIC, Multi-Agency Geographic Information for the Countryside (MAGIC). Interactive maps [Online].

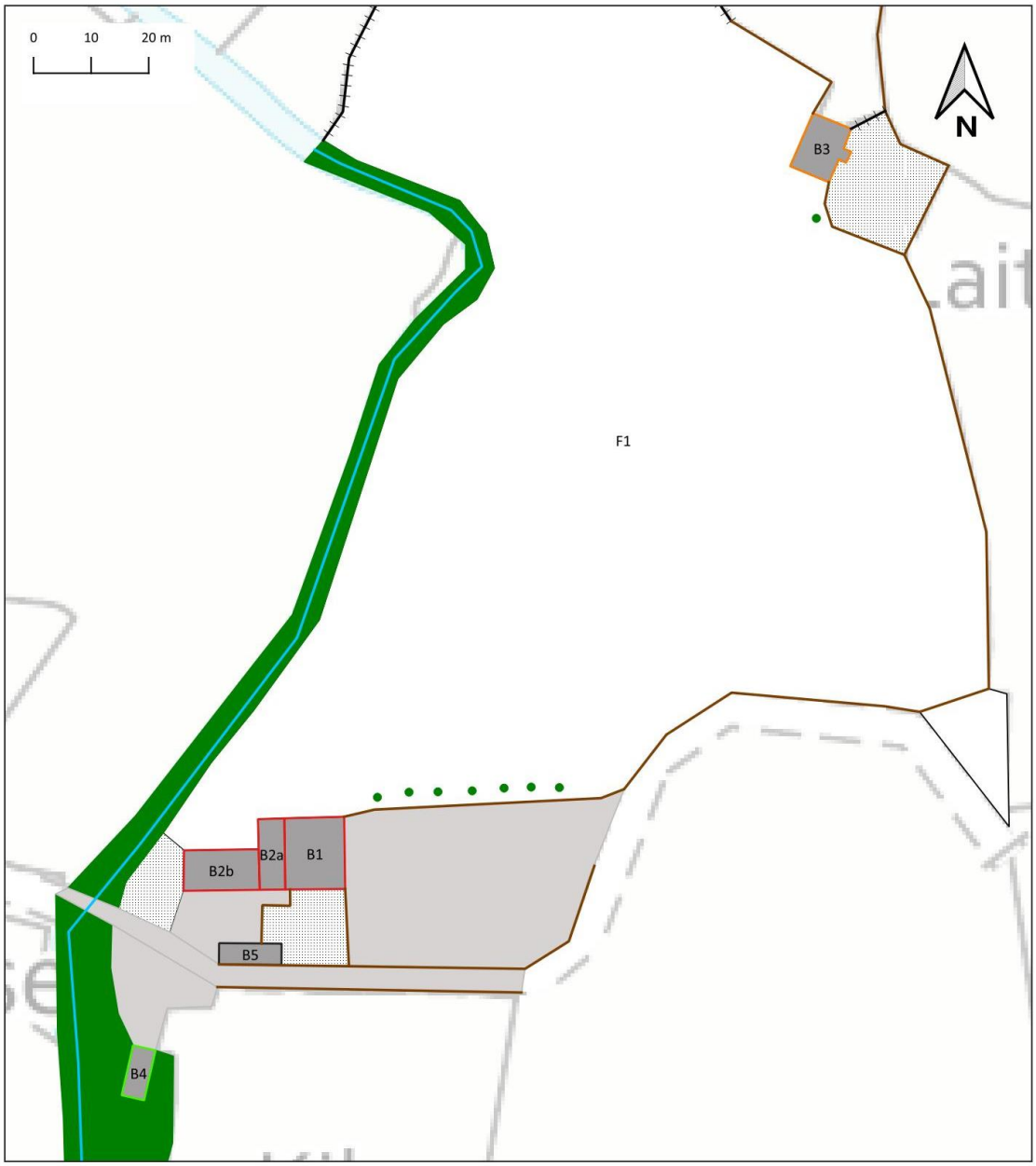
Mitchell-Jones A.J. and McLeish A.P. (Eds). (2004). Bat Workers' Manual. 3rd Edition. Joint Nature Conservancy Committee. Peterborough.

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Shawyer, C. R. (2011) *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in survey and Reporting.* IEEM, Winchester.

PLAN 1

Plan of the site at Bridge End Farm, showing habitats present, and bat roost potential of buildings.



Habitats
- Bare Ground
- Building
- Hardstanding
- Riparian Habitat
- Species-poor Semi-improved Grassland

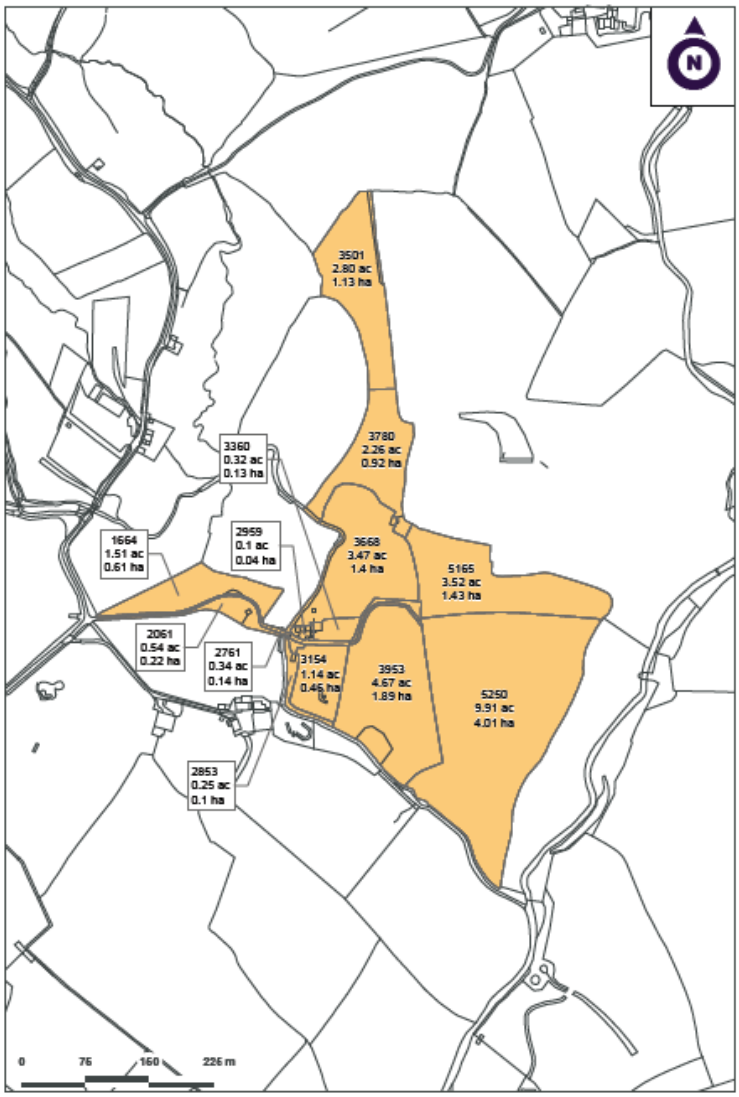
- Fence
- Running Water
- Wall
- Mature Tree

Bat Roost Potential
- High
- Low
- Moderate
- Negligible

Anser Ecology

Plan Title	**Ecological features**
Project	**Bridge End Farm, Slaidburn**
Date	**April 2023**
Plan Ref.	**AE66/P01**

APPENDIX 1: MAP OF BRIDGE END FARM LAND HOLDING (EXTRACT FROM CARTER JONAS SALE BROCHURE)



LAND

The land comprises 31 acres of ring-fenced meadows suitable for both grazing and mowing. There are seven individual meadows with boundaries of either well maintained stone walls or stock fencing.

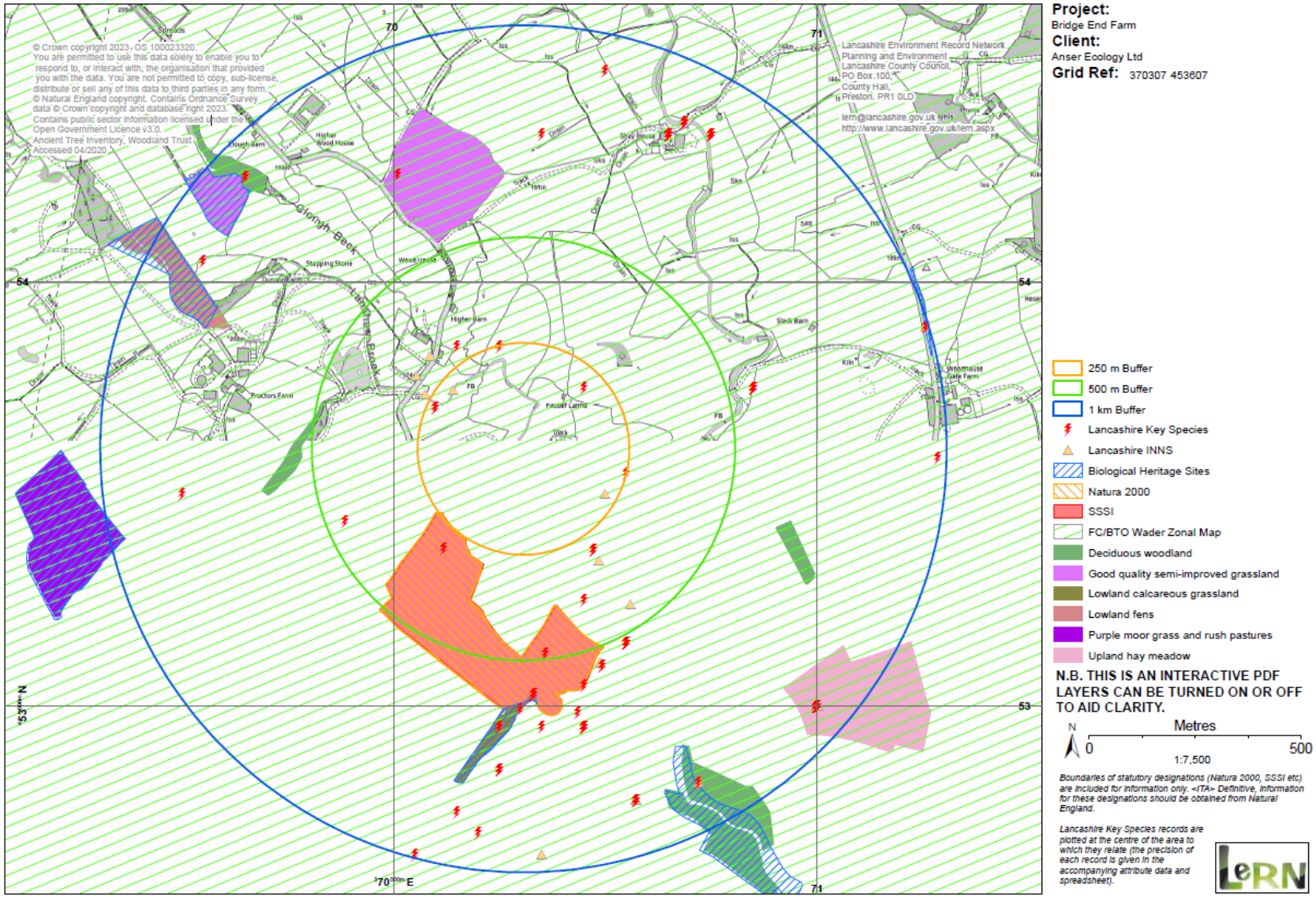
The soil is described under Soilscape 17 as slowly permeable, seasonally wet acidic soil with a loamy and clayey texture, most suited to grass production.

The land offers opportunities to farm in a very low input, traditional manner or perhaps convert the land to increase its biodiversity or carbon capture potential.

To the East of the farmhouse there is a small 0.3 acre (0.13 ha) paddock which is in a perfect position to offer a garden area to accompany the farmhouse.

Please note, there is a public footpath which runs alongside the steading, following the route of the brook. There is also a second footpath which crosses Bridge End to the west.

APPENDIX 2: SUMMARY MAP OF LOCAL BIOLOGICAL RECORDS (LANCASHIRE ENVIRONMENT RECORD NETWORK)

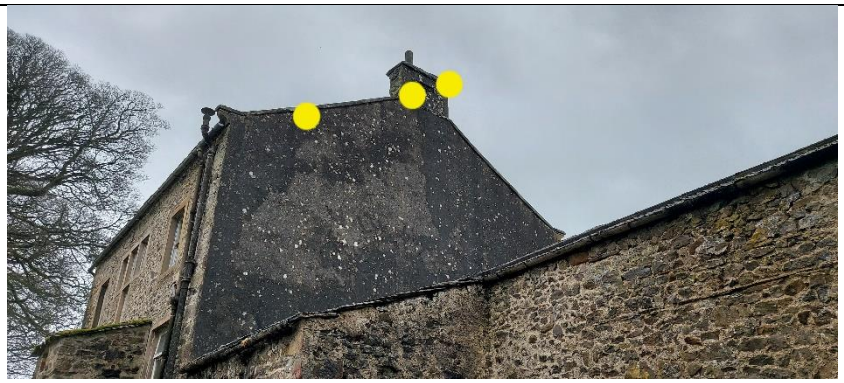


APPENDIX 3: SITE PHOTOGRAPHS AND EXAMPLES OF POTENTIAL ROOST FEATURES

Building B1 (farmhouse) – south elevation (front) - yellow indicates lifted tiles & gaps under flashing.

Building B1 – north elevation (rear) - loft interior gaps under york stone tiles, cracks in walls etc.

Building B1 – east elevation – gaps and cracks in brickwork



Building B1 – west elevation – gaps and cracks in brickwork/render.

B2a (right) and B2b (left) – adjoining barns

B2a (adjoining barn) – north elevation – gaps under york stone roof tiles.

Building B2a – west elevation – missing mortar from edge tiles.

Building B2a – interior, high potentiaal for cavity bats.

Building B2b (adjoining barn) – west elevation – gaps and cracks in brickwork.

Building B2b – hayloft interior, potenital for cavity bats.

B2b – interior, derelict animal stalls.

B3 (detached stone barn) – east elevation (front) – highlighting PRF gaps under roof tiles.

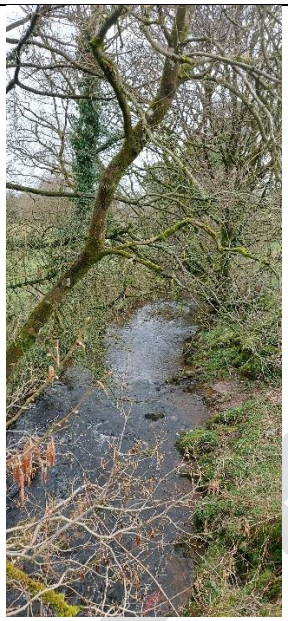
B3 – west elevation (rear) – showing lifted tiles on roof.

B3 – interior of barn.

B4 – Nissen Hut

B4 – interior, showing low suitability for cavity bats and access through broken window.

Barn Swallow nest in B2b



Riparian Habitat along Lanshaw Brook

Setting of famstead in wider landscape - Field F1 looking south, showing line of mature sycamore trees, and riparian habitat along Lanshaw Brook to west of farm.