

Ecological Impact Assessment and Bat Risk Assessment

WOODHOUSE FARM, COANWOOD

March 2023

Ruth Hadden, BSc. MCIEEM
Ryal Soil and Ecology
Ryal

Tel: 01661 886562

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| Principal Author | Ruth Hadden | |
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Disclaimer:

Ecology surveys are carried out in good faith, to the relevant professional guidelines. Where variation from these guidelines is necessary, this is outlined in the report. Any comments regarding condition of buildings or trees are in relation to the use of the building/tree by bats and birds and should not be considered as a building survey or arboricultural opinion on the condition of those features.

The client should be aware that the mitigation recommendations in ecology reports are often translated directly into planning conditions, and as such these should be studied closely and agreed with any contractors in advance of site works commencing.

Mitigation recommendations should be clearly marked on the Architect's Plans submitted with any planning or other consent.

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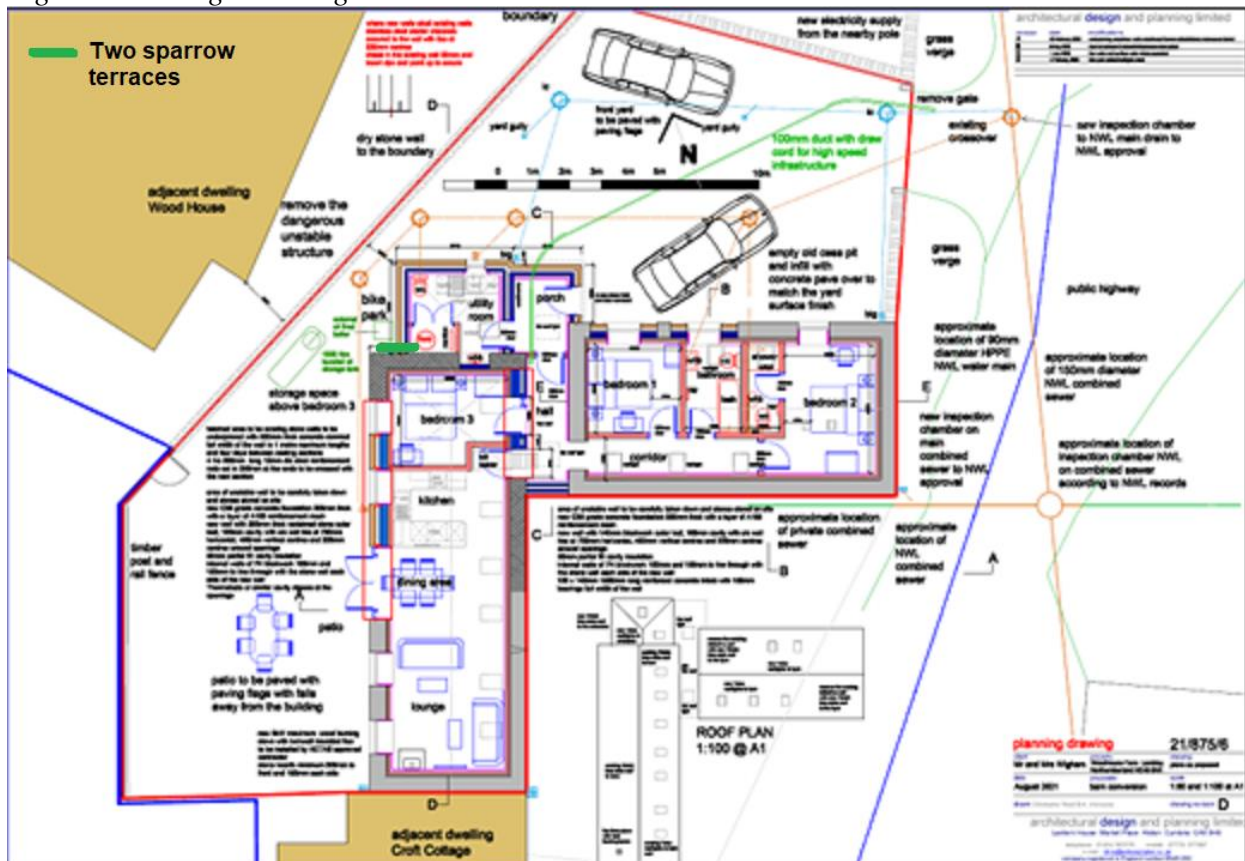
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Ecological Impact Assessment for Woodhouse Farm, Coanwood

Summary

- An ecological survey was requested primarily for bats and protected species for a site at Woodhouse Farm, by Architectural Design and Planning Ltd on behalf of the owners.
- Woodhouse is located immediately in agricultural land consisting of mainly improved grassland with boundaries of hedges and fences, 850m to the east the River South Tyne flows with the wooded riverbanks providing bat-feeding corridors to the north and south.
- The building is situated with hardstanding to the north and disturbed ground to the west. The area to the east is the garden of the neighbouring house.
- The buildings consisted of two buildings that had been partially converted to the first fix stage. Externally the eaves were boxed with sound pointing, gable soffits and ridges that had ridge vents. No evidence of bats was located, within the loft or externally. The structure has negligible suitability for bats due to the works carried out and being well sealed, no further survey is recommended.
- Known bat activity in the area within 2km of the site consists of maternity roosts of Pipistrelle sp. and Myotis sp.?, 1.4km to the southwest, Brown long-eared and Natterer's 1.1km to the north and Brown long-eared 1.4km to the northwest . A day roost of Brandt's and Daubenton's are known 1-2km to the north and roosts of Pipistrelle 45kHz also 1.2-2km to the north are known. Additional foraging bats of the above species plus whiskered/Brandt's and Pipistrelle 55kHz are also known within 2km.
- The occasional bat may be present in any suitable crevice in the structure at any time of the year in small numbers. No further destructive works is planned with no negative affect on bat conservation status.
- Mitigation will be put in place with the provision of sparrow terraces.
- Any nesting bird species will be allowed access to the nest until the young have fledged.

Figure 1. Ecological Mitigation Plan



1. Introduction.

The inspection was carried out and reported by Ruth Hadden BSc an experienced Licensed Bat Surveyor.

Figure 2 Survey area outlined in red.

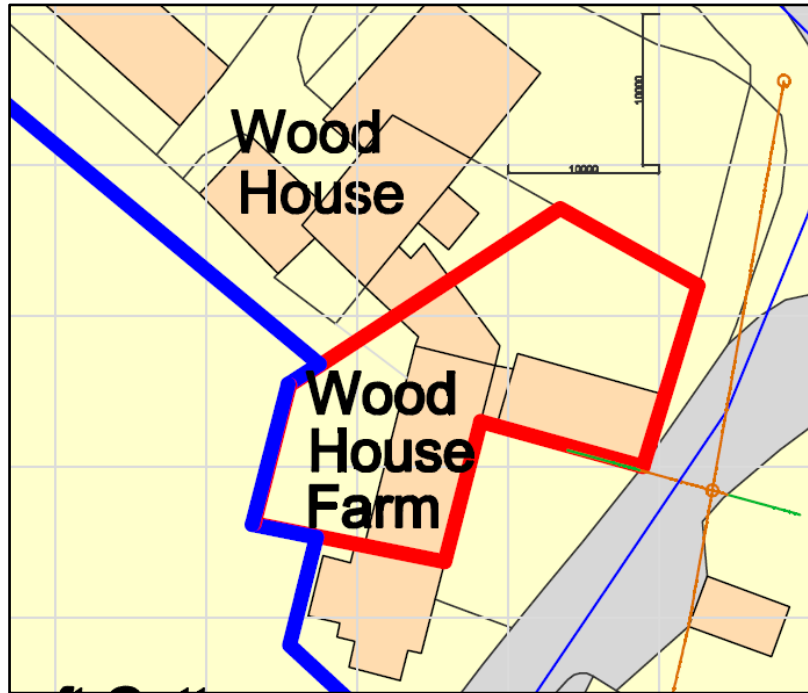
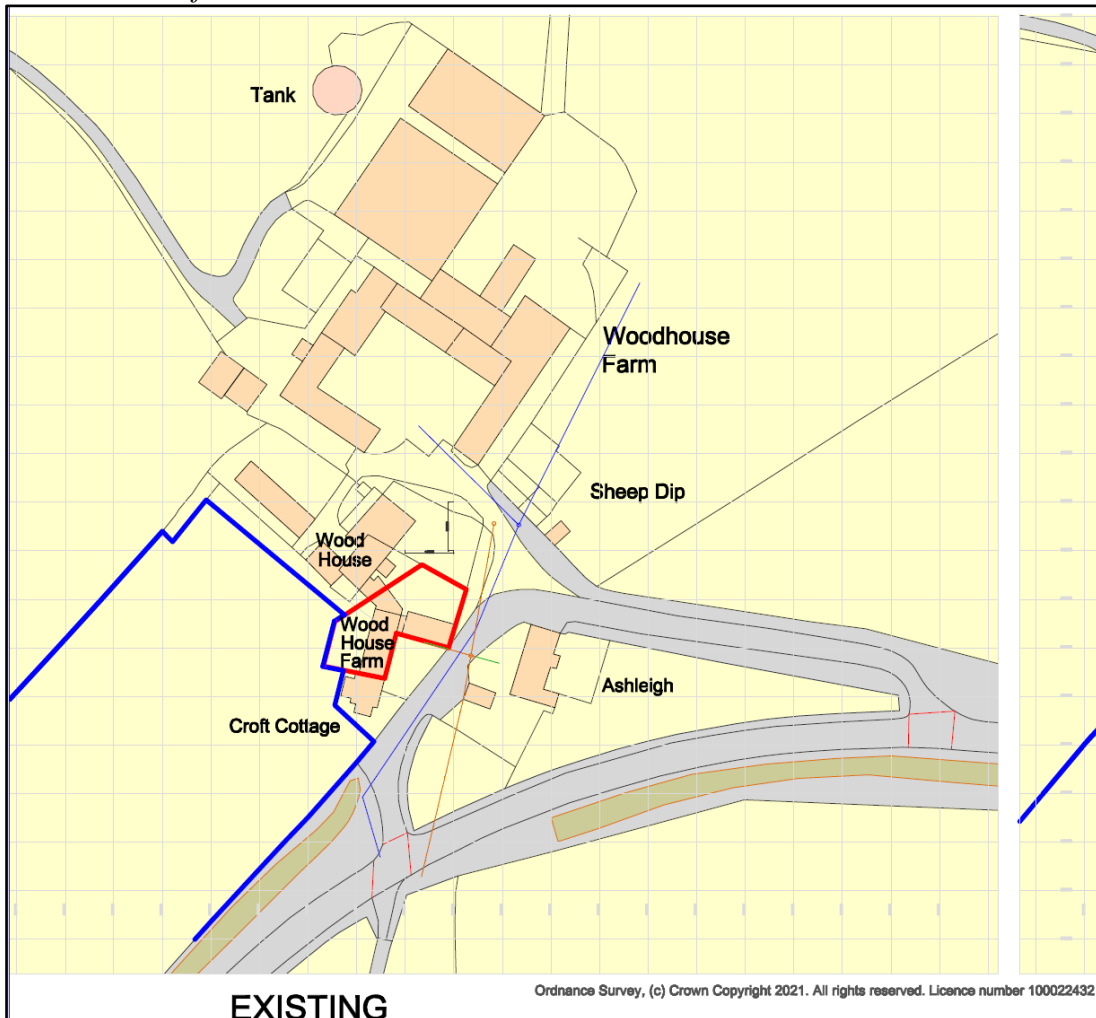


Figure 3. Location of site.



2. Relevant Policies and Legislation.

Under Section 25 (1) of the Wildlife & Countryside Act (1981) local authorities have a duty to take such steps as they consider expedient to bring to the attention of the public the provisions of Part I of the Wildlife & Countryside Act, which includes measures to conserve protected species.

The Natural Environment and Rural Communities Act (2006) places a Statutory Biodiversity Duty on public authorities to take such measures as they consider expedient for the purposes of conserving biodiversity, including restoring or enhancing a population or habitat.

The National Planning Policy Framework (NPPF) states “*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;” (paragraph 175).

ODPM Circular 06/2005/Defra Circular 01/2005 states that the presence of a protected species is a material consideration when considering a development proposal that could harm the species or its habitat.

Appendix 1 details legislation relating to applicable species.

Section 41 of The Natural Environment and Rural Communities (NERC) Act (2006) requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. This includes planning decisions.

2.1 Designated Sites

Site of Special Scientific Interest (SSSI) citations are for special features of importance to nature conservation. Sites of Special Scientific Interest (SSSIs) are nationally important sites protected under laws including The Wildlife and Countryside Act 1981, Countryside and Rights of Way Act 2000. LPAs must consult Natural England on planning applications that might affect SSSIs. Operations that could damage special interests require consent by Natural England. It is an offence for any person to intentionally or recklessly damage or destroy any of the features of special interest of an SSSI, or to disturb wildlife for which the site was notified.

3. Methodology.

3.1 Scope of the Assessment.

The zone of influence of this development is defined as being the site itself, habitats to the immediate boundaries within 2km.

The assessment has included consideration of;

- designated sites
- habitats and species of principal importance for conservation of biodiversity
- protected species, namely bats.

3.2 Desktop Survey.

Natural England’s Magic on the Map website was accessed for details of any designated wildlife sites within 2km.

The Environmental Records Information Centre North East (ERIC) data search has been restricted to bats, as this is the major constraint to renovation works.

Natural England’s Magic on the Map and OS Explorer 1:12500 maps were used to assess the distance to habitat features close to the site.

3.3 Site Survey

The survey included an assessment of habitats on site for use by bats following the Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists, Good Practice Guidelines* (3rd edition, 2016) and Natural England’s definitions except where indicated. The survey effort at the site has taken account of the recommendations of the BCT Good Practice Survey Guidelines, taking proportionality into account and the proposals.

The search area is shown in Figure 2. The survey included searching for signs of any wildlife using the site, with the key indicators listed below.

- Tracks, prints, live or dead animals, droppings, fur/hair, feeding remains (all mammals)
- Setts or feeding evidence, clear tunnels under boundaries (badger)
- Suitable bat roosting features such as deadwood or limb holes in trees.
- Nests or singing/displaying birds.

Field Survey for Bats and Birds

Visual Inspection

A close inspection of the structure was made in good light, and by torch where required. The structure was examined as far as was feasible for signs of bats: droppings, urine streaks, clean cobweb-free areas or crevices and potential roost exit holes. All external crevices were checked using a torch and possible roosting sites were noted. Crevice loving bats can be difficult to find especially when bats are present between the stones. Nesting material was noted and beneath ledges the ground was examined for feathers, pellets and birdlime that could indicate occupation by birds.

Timing and Weather Conditions

| Survey | Date | Timings | Weather |
|------------|---------------|---------|--------------|
| Inspection | 13 March 2023 | 40 mins | Mild and wet |

Personnel

Ruth Hadden – Bat Consultant since 1996, Class Survey Licence CL20 2015-13665-CLS-CLS (Bat Survey Level 4). Licensed to handle bats and enter known roosts since 1986.

Qualifications BSc Joint Honours Zoology & Plant Biology, Newcastle upon Tyne.
MCIEEM.

3.4 Assessment.

The assessment has been conducted according to the *Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater, Coastal and Marine*, CIEEM, September 2018. Impacts are considered for during construction and occupation.

Preliminary Ecological Appraisal Reports (PEAR) which CIEEM guidelines¹ states can be used to support a planning application where it can be determined that the project would have no significant ecological effects, no mitigation is required, and no further surveys are necessary. PEARS though can also provide;

- the results of initial ecological surveys associated with a proposed development
- identify further ecological surveys necessary to inform an EcIA
- identify ecological constraints to a project
- make recommendations for design changes
- highlight opportunities for ecological enhancement.

4. Baseline Ecological Conditions

4.1 General

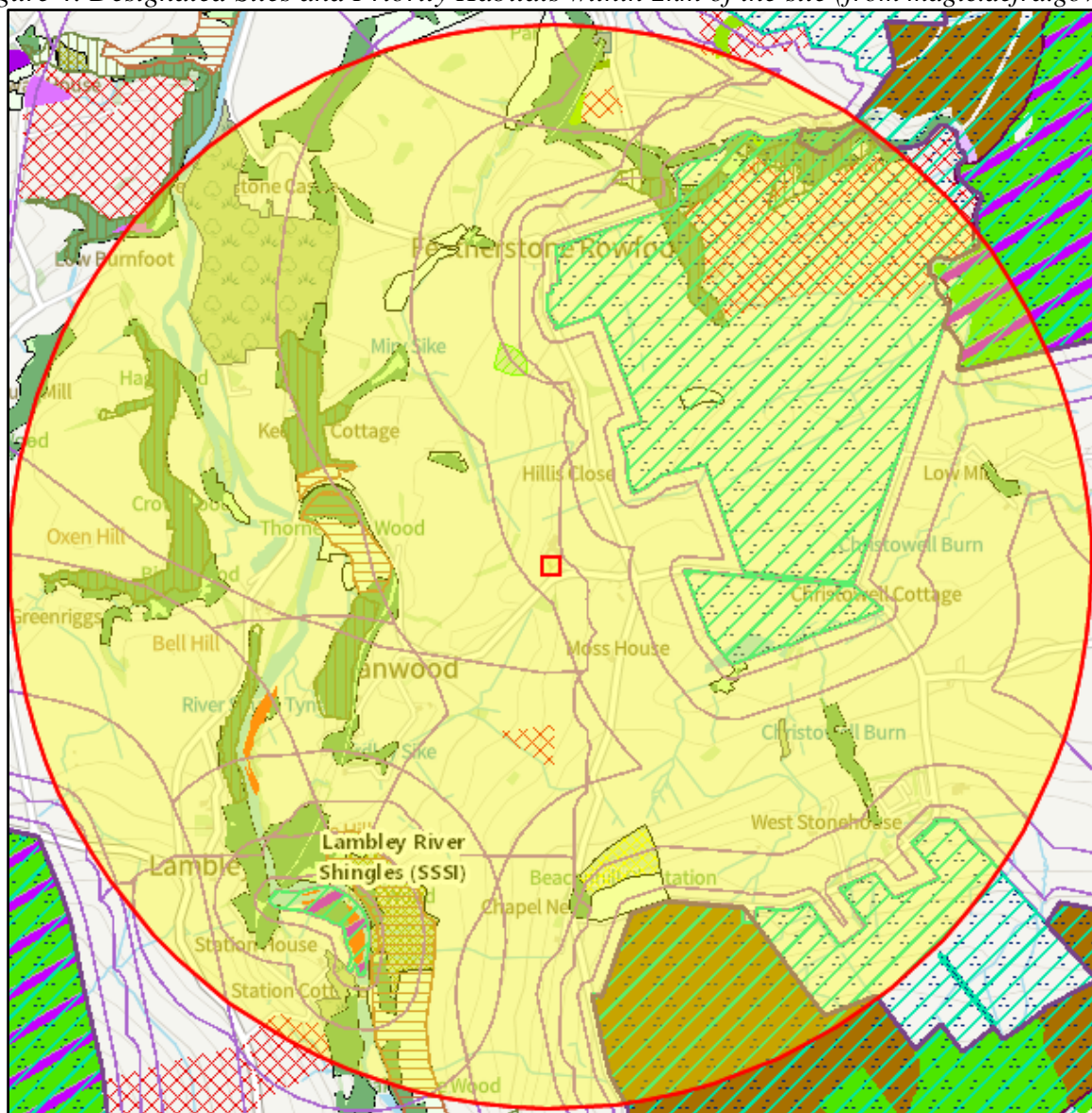
The building surveyed is located at NY685595 as indicated below.

4.2 Designated Sites

There are designated sites within 2km, Whitfield Moor, Plenmeller and Asholme Commons SSSI and Lambley River Shingles SSSI, North Pennines Moors SAC, and SPA and Tyne and Allen River Gravels SAC. The site also falls within impact risk zones for the SSSI's in the wider area and is within the Northumberland National Park and AONB North East.

¹ *Guidelines for Ecological Report Writing Second Edition* December 2017

Figure 4. Designated Sites and Priority Habitats within 2km of the site (from magic.defra.gov.uk)



4.3 Habitats

Figure 4 shows BAP Priority within 2km (listed under Section 41 of the Natural Environment and Rural Communities Act 2006). Habitats are deciduous woodland (green), ancient and semi-natural woodland, wood pasture and parkland, good quality semi-improved grassland, Calaminarian grassland, lowland meadow, upland heathland, grass moorland, and habitats with no main type.

4.4 Species and Species Groups

4.4.1 Desktop Search

Records from the Environmental Records Information Centre North East (ERIC North East) show results from within 2km of the site for bats. The Magic Site shows no ponds within 500m, one granted European Protected Species licences for bats within 2km and no granted European Protected Species Licences for great crested newts within 2km.

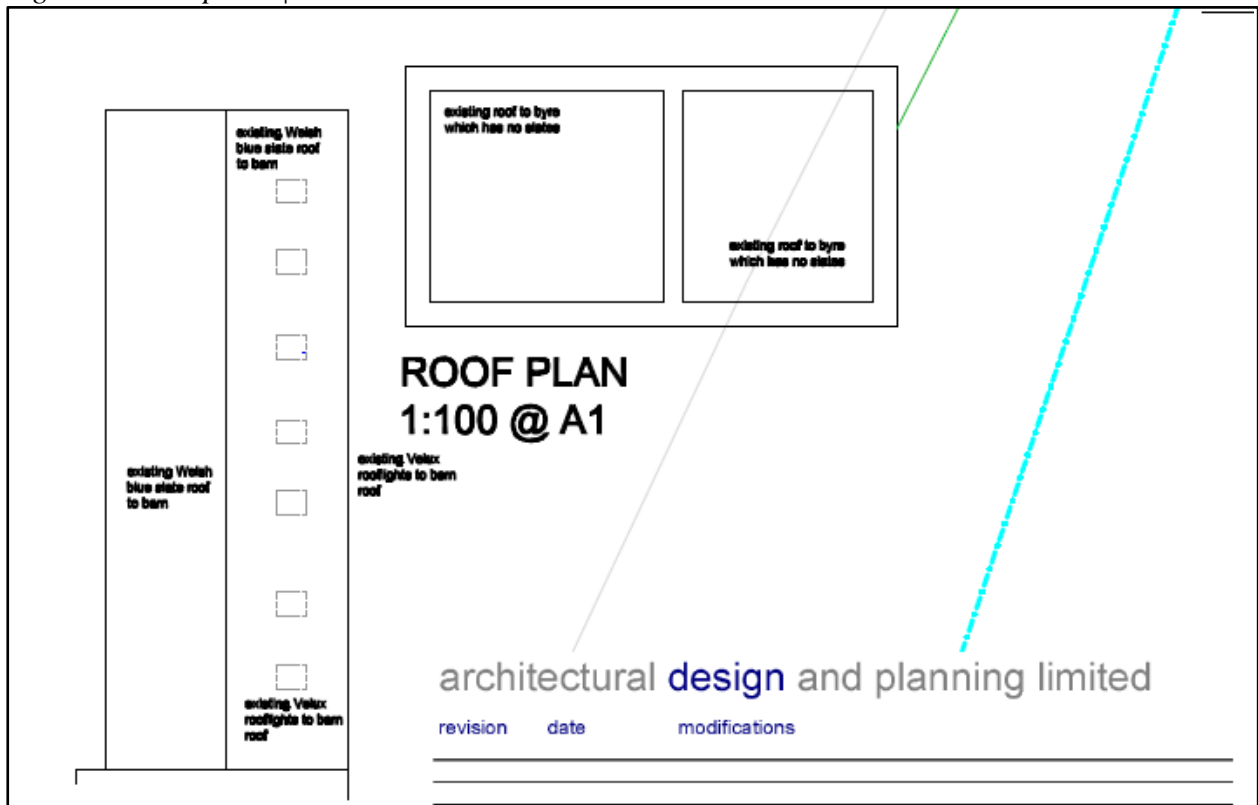
4.4.2 Habitat description

Woodhouse is located immediately in agricultural land consisting of mainly improved grassland with boundaries of hedges and fences, 850m to the east the River South Tyne flows with the wooded riverbanks providing bat-feeding corridors to the north and south.

The site and area has good potential for feeding bats, due to the proximity of the river and associated woodlands giving shelter and acting as a feeding corridor for bats to further afield. Bat roost potential will be restricted to the scattered dwellings in the area.

The building is situated with hardstanding to the north and disturbed ground to the west. The area to the east is the garden of the neighbouring house.

Figure 5. Site plan ↑ N



4.4.2 Bats

Pre-existing information on the species at the site.

Known pre-existing records for the local buildings surveyed are Brown long-eared and Pipistrelle 55kHz bats recorded in the farmhouse and northern building in 2015 (R Hadden).

Status of species in the local/regional area.

Known bat activity in the area within 2km of the site consists of maternity roosts of Pipistrelle sp. and Myotis sp.?, 1.4km to the southwest (1985 and 2004) Brown long-eared and Natterer's 1.1km to the north (2005) and Brown long-eared 1.4km to the northwest (1987). A day roost of Brandt's and Daubenton's are known 1-2km to the north (2015/2016) and roosts of Pipistrelle 45kHz also 1.2-2km to the north (2005/2016) are known. Additional foraging bats of the above species plus whiskered/Brandt's and Pipistrelle 55kHz are also known within 2km. (ERIC North East A full data set available upon request).

Locally and regionally, the Common Pipistrelle is the most common bat. Both Pipistrelle 45kHz and 55kHz bats are frequent in northern England, although Pipistrelle bats are the most abundant species they are thought to have declined by 70% between 1978 and 1993 (National Bat Colony Survey). Since 1997 monitoring by the National Bat Monitoring Programme (NBMP) has shown that bat numbers seem to be steady with small fluctuations up or down depending on the species and survey type carried out. The Brown long-eared bat is occasional with colonies much smaller in numbers than the Pipistrelle. Daubenton's, Natterer's and Whiskered/Brandt's bats are also occasional but widespread in Northumberland with an average colony size being about 35 adult bats. The Nathusius' Pipistrelle is a rare bat, has migratory habits and has been proved to fly across the North Sea from Bristol to Holland and has occasionally been recorded in Northumberland throughout the season.

Granted European Protected Species licences for bats within 2km consist of occasional roosts of Pipistrelle 45kHz bats 2km to the north (2015). (Magic Site).

Bats – Daytime Risk Assessment

The buildings consisted of two buildings that had been partially converted to the first fix stage. Externally the eaves were boxed with sound pointing, gable soffits and ridges with ridge vents. The western building had a loft space with boxed roof lights. The roof was lined with boarding and a breathable membrane, with no ridge board. No evidence of bats was located, within the loft or externally and no suitable crevices were noted. The structure has negligible suitability for bats due to the works carried out and no further survey is recommended.

No potential bat hibernation sites were identified in the building; however, bats may be present in any suitable crevice.

4.4.3 Bird Assessment

Status of species in the local/regional area.

Notable species in the area consist of Grey Partridge, Lapwing, Black Grouse, Tree Sparrow and Curlew all UK and Northumberland BAP species plus Snipe, Redshank, both Northumberland BAP species have been recorded within 2km. (Magic).

Survey

No birds were noted during the survey.

4.4.4 Reptiles and Great Crested Newts

Status of species in the local/regional area.

There are no records for great crested newts within 1km of the site (Amphibian Atlas 2016)). No ponds are shown, within 500m on the Magic Site.

Survey

There is no standing water on site. There will be negligible impact on great crested newts.

4.4.5 Mammals

Survey

No evidence of protected species was noted on site.

4.4.6 Invasive Species

Status of species in the local/regional area.

These are non-native invasive species included in Schedule 9 of the Wildlife & Countryside Act 1981 (as amended), which makes it illegal to release or allow to escape into the wild.

Survey

No invasive species were noted during the surveys.

5. Photographs of the Site



Interior of the western section



Interior of the northern section



Loft of the western section

Clean crevice within the loft against the gable wall



From the northwest

Northern section from the north





From the northeast



From the southeast

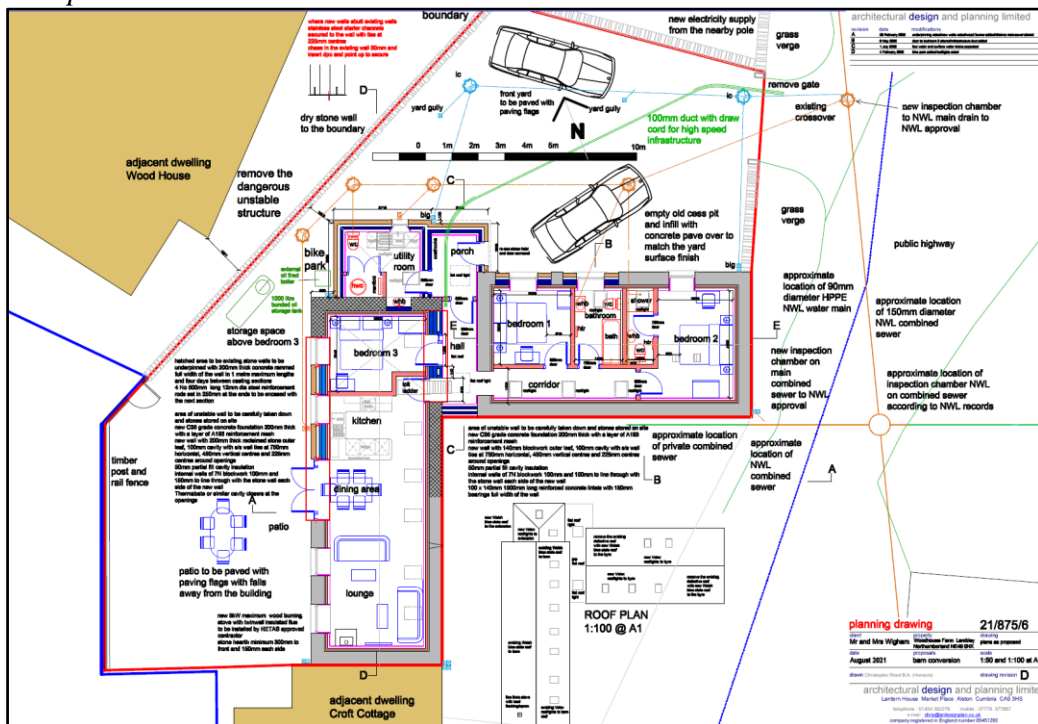


All soffits well sealed

6. Description of Proposed Development.

The works will include no further work to the external structure of the building.

Figure 5 Proposals



7. Assessment of Impacts

7.1 Constraints

No constraints for a risk assessment.

7.2 Site Based Impacts.

The structure being converted has a negligible conservation significance for bats as a roost site.

Pre-activity impacts are negligible with no further changes being made to the structure prior to works to completion.

Mid-activity impacts would be high and can cause disturbance, injury and death to bats, if no mitigation is carried out in the eventuality of a bat being located during works, however mid-activity impacts on bats could be reduced further if mitigation such as caution for any work is carried out.

Site Assessment

The site is considered to have negligible conservation significance for bats and for birds.

7.3 Impacts on the SSSI.

The site falls within the risk impact zones for the SSSI's in the area. Assessments of potential impacts on these sites need to be considered, however the development is a relatively small renovation scheme and it is unlikely to greatly impact the designated areas.

8. Mitigation and Enhancement.

The National Planning Policy Framework (NPPF) requires that the planning system minimizes impacts on biodiversity and provides net gains. The following recommendations will likely be translated into conditions placed on any planning consent. They are intended to reduce the risk of this development to protected species and habitats.

Natural England guidelines on mitigation states timing constraints and like-for-like replacement is a minimum requirement.

8.1 Pollution Prevention

To protect the waterway, measures to be made to ensure that there is no runoff (herbicides, wheel washing, cement washings etc.) either during construction to prevent pollution or sediment issues, or after development. (See Environment Agency's Pollution Prevention Guidelines (PPG5) for guidance.

8.2 On Site Mitigation

As the roof is completed with a breathable felt, no bat mitigation is recommended at this moment.

Two sparrow terraces to be located at eaves height or above on the north gable wall.

Any trenches or excavations to be closed overnight or provided with an earth or timber ramp not less than 300mm wide and no steeper than 45 degrees to provide an escape route for ground animals that might otherwise become entrapped.

8.3 Mitigation Summary

To maintain bat populations in the area the following will be carried out:-

- Any nesting bird species will be allowed access to the nest until the young have fledged.
- Two sparrow terraces to be provided.

Figure 6. Mitigation Locations

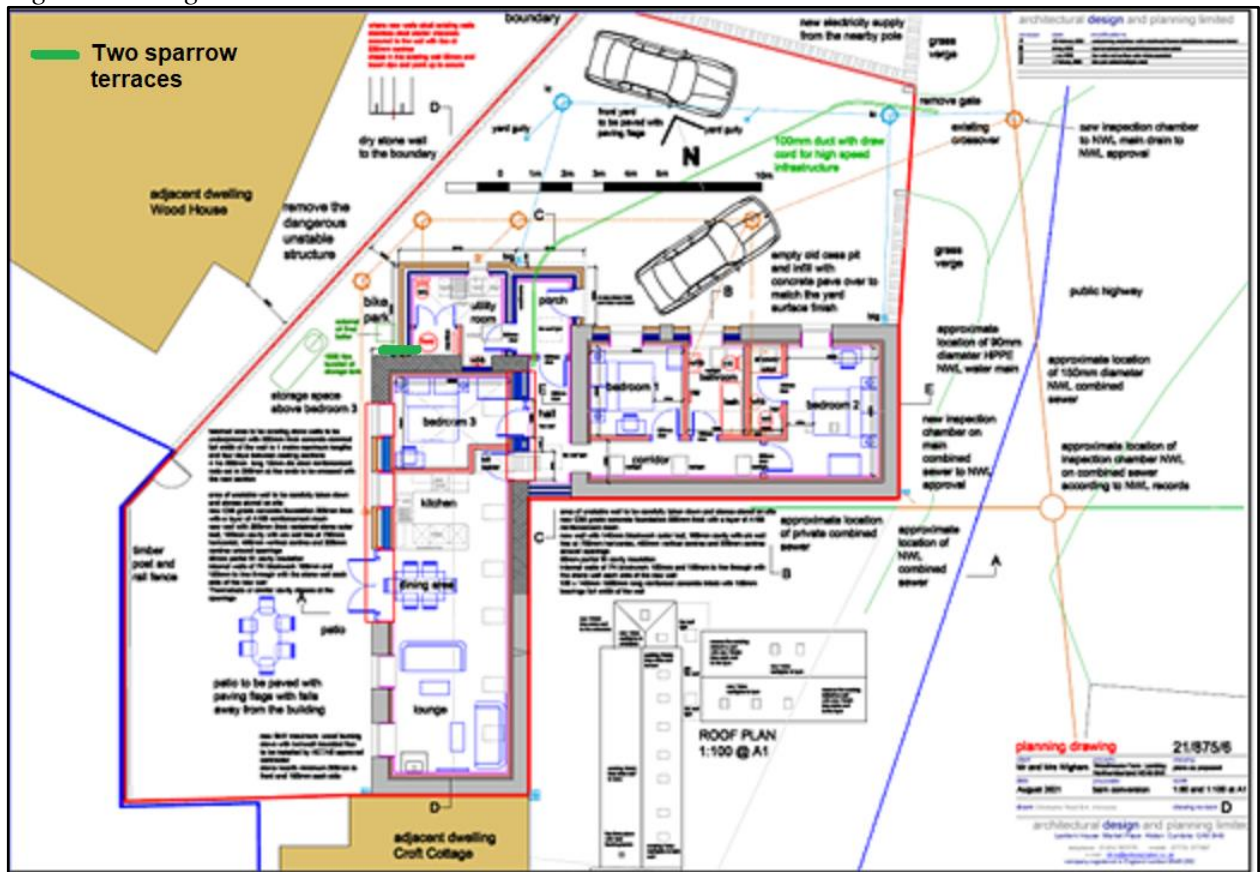


Table 1 Mitigation Summary

| Location | Mitigation Type |
|------------------|---|
| North gable wall | Two double chambered sparrow terraces placed as high as possible above the small extension. |

8.4 Enhancement

Not applicable.

8.5 Monitoring

Due to low bat activity on site, no monitoring after the development is completed will be required to assess the success of mitigation. (Bat Mitigation Guidelines 2004, Section 7.2). Ruth Hadden available to liaise with the owners as required regarding the mitigation.

8.6 Conclusions

- Without any mitigation the proposed works will result in negligible impact on the bat and bird population present.
- The provision of mitigation in provision of sparrow terraces will maintain biodiversity over the existing site.

9. References

- Barn Owl Trust (2002), Barn Owls on Site. English Nature
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- Institution of Lighting Professionals/Bat Conservation Trust (2018) Bats and artificial lighting in the UK, Guidance Note 08/18.
- Joint Nature Conservancy Council (2004) The Bat Workers Manual. JNCC.
- Bat boxes:** <https://www.nhbs.com/low-profile-woodstone-bat-box>
- Build-in WoodStone Bat Box** <https://www.nhbs.com/build-in-woodstone-bat-box>
- Barn Owl Box :** <http://www.barnowltrust.org.uk/infopage.html?Id=41>
- Sparrow Terrace:** www.nhbs.com/lsp-schwegler-sparrow-terrace
- Swift boxes:** <https://www.nhbs.com/vivara-pro-cambridge-swift-nest-box>
- Bird box :** <https://www.nhbs.com/1b-schwegler-nest-box>

APPENDIX 1. LEGISLATION RELATING TO PROTECTED SPECIES

Bats

All bats are protected under the Wildlife and Countryside Act (Schedule 5). They are also included in Schedule 2 of the Conservation Regulations 2017. The Act and Regulations make it illegal to:

Intentionally or deliberately kill, injure or capture (take) bats

Deliberately disturb bats (whether in a roost or not)

Damage, destroy or obstruct access to bat roosts

The Countryside and Rights of Way Act 2000 extended the protection given to bats to cover *reckless* damage or disturbance.

A bat roost is interpreted as 'any structure or place which is used for shelter or protection', whether or not bats are present at the time.

Barn Owls

Similarly, the Barn Owl is protected under Part 1 of the Countryside Act 1981 and is listed on Schedule 1, which gives them special protection. It is an offence, with certain exceptions to:

- Intentionally or deliberately kill, injure or capture (take) any wild barn owl.
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being 'built'.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing young.
- Intentionally or recklessly disturb any dependant young or wild barn owls.

Biodiversity

The National Planning Policy Framework (NPPF) 2012 requires Local Planning Authorities (LPA's) to seek to deliver biodiversity enhancement through the planning system, see paragraphs 9, 109 and 118. In particular Paragraph 109 includes a statement:

The planning system should contribute to and enhance the natural and local environment by:

- 'minimising impacts on biodiversity and providing net gains in biodiversity.'