



**CRONEY BANK FARM,
BAGNALL, STAFFORDSHIRE**

**PRELIMINARY ROOST ASSESSMENT
OF BUILDINGS**

**Prepared for
P.A. TAYLOR PLANS DESIGN AND CONSTRUCT**

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1. INTRODUCTION

- 1.1 This report has been prepared for P.A. Taylor Plans Design and Construct. It presents the results of a Preliminary Roost Assessment of buildings at Croney Bank Farm, Bagnall, Staffordshire during May 2021.
- 1.2 The proposals are for three extensions to be added to the two farm buildings on site. One extension will be constructed at the southwest of the farmhouse and another at the southwest of the shippen, the third extension will link the two buildings. The proposals are illustrated on the drawing *Proposed Site Location Plans PLANNING* prepared by P. A. Taylor Planning (drawing number: 6806.15, dated January 2021).
- 1.3 The two buildings comprise of a shippen (with a small attached pigsty) and the 'L' shaped farmhouse; both a reset around a small yard and form a U-shape. The shippen is single storey and constructed of stone with a gable ended, tiled roof. The pigsty follows the same orientation, abutting the southwest gable of the shippen, also with a pitched tile roof, but is brick-built. Both the shippen and pigsty will from herein be termed the shippen. The farmhouse is mainly two storeys with a small single storey section at the north. The farmhouse is constructed from stone apart from the northeast section which is partially brick-built. The farmhouse is gabled with pitched tiled roofs. A number of other associated buildings are present including two large wooden sheds, a small outbuilding and a barn converted into a separate residential property. The farmhouse is unoccupied at present and the shippen is unused and bare.
- 1.4 The buildings are in the rural parish of Bagnall. They are surrounded by agricultural land, characterised by pasture bordered by hedgerows and drystone walls with several pockets of woodland. Several ponds and water bodies are present locally, including a large pond within the property's garden to the east. A brook runs 80m to the northeast and feeds Stanley Pool 1.2km to the north. The OS grid reference for the centre of the buildings is SJ 92907 50419.
- 1.5 The report describes the methods used for the survey and any constraints encountered, along with the results of the survey, including a description of the buildings and any evidence of bats found. The findings are then assessed in light of the proposals and recommendations for further survey or action are given where appropriate.
- 1.6 The legislation relating to bats is given in Appendix I.

2. METHODOLOGY

Search of Existing Bat Records

- 2.1 The local record centre, Staffordshire Ecological Record, was contacted for existing records of bats within 2km of the site.
- 2.2 The results of a record search can help to set a site into the context of its surroundings, as well as provide valuable information on the known presence of bats in the local area.

Survey Methodology

- 2.3 The Preliminary Roost Assessment was undertaken on the 8th May 2021 by Neil Watkin. Neil is an experienced ecologist with over seven years working in the ecological sector. Neil holds a Natural England Class 2 licence to disturb and handle bats.
- 2.4 An assessment of the building was made in terms of its suitability to support roosting bats. Factors considered included internal conditions, presence of features suitable for use by crevice dwelling and free hanging bats, proximity to foraging habitats/cover and potential for disturbance.
- 2.5 A description of the building was made, and it was designated to one of the following categories according to its assessed potential to support bats:
 - Bat roost – evidence of use by bats present. Works affecting the roost would need to be undertaken under a statutory licence from Natural England, with precautionary and mitigation measures implemented as specified by the licence.
 - High Potential – building exhibiting features very suitable for use by roosting bats (such as gaps between tiles and underfelt, gaps below ridge tiles, significant crevices within the walls) and offering optimal roosting opportunity. Often a number of suitable features will be present. Further survey (usually a minimum of three evening emergence and/or dawn re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.
 - Moderate Potential – building exhibiting features less suitable for roosting bats (such as superficial gaps within walls, gaps containing debris or cobwebs, limited areas of tiles or generally well-sealed tiling) and offering sub-optimal roosting opportunity. Suitable roosting opportunity may be limited to a single or small number of features that can be searched for signs of use. Further survey (usually a minimum of two evening emergence and/or dawn re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.

- Low/Negligible Potential – building exhibiting features very unlikely to be used for roosting or no features suitable for roosting. For low potential buildings, further survey (usually a single evening emergence and/or dawn re-entry survey) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. Precautionary measures may need to be implemented during works to the building, although often no further action would be required.
- 2.6 A detailed visual inspection of the exterior and interior of the building was undertaken. The inspection followed standard methodologies set out in *Bat Surveys for Professional Ecologists – Good Practice Guidelines*, Bat Conservation Trust (Collins, 2016).
- 2.7 Externally, a visual inspection of features such as gaps in the fabric of the buildings was made for evidence of bat use from ground level. Evidence searched for included droppings and staining from fur-oil and urine. The survey was undertaken from the ground and aided by the use of close-focusing binoculars and a high-powered torch where necessary.
- 2.8 The internal survey of the buildings followed a similar approach, with a search made for bat droppings, prey residues (such as fly or moth wings) and urine stains, as well as resident bats.
- 2.9 The weather conditions during the inspection survey were as follows: dry with 90% cloud cover, gentle breeze, and temperatures of 3°C.

Constraints

- 2.10 Much of both of the buildings were inaccessible for survey therefore it was not possible to carry out an internal inspection and as a result evidence of bats may have been missed. The assessment therefore necessarily had to be largely based upon external features only.

3. SURVEY FINDINGS & INTERPRETATION

Review of Existing Ecological Records

- 3.1 Staffordshire Ecological Record provided information on bats that have been recorded within 2km of the site.
- 3.2 Bats have been recorded on 91 occasions within the search area, with at least four species known to be present: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus*, whiskered /Brandt's *Myotis mystacinus/brandtii*.
- 3.3 There are no records of bats from the site itself. Seventeen roosts have been recorded within the search area. The nearest record to site is a common pipistrelle roost, circa 400m to the southwest. Another bat roost recorded in 1997 is located 450m to the northwest with a pipistrelle roost identified during 1997 and 600m to the north. The remaining known roosts are either identified as pipistrelle, brown long-eared or simply as bats and are generally over 1km from the site.
- 3.4 The remaining records describe bats in flight, either commuting or foraging with occasional grounded or dead bats recorded. Whiskered/Brandt's have been recorded on two occasions in Bagnall village 400m to the northwest, and brown long-eared have been recorded five times, four of which are also located in Bagnall. Soprano pipistrelles have been recorded twice only, during 2018, 1.9km to the north. Common pipistrelle have been recorded 18 times, in various directions from the site. Given the quality of habitat found in the wider area it is highly likely that both the species and numbers of bats is under recorded in the local area.

Survey Findings

External Inspection

- 3.5 The surveyed buildings, are surrounded by four other buildings which should not be affected by the proposals. A small brick outbuilding lies to the south and a large wooden shed is to the southwest with a second similar building to the north. A brick-built barn has recently been converted to a residential property; this lies to the west.
- 3.6 The farmhouse is largely built from stone with the northeast part of the building originally being single storey but at some point, in the mid 1900's a second floor was added leaving a small section to the north remaining a single storey where the original roof tiles have been retained. A small ventilation hole of approximately 100mm x 200mm is present in the stonework of the northern gable of the single storey section.
- 3.7 The roof on the older two storey section is pitched and gabled at the northeast and southwest with the newer extension built perpendicular to the old and gabled at the northwest. The roof is clad in clay tiles and all of the two storeyed sections of the farmhouse have been re-roofed in recent years. As a result, the roof is generally well-sealed apart from possible gaps between the tiles and the flashing surrounding a metal flue at the southwest end of the roof. The brick and stonework

are in good repair and well-sealed with the exception of a hole c.100m diameter situated in the stonework beneath the eaves on the south side of the courtyard. The windows and doors are a mix of uPVC and wooden frames; all are well-sealed with no gaps evident.

- 3.8 The tiles at the eaves of the two-storey section of the farmhouse provide small gaps and a ridge tile near to the brick gable wall of the two-storey section is raised providing potential for access and roosting.
- 3.9 The shippen building is constructed of stone and is single storeyed. It is gabled at the northeast and southwest with ventilation holes allowed into the upper gable walls, the southwest of which has been partially blocked with a loose brick. As with the farmhouse the shippen has recently been re-roofed. The tiles are well fitted and present no gaps. Stones are missing near to the base of the wall on the north-western elevation and mortar beds have degraded on this wall, providing gaps within the stonework. Similarly on the southwest gable wall both stone and mortar are missing. uPVC fascia boards have been fitted at both eaves of the shippen. Gaps are present on both elevations, between the wall tops, fascia, and wall plates for most of the wall lengths. The shippen has uPVC windows which are well-sealed but two doors on the courtyard side and one to the northwest are wooden, ledged, and braced. The door on the northwest has gaps between it and the surrounding stonework. The attached pigsty is brick-built and has a pitched, tiled roof. The roof is well-sealed, and the brickwork is in good repair with no gaps. The two doorways on the pigsty do not have doors or frames fitted and are unsealed.
- 3.10 Of the surrounding buildings not directly affected by the proposals, the adjacent barn which has recently been converted into a residential property, situated to the west of the proposed works is brick-built with a gabled, pitched, tiled roof. New wood framed windows and doors are installed. The building is well-sealed with no gaps beyond the superficial gaps on the outer brickwork where ventilation holes on the walls have been sealed with mortar. The small brick-built outhouse to the south has a pitched tile roof and a wooden, ledged, and braced door. This building is well-sealed with no suitable gaps. Both wooden sheds are clad in tongue and groove boards and have pitched, felted roofs. These buildings present no suitable gaps or crevices and are well-sealed throughout.

Internal Inspection

- 3.11 An internal inspection of the buildings was not fully possible, however the interior of the shippen was viewed via missing stones in the northern wall. The building has no roof void and internal dividing walls do not reach to roof height. The walls are constructed from stone and are lime washed. The roof timbers have been replaced and breathable roof membrane is fitted beneath the tiles. The pigsty was accessible and has bare brick walls with a low roof with no roof void. The roof timbers have been replaced and again breathable roof membrane has been fitted beneath the tiles.

Interpretation of Survey Findings

- 3.12 No evidence that bats make use of buildings for roosting was observed during the survey.

- 3.13 The buildings hold high potential to support roosting bats. On the farmhouse the potential to support roosting bats relates to a number of features including a hole in the stonework near to the eaves on the southern part of the building, possible gaps between the tiles and flashing around the metal flue, a ventilation hole in the stonework at the gable of the single storey section and gaps beneath tiles at the eaves and beneath a ridge tile on this section.
- 3.14 On the shippen the potential for bat use is due to the various gaps in mortar beds and holes in the stonework on the northwest elevation and southwest gable wall, gaps between fascia boards and wall plates and ventilation holes in the gable ends.
- 3.15 As a result of the buildings' construction type and condition, externally in the roof tiles, gaps beneath fascia boards and in the stonework, besides those internally in the shippen they are likely to provide a range of opportunities suitable for roosting bats. The buildings are graded as high potential for use by bats.
- 3.16 The buildings are located in a rural area and surrounded by habitats that provide excellent and varied opportunities for bats to use for foraging. The records show at least four species are known in the local area with roosts nearby.
- 3.17 The four surrounding buildings which are not part of the proposals, including the converted barn, outbuilding and two wooden sheds display negligible potential to support roosting bats.
- 3.18 Two species of bird were noted as nesting in the shippen. A wren was observed carrying nesting material into the ventilation hole at the northeast gable wall and a blue tit made similar visits to the gaps in the mortar on the northwest elevation. A barn swallow nest was also identified at the southwest gable of the shippen within the pigsty. The proposals would need to take account of the presence of nesting birds.

4. RECOMMENDATIONS

- 4.1 The buildings have been graded as having high potential for roosting bats due to a range of features present and the proximity of quality foraging habitat. It is therefore recommended that follow-on bat surveys be undertaken. These would help to determine whether bats make use of the building for roosting and, if so, the extent of bat use; the species of bat present; the status of any roost/s; numbers of bats present; and roost and access points to be determined, thus enabling impacts to be assessed and appropriate compensation and mitigation to be designed where applicable to off-set impacts on bats. The recommendation for follow-on survey follows the advice on assessment of buildings contained within *Bat Surveys – Good Practice Guidelines* (Collins, 2016).
- 4.2 The follow-on survey would need to consist of a combination of three evening emergence and/or dawn re-entry surveys, with surveyors positioned externally, watching for bat emergence from/re-entry into, and activity associated with the buildings. Sufficient surveyors would need to carry out the survey to adequately view the buildings.
- 4.3 The surveys would need to be undertaken during a time of year when bats are most active. Such surveys can be undertaken between May and September according to Bat Conservation Trust guidelines, with May to August being the optimal period (September is considered sub-optimal). Survey visits would need to be each spaced by a minimum of two weeks.
- 4.4 In view of the legal protection afforded to bats (see Appendix I), a statutory European Protected Species (EPS) development licence would need to be sought from Natural England to undertake the proposed work on the building. In order to issue a licence, Natural England require detailed and up-to-date information about the status of bat roosts and bat use of the building and a commitment to appropriate mitigation measures where applicable. In addition, planning permission (usually full) would have to have been granted for the development (again where applicable).
- 4.5 In order to obtain a licence from Natural England, the following three tests would need to be satisfied:
- there is no satisfactory alternative;
 - 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; and
 - the action authorised preserved 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.
- 4.6 The presence of nesting birds can be avoided as a constraint to the proposals by timing works to avoid the bird nesting season. Should works need to be carried out during the bird nesting season then a watching brief for birds would need to be undertaken by an ecologist prior to any works commencing as well as during the works to check for the presence of nesting birds. The findings of the watching brief would be used to ascertain the best method to proceed to avoid impacting upon nesting birds, which would be set out via a method statement. The bird nesting

season is generally deemed to run from March to August inclusive, although some species such as barn swallow can nest outside this period.

5. REFERENCES

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

PLATES



Plate I. Farmhouse and Shippen viewed from the south west.

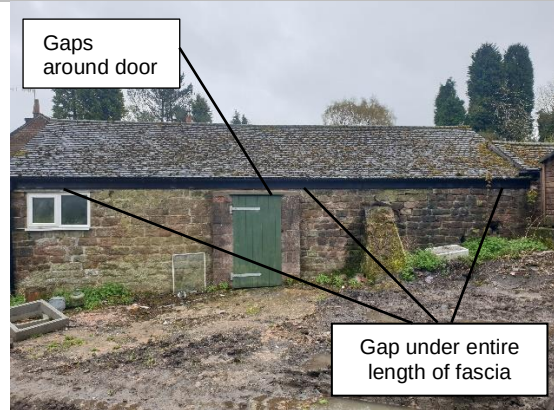


Plate II. View of northern western elevation of the shippen.



Plate III. North western elevation of shippen.



Plate IV. Northeast gable of shippen and northwest gable of single storey section of farmhouse.



Plate V. Gap under fascia on south eastern elevation of shippen.



Plate VI. Missing mortar around the blocked ventilation hole at southwest gable of shippen.



Plate VII. Raised ridge tile on single storey section of farmhouse.



Plate VIII. Hole in stonework under eaves on north western elevation of farmhouse.



Plate IX. Gaps under common tiles around flue vent on south eastern pitch of farmhouse.



Plate X. South western gable wall of shippen within the pigsty, showing gaps in stonework.

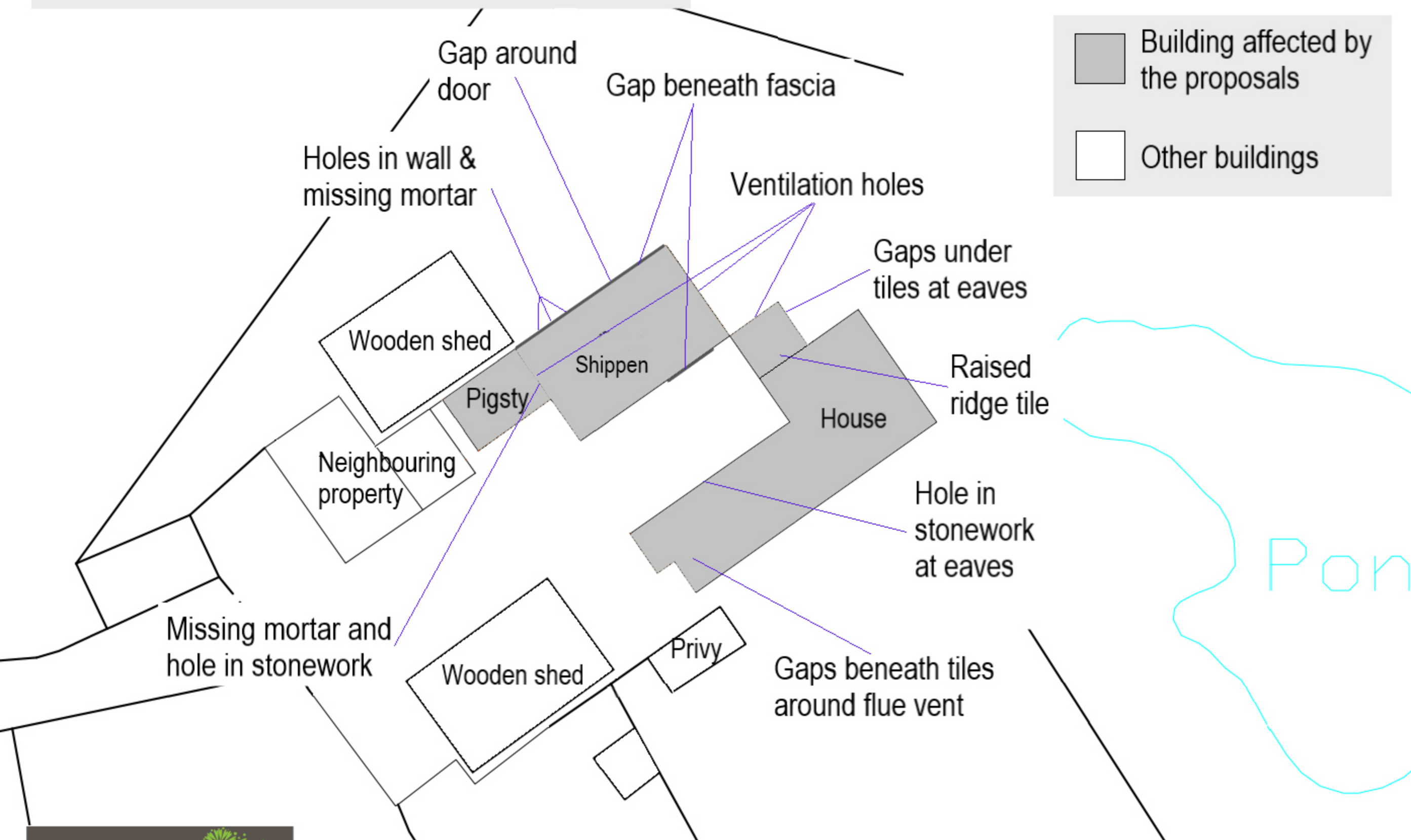


Plate XI. Internal view of the shippen.



Plate XII. Roof section of the shippen.

Figure 1. Layout of Buildings and Locations of Potential Roost Features



APPENDIX I - LEGISLATION RELATING TO PROTECTED SPECIES DISCUSSED IN THE REPORT

The information below is intended only as guidance to the legislation relating to these species and relates solely to England and does not purport to provide legal advice. It is recommended that the legislative documents be referred to for the full legal wording and the services of a relevant specialist sought where legal advice is required.

Bats

There are seventeen different species of bat in the UK; some are very rare whilst others are widespread. However, because the populations of most species have declined in past decades, all British bats have been protected by law.

Bats are protected in England under European Legislation via the Conservation (Natural Habitats and Wild Flora and Fauna (92/43/EEC)) or 'The Habitats Directive'. The Directive is transposed into UK law via the Conservation of Habitats and Species Regulations 2010 (Statutory Instrument 2010/0490 known as the Habitats Regulations), which came into force on the 1st April 2010. The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 (Statutory Instrument 1994/2716) and amendments. Due to their inclusion on Schedule 2 of the Habitats Regulations, bats are considered 'European Protected Species'.

In summary, this legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat;
- damage or destroy a breeding site or resting place of any bat;
- possess a bat (alive or dead) or any part of a bat.

Disturbance of bats includes in particular any disturbance which is likely:

(a) to impair their ability:

- (i) to survive, to breed or reproduce, or to rear or nurture their young; or
- (ii) to hibernate or migrate; or

(b) to affect the local distribution or abundance of the species to which they belong.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended), which has also been amended by the Countryside and Rights of Way (CROW) Act, 2000.

In summary, this legislation makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection.

Birds

All wild birds, their nests and eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is, therefore, an offence (subject to certain exceptions) to:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- take or destroy the egg of any wild bird.

In addition to the above, in accordance to amendments of the Wildlife and Countryside Act by the Countryside and Rights of Way Act 2000, it is an offence to:

- intentionally or recklessly disturb any species listed on Schedule 1 of the Wildlife and Countryside Act whilst building a nest, or whilst it is on, in or near a nest containing eggs or young; and
- disturb the dependent young of a Schedule 1 bird.

For example, barn owl is protected under Schedule 1 of the Wildlife and Countryside Act, protecting them from intentional or reckless disturbance during the breeding season (which is normally considered the time from when the female makes the first nest 'scrape' and lays the first egg until the time when the last dependent young stops returning to the nest (English Nature, 2002/3)).

NERC ACT AND BIODIVERSITY

A number of UK habitats and species are also included on the list of habitats and species which are of principal importance for the conservation of biodiversity in England as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act. The NERC Act came into force on 1st Oct 2006. Section 41 (S41) of the Act 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 list has been drawn up in consultation with Natural England, as required by the Act.

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 NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities

under the UK Post-2010 Biodiversity Framework. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England. In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

The impact that this legislation has on the Planning system is also outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System. This states:

The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature [now Natural England] before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species' protection provisions affecting the site concerned.