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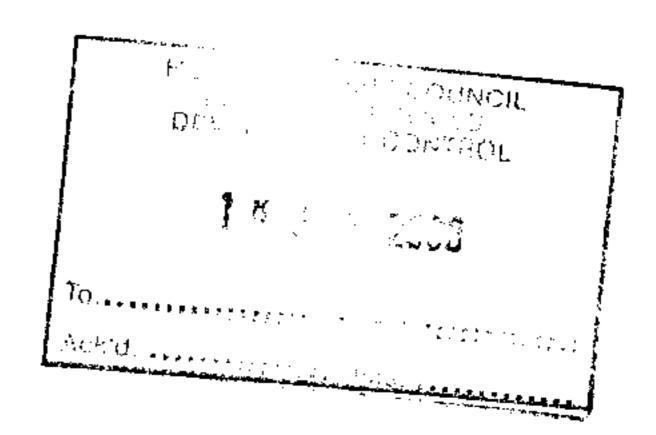
Report by Radnorshire Wildlife Services Ltd

Survey at:

Ladyridge Barns
Brockhamton
Fownhope
Herefordshire

Grid reference SO 593 320.

Date: 12th June 2008



Radnorshire Wildlife Services Company Number 4284093

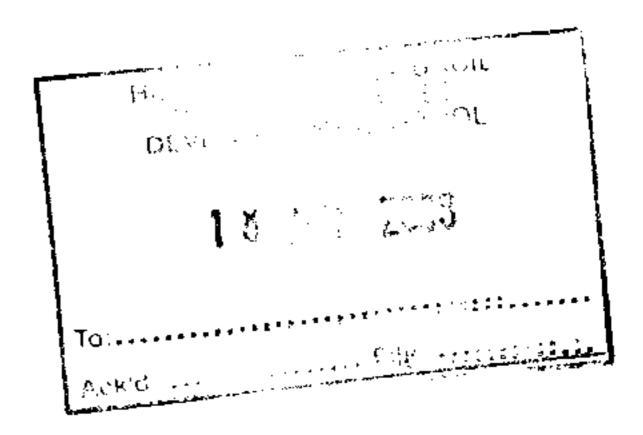
Ecological Survey Report for Reg Ellis and Associates (Architects)

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1 Introduction and background to development

The owner is applying for planning consent to convert a range of traditional farm buildings. An assessment of any adverse effects on protected species, principally bats, is required.

The aim of this report is to prevent any animal being physically harmed, to protect all roost sites where possible and to provide mitigation for the proposed development to maintain the conservation status of protected species.

2 Local Policy Context

Herefordshire County Council has published Supplementary Planning Guidance on Biodiversity. This encourages planning applicants to take a positive approach to biodiversity conservation and sets out what is required in ecological reports. Four bats (barbastelle, greater and lesser horseshoe and pipistrelle) are noted as Biodiversity Action Plan priority species.

The Council's Draft Biodiversity Strategy 2007 – 2010 states: "We will ensure all planning decisions are informed with adequate ecological information, encouraging developers to submit quality ecological surveys and assessments with applications such as those that might be generated by professional ecological consultants. The Biodiversity SPG and UDP policies will be used as a tool to secure high quality applications."

The Herefordshire Local Biodiversity Action Plan includes species action plans for bats and for barn owls.

3 Personnel and equipment

Radnorshire Wildlife Services Ltd is the consultancy arm of the Radnorshire Wildlife Trust. This report is by the consultancy manager Chris Ledbury MLI MIEEM. He was assisted by Fiona Luckhurst MIEEM an experienced bat consultant (licence number 2008 0840) and by Julia Williams an experienced bat worker (licence number 2007 2796). Penny Ledbury, plus Joshua Evans, a consultant from Worcestershire Wildlife Consultancy, assisted with the emergence surveys which required five surveyors on each occasion because of the spread of buildings.

Normal surveying techniques were used for the buildings survey with laddered access available to parts of the building. For the emergence surveys, surveyors used heterodyne and frequency division recorders with post-survey computer analysis.

4 Survey and site assessment

4.1 Pre-existing information on species at survey site

The Herefordshire Biological Records Centre has six recent (since 2000) records of barn owl within the two km search area but none in the immediate vicinity. The Centre has a 2007 record of two roosting pipistrelles from this grid reference, the map location appearing to coincide with the granary but no further details are available.

4.2 Status of key species nationally, regionally and locally

Key species at Ladyridge are lesser horseshoe bats and pipistrelles plus barn owls and swallows.

Bats

While bat population trends are difficult to measure there is a consensus that in both Britain and continental Europe, nearly all species are declining and vulnerable. Because of past declines, seven of the 16 British species have been designated as priority species by the government. These are greater and lesser horseshoe bats, soprano pipistrelle, noctule, brown long-eared, barbastelle and Bechstein's bat.

The population estimate for lesser horseshoes is 18,000 for the UK with 9,000 in England. The UK has an internationally important population because of severe declines across Europe. The population is concentrated in south-west England and parts of Wales and has increased in both countries partly due to strict roost protection.

Both soprano and common pipistrelle are common and widespread nationally and locally and their populations are stable or increasing.

Barn Owls

Britain's barn owl population has suffered a severe decline, perhaps 70% since the 1930s. It is currently on the amber list of species of conservation concern due to a moderate decline of 25% - 49% in the last 25 years. Nationally, population density is critically low over much of its range. Intensive farming has led to less availability of food, road deaths have increased and huge numbers of roosting and breeding sites have been lost. Barn owls use a range of sites in their home range, for roosting and breeding, roosting only and occasional visits. They are faithful to their sites from year to year and loss of one site may lead to abandonment of them all and disappearance of the owls from the locality.

The Herefordshire population has declined over the last seventy years and is currently estimated at 50 breeding pairs although 2007 was a good year and this figure may have increased. They are frequently seen in the local area.

Swallows

Swallows are also on the amber list of Birds of Conservation Concern. Birds on this list are either:

- in moderate decline
- restricted to a small number of sites
- present in internationally important numbers in the UK or
- in unfavourable conservation status across Europe

Changing farming practices and loss of roost sites is causing increasing concern.

Survey objectives 4.3

The aims of the survey were to:

- establish whether the building is being used by barn owls
- establish whether the building is being used by bats and if so the hature of that use

- assess the potential impacts of the proposed works on bats and barn owls
- assess the options for mitigation and/or enhancement
- take account of any other protected species

Desk study involves a search of records by the Herefordshire Biological Records Centre (Protected species records resulting from the survey will be supplied to the Centre unless the owner requests this not to be done)

4.4 Survey area

Brockhampton Estate is a large (approximately 2000 acres) estate on the east bank of the Wye Valley south of Fownhope. Ladyridge Barns are at an altitude of about 110 metres at grid reference **SO 593 320**. All except the stable block are in a relatively derelict condition. They comprise:

- The granary, built of stone with an unlined slate roof. On two floors, the upper floor is empty but the ground floor is used for storage and is largely open. On the west side a lean-to is partly open with a roof of corrugated sheets and partly enclosed with a tile roof.
- The threshing barn, built with a mix of stone, brick and timber weather-boarding with a mix of roof materials. The main part is open to the unlined roof but the northern part has a timber floor inserted to provide an upper level.
- The former milking parlour, adjacent to the threshing barn. This is single storey, in a derelict condition and filled with old equipment.
- The implements shed. Mainly weather-boarding with a tile roof this is at ground level only and is open to the yard. A large growth of ivy envelops one end.
- The small shed. At the north end of the threshing barn, this is a brick, stone and timber building with louvered ventilation on the roof.
- The stable block is single storey, of stone and tile and is still in use.

Potential bat roost sites include the weather-boarding, wall tops, roof coverings, ridge lines, masonry gaps and crevices and mortice joints in the timbers.

4.5 Habitat description

The surrounding habitat is excellent with a mix of pasture, hedge lines, mature trees and wood. The River Wye Special Area of Conservation is about 600 metres to the west.

4.6 Methodology

Barn Owls

On site, signs of occupation by barn owls include pellets, droppings and feathers and nesting evidence. External survey involves checking for appropriate access holes, droppings on or near walls and presence of other suitable buildings and habitat in the vicinity. Internal survey involves checking for nest debris, droppings and pellets and feathers. Potential survey constraints include restricted access to parts of a building, previous clearance of signs of occupation and the fact that barn owls may leave few obvious signs of occupation even in the breeding season.

Bats

On site, external survey involves a detailed search for bat droppings on the ground or stuck to walls, suitable entry and exit points around eaves, soffits, flashings etc and any other signs such as staining (oily marks from fur at access points) Internal survey also involves a detailed search of floors, walls and structural elements for droppings, feeding remains and other signs such as corpses. The emergence survey is done from just before sunset to about 80 minutes after, and needs enough surveyors to provide adequate coverage. Species, numbers, exit points and flight paths are recorded. Constraints can include lack of access to parts of the building, difficulties caused by the weather and the time of year

5 Results

At Ladyridge, access was available to most parts of the buildings. However, some of the upper floors were in a dangerous state, ground floors were very cluttered with old materials and farm equipment and the small shed was padlocked. A comprehensive survey was thus not possible.

Barn owls

There is access to most of the buildings for owls and barn owl pellets were identified in both the granary and the threshing barn. In the granary the single pellet was old but could have been from 2007. In the threshing barn there were several pellets but these were very old and decomposed. There was no obvious sign of a nesting platform. However, barn owls have been seen in and around the buildings in previous years by local people and one was seen flying towards the buildings on 4/6/08.

Bats

The site survey was on 14/2/08. An intensive search did not identify any definite signs of use by bats but that is not surprising given the time of year, the very open and draughty nature of most of the buildings and the difficulties of access in some areas. While no droppings were discovered, a quantity of butterfly wings in the granary may have been feeding remains. However, a further brief survey on the evening of the first emergence survey revealed a small scatter of fresh lesser horseshoe type droppings in the granary.

The first emergence survey was on 14/5/08 starting at 20.50. Weather was dry with a 14mph breeze and 15%doud. Temperature was 12.8°C dropping at the end to 10.9°C. While there was considerable foraging activity around the buildings and along the lane with passess by common and soprano pipistrelles, a Myotis species, lesser horseshoes and one noctule, there was no evidence of roosting in the buildings. A lesser horseshoe was recorded foraging in the ground floor open bays of the granary towards the end of the survey at 22.00

The second emergence survey was on 5/6/08 from 20.55 to 23.10. Weather was dry, calm with 20%cloud. Temperature was 19.2°C dropping to 13.9°C. Foraging and passes were again recorded from both species of pipistrelle, a noctule, lesser horseshoes and Myotis and brown long-eared bats mainly along the lane. Again there was no evidence of roosting within the buildings.

Other

Swallows use several parts of the buildings for nesting along with a range of other species including blackbird, wren and robin.

6 Interpretation and evaluation

Although the visual site survey was not carried out at the optimum time, the emergence surveys were valid in terms of timing, temperature etc and in coverage by experienced surveyors. Surrounding habitat is excellent and the area is used by large numbers of a range of bat species. A local specialist leads bat walks in the area and several people we spoke to told us about their own roosts including lesser horseshoes. The nearby church may be the source of the brown long-eared bats that were recorded on the second emergence survey.

Despite all that and the suitability of several of the buildings no significant roosting was proven. The granary may have been used briefly as a lesser horseshoe feeding roost earlier in the year and lesser horseshoes use the open bays of the granary for foraging. Pipistrelles use the whole area for foraging and especially the area near the stables.

Barn owls have used the buildings in the past and are still in the area but not currently using any of the buildings as a roost.

7 Assessment of the impact of the development

The proposal is to convert the buildings into work units with a small amount of residential provision and with associated hard and soft landscaping as shown in the appendices. During the course of the work there will thus be loss of any temporary roosting areas. In the long term there may be a loss of foraging potential but with the mitigation that is proposed, the site and surrounding area should remain just as attractive for bats.

Post-activity impacts might include external lighting or other forms of disturbance and possible alteration of mitigation measures by future occupants.

8 Mitigation and compensation

The client's architects have provided details of the intended mitigation. A bat loft will be provided within the roof space of the new open garaging. This will have a plywood floor with a wooden screen incorporating access to allow for cleaning and inspection. Provision for barn owls will be via an opening in the stone gable at the east of the garaging with a stone cill and access into a box as specified by the Barn Owl Trust.

It is not intended to over-restore stone work on the walls to be retained, so some gaps and crevices will remain. Roofing will be a mix of slates, pantiles and clay tiles with overhanging eaves and some areas of weather-boarding. However, specific provision for pipistrelles should be guaranteed by providing some access slots. Pipistrelles roost in small gaps under soffit boards and eaves, under external cladding, between roof tiles or slates and insulation material, around

window frames and in cavity walls. They favour sites which provide different places to move to depending on the temperature.

Access needs to be provided for pipistrelles in the conversion. Access slots need to be over the wall top and beneath the slate or tile and should measure 15mm by at least 25mm. They should allow bats to access further than the first batten. Access slots should be provided under the soffits at the apex of at least two gables and at eaves level on two sides to provide a range of access options. Additional roosting space should also be provided by ensuring that there are some crevices behind the weather-boarding rather than leaving it to chance.

Any external lighting needs to be carefully positioned so that it does not shine directly onto bat access points. Illuminating a roost causes disturbance and may cause bats to desert. Light falling on a roost access point will delay emergence and thus shorten the available time for foraging. It is the intention to provide only minimal external lighting anyway

The open garaging will be appropriate for swallows and if necessary (depending on the detailed design) nesting platforms client's could easily be incorporated. Swallows prefer outbuildings which provide dark ledges, as brightly lit sites are at greater risk from predators. Timing of the work should aim to avoid disturbance to nesting birds as it is illegal to destroy a nest which is in use.

If any existing timbers are to be treated, only approved chemicals should be used which are known to be suitable for bat roosts and treatment should not be carried out between May and September unless it has been established that there are no bats in timber joints etc. Any new wood which is used in the bat loft must not have been pre-treated with materials which are toxic to bats.

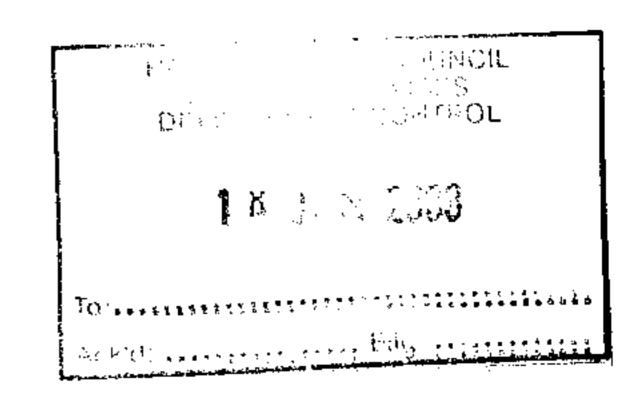
The intention is to use indigenous hedging, some new planting and to create a perry pear orchard. This will all benefit biodiversity. If some planting which attracts night flying insects e.g. honeysuckle can be incorporated that will be a bonus.

9 Summary

The development will provide a new use for redundant buildings. It is possible to mitigate for both birds and bats. Apart from a temporary feeding roost, no bat roost has been proven in the buildings but there is a significant bat population in the immediate area. The planned provision will benefit that population.

10. References

Bat Mitigation Guidelines. English Nature. 2004Herefordshire Council Supplementary Planning Guidance: Biodiversity. 2002
Bat Surveys: Good Practice Guidelines. Bat Conservation Trust. 2007
Barn owls on Site: a guide for developers and planners. English Nature. 2002
Bat Workers Manual Herefordshire Biodiversity Action Plan



Appendix 1

Granary East side



Granary North side



Granary West side



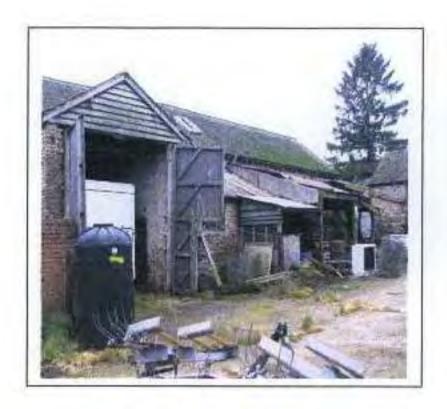
South part of threshing barn

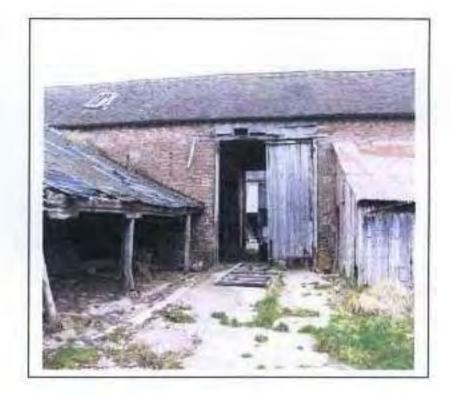




Threshing Barn

Rear of threshing barn





Stable block

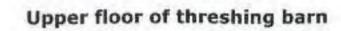
The small shed







Interior of granary







Implements shed

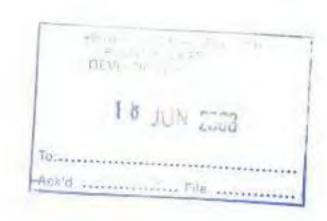


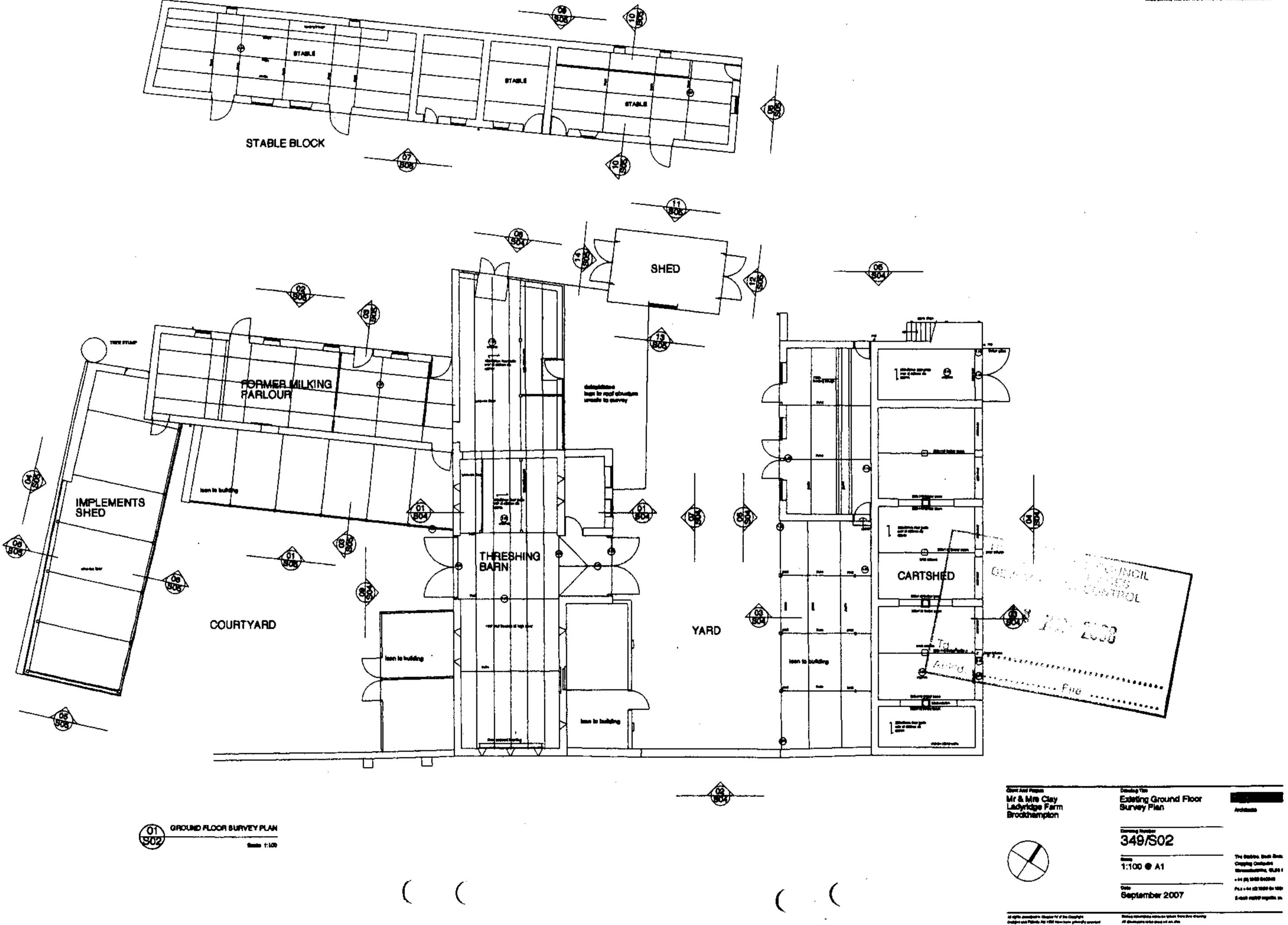


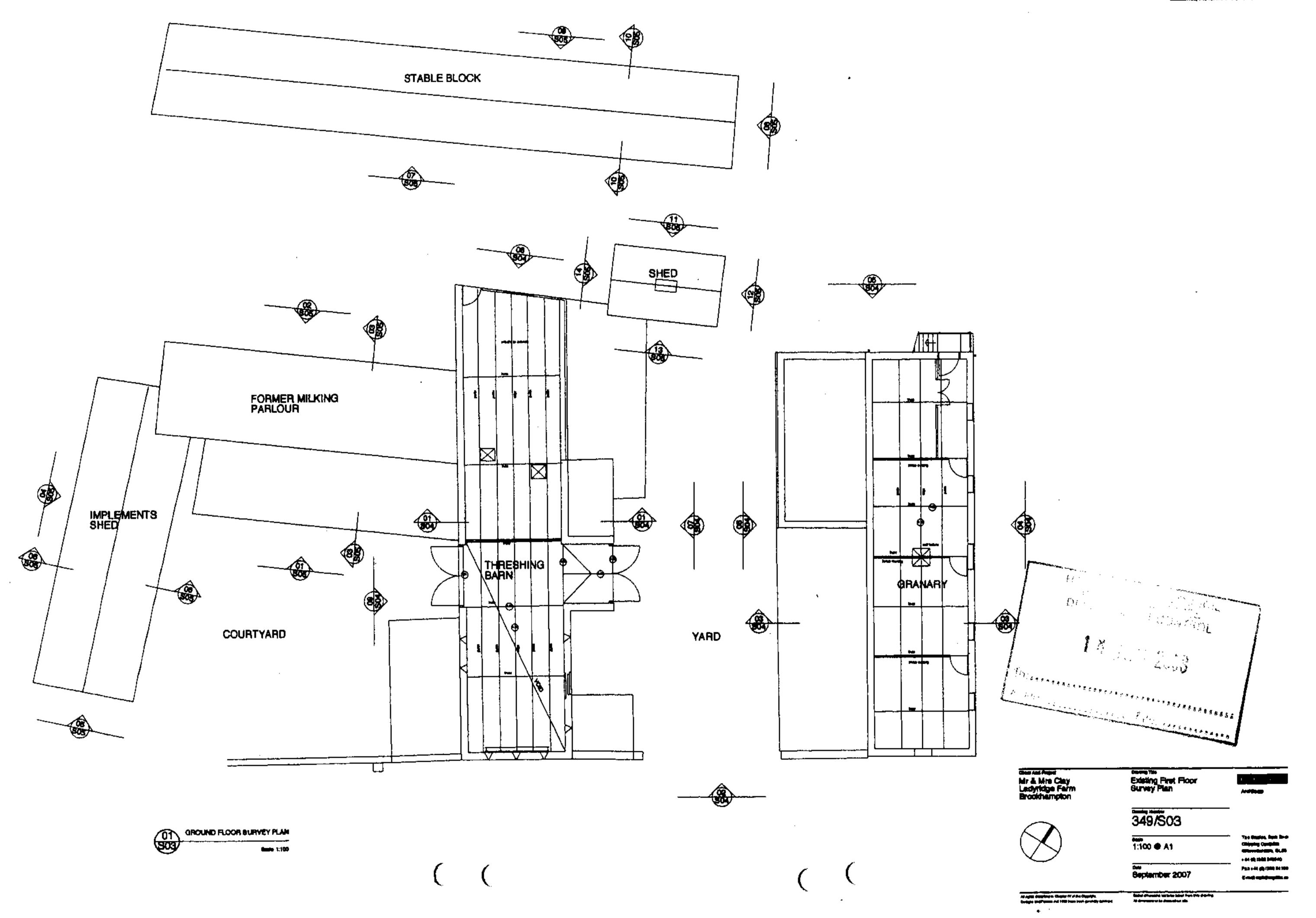
Appendix 2

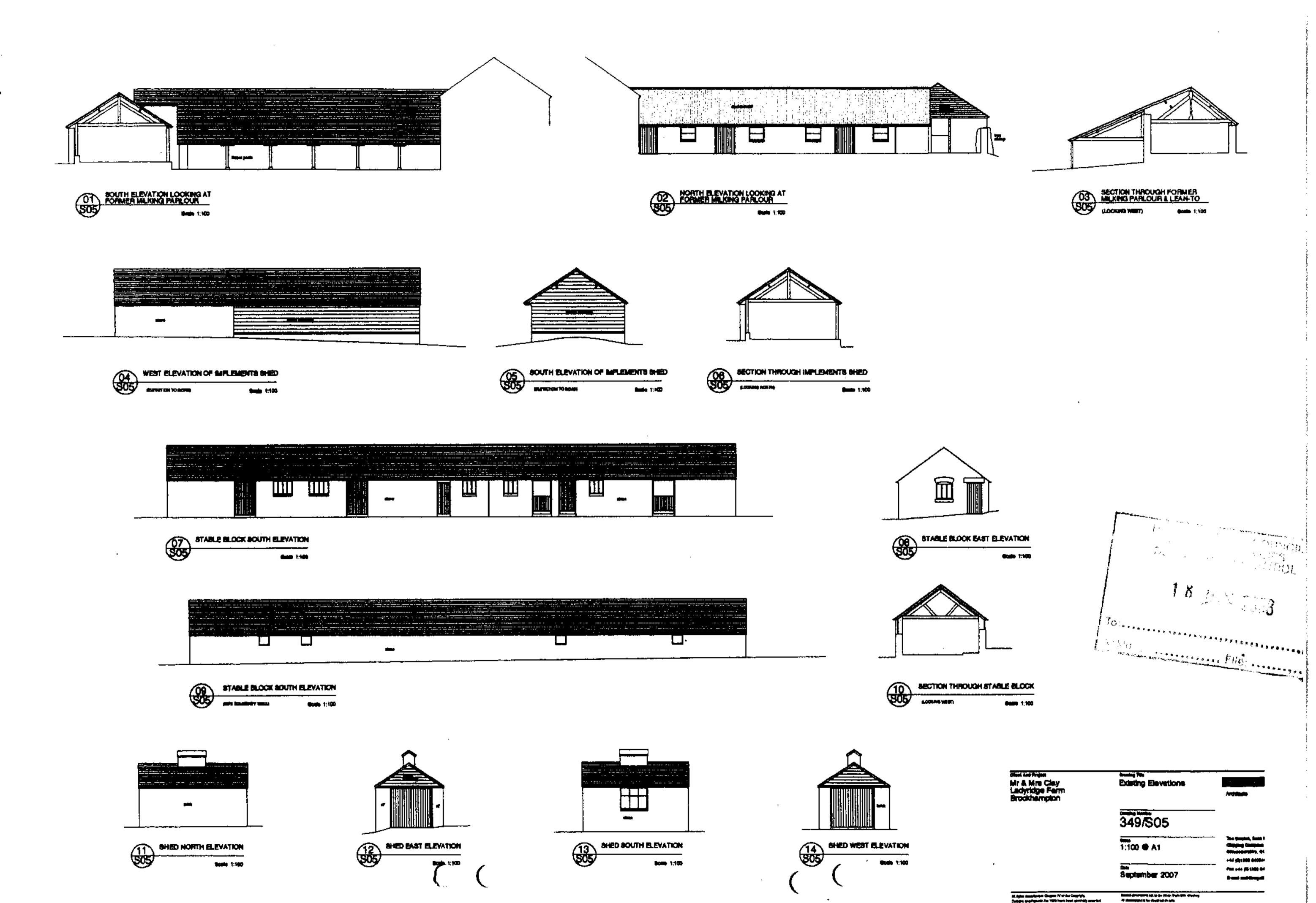
Aerial view centred on Ladyridge Barns with River Wye and Capler Wood at the west edge and the parkland of Brockhampton to the east.



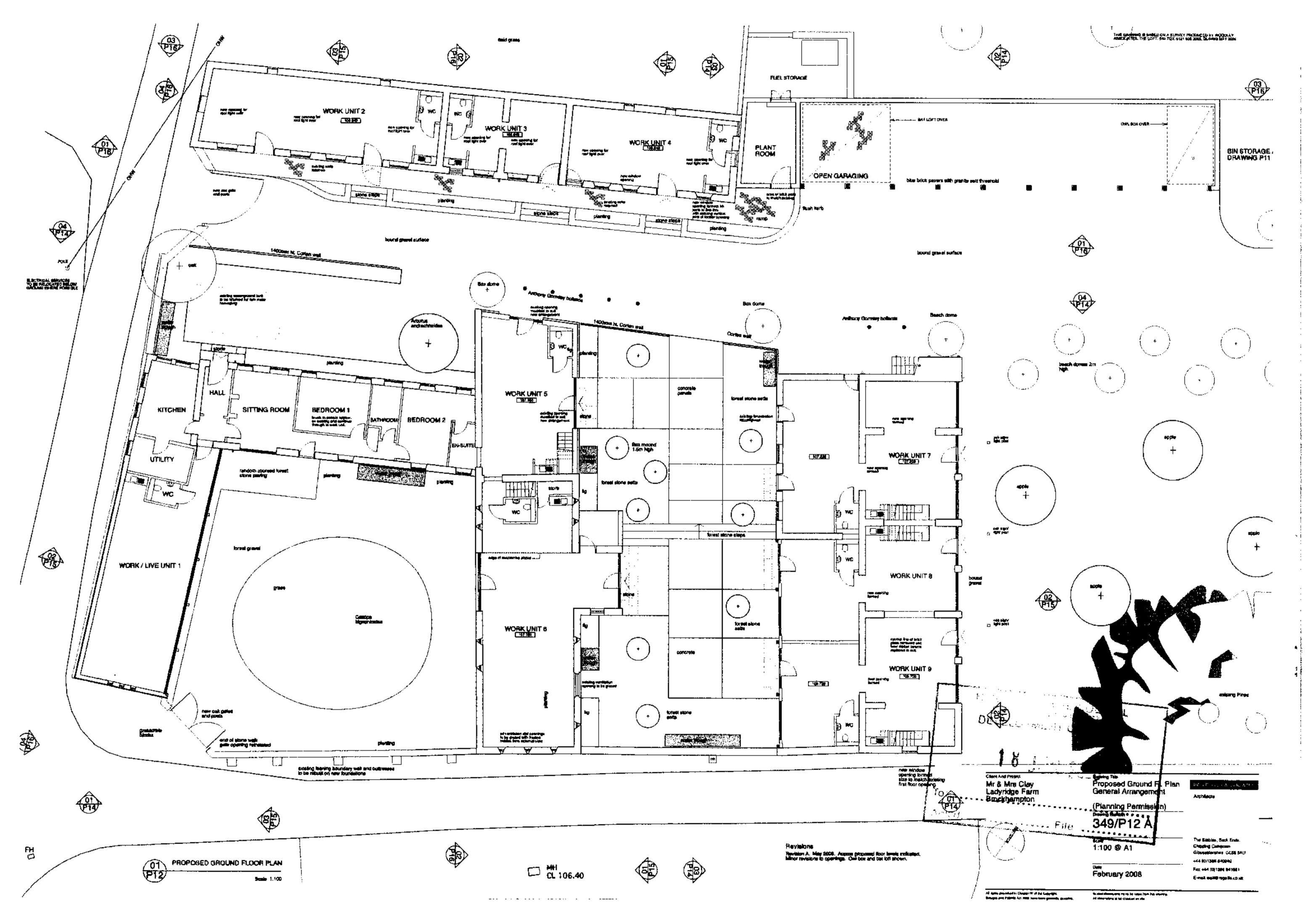








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Legal Summary

Birds

Barn owls are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) which gives them special protection making it an offence with certain exceptions to intentionally kill or injure, intentionally damage a nest while in use, intentionally take or destroy eggs, intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in on or near a nest containing eggs or young, or to intentionally or recklessly disturb any dependent young of wild barn owls.

Indeed, most birds, their nests and eggs are protected under Part 1 of the 1981 Act. This makes it an offence to intentionally kill, injure or take most wild birds, to intentionally damage or destroy the nest of most wild birds while it is being built and to take or destroy an egg of most wild birds. This needs to be taken into account during the building operations.

Bats.

Bats are also protected under the Wildlife and Countryside Act 1981. Schedule 5 makes it illegal to intentionally kill, injure or take any British bat. It is also an offence to intentionally damage or destroy their place of rest (the roost).

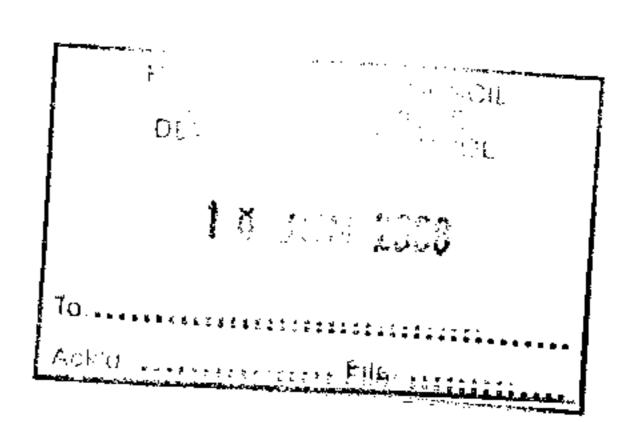
All British bat species are also protected under European law. The Habitats Directive requires the UK government to provide bats with strict protection.

In some cases where development is proposed it may be necessary to apply to Natural England or the Welsh Assembly Government for a European Protected Species Development Licence. Licences may be granted under Regulation 44(2)(e) of the Conservation (Natural Habitats)Regulations 1994.

Maximum penalties for committing offences relating to bats or their roosts can amount to imprisonment for a term not exceeding six months or to fines up to £5000 (April 2001 figure) per roost or bat disturbed or killed or both.

For full details, reference should be made to the Wildlife and Countryside Act 1981, the Conservation (Natural Habitats etc) Regulations 1994 (as amended) and the Countryside and Rights of Way Act 2000.

Grant of planning consent does not over-ride protected species legislation. If protected species are encountered during building works, and the consultant conducting the watching brief is not available work should stop and Natural England should be asked for advice.



Report prepared by

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Consultancy Development Manager

Radnorshire Wildlife Services Ltd.

Signed:

Date:

13/6/08

Approved by:

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Trust Manager

Radnorshire Wildlife Trust

Signed:

Date:

16/6/08

Surveys and report for Ladyridge Barns June 2008

To.....

As part of our quality control procedures we welcome comments on this report.