

A Preliminary Ecological Assessment& Mitigation Report for Robins Cottage

Aim: To establish the presence or absence of bats & birds in the building & importance of adjacent habitats.

Mr & Mrs E Sinton Robins Cottage Chedworth GL54 4AH,

Reference:1ES-PEAR.doc

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1. Introduction

As part of the planning application 23/02358/FUL & 23/02359/LBC for the proposed two-storey replacement side extension at Robins Cottage, it is necessary to survey all of the building and areas to be directly affected by the proposed development, to establish whether there are any protected species currently using the building or any priority habitats adjacent to the building. This report should be read in conjunction with the Design, Access and Historical Statement & Existing Site Photographs by PSK architect Ltd.

2. Methodology of Surveys

The survey of the cottage & adjacent areas was carried out on the 31st October 2023; by Ros Willder MSc, CEnv, MCIEEM & Licensed Ecologist RC121, 23629, 10473 of Willder Ecology, the weather was overcast. The daytime survey began at 12:30 am.

A detailed daytime survey was carried out of the building and any areas which would potentially be affected by this proposal. This was done by a thorough visual inspection of all areas of the building using a strong handheld torch.

In addition, a frequency division bat detector and endoscope were used, where appropriate, to enable further detailed examination of the walls. The area around the building was also surveyed and the adjacent habitats assessed.

A pond search was carried out to identify ponds within 250m & 500m of the site, the results of which are discussed in Section 4 and shown on the Pond Search map is shown in Appendix Three.

A designated site search was also carried out using the MAGIC map service from Natural England and the results are discussed in section 4 and shown in Appendix four.

3. Results of Surveys.

3.1 Examination of Robins Cottage

Robins' cottage is a Cotswold stone cottage that is semi-detached with an existing small single storey extension on the north west elevation that is also comprised of stone on all elevations as shown below in figure one & also shown in the existing plans in appendix two.



Figure 1 - The north western (side) & north-east (rear) elevations of the Cottage

The north western & rear elevation of the cottage has a tightly sealed stone wall with the edge of the Cotswold tiled roof overhang well sealed with mortar & two timber framed glazed windows on the gable end wall (as shown in figure two) & two glazed windows on the rear elevation & roof.

The existing single storey extension has the same sealed stone walls & Cotswold tiled roof which is similarly sealed with a bright flood light at the apex & a single timber framed window as shown above in figure one.

The three timber framed glazed windows on the gable end walls are well sealed with no gaps or crevices around them as shown below in figure two. There is a painted glazed timber door with an additional external light on the front south west elevation with as shown below in figure two. The walls are well sealed with no cracks or crevices & the roof of the single storey extension is lit by the adjacent glazed windows & the flood light on the roof as shown below in figure two.



Figure 2 – The north west & south west (front) elevations of the extension

Whilst Robins cottage is completely covered in Cotswold stone tiles, it is important to note that the neighbouring attached property was burn down & completely rebuilt in the 1980's which meant that roof works were also carried out at that time to Robins cottage.

The single storey extension appears to have been built more recently than than the main cottage & the roof has been repaired & mortared to prevent water ingress which would explain the tightly sealed nature of the edge of the roof as shown above in figure two.

The front south east elevation of the cottage is comprised of the same Cotswold stone walls & Cotswold tiled roof with a roof light in it.

However, the timber framed glazed windows have dressed stone window surrounds & the front door to the cottage has a small Cotswold tiled porch area as shown below in figures three & on the existing elevations plan in appendix two.



Figure 3 – The front (south west) elevation of the cottage

The area to be impacted by the proposed two storey extension is comprised of the existing single storey extension (as shown in figures one & two) and an area of hardstanding around the existing single storey extension (as shown in figure five over the page).

The proposed two storey extension will not interrupt the existing cottage roof as shown above in figure three & on the recently revised proposed plans in appendix five.

The surrounding area around the cottage is comprised of a garden to the front of the cottage which will not be affected by this proposal as shown in figure four below, a private access lane to the rear of the property shown in figure one & a hard standing parking area which will also be unaffected by this proposal & an area of hard standing next to the single storey extension on the north west which will be lost shown in figure five below.



Figure 4– The garden at the front (south west) elevation of the cottage

The area of hard standing and gravel around the single storey extension comprises no tall vegetation therefore there will be no habitat lost by this proposal. In addition, the boundaries of the wider site are sufficiently distanced from the cottage & the area for the proposed extension & therefore will not be in any way impacted by the proposal. There are no trees or hedgerows near the proposed area for the extension and the site is also very well lit by external flood lights and as shown in figures one & two.



Figure 5- The hard standing by the existing cottage extension

Internally the cottage is incredibly well sealed form the external walls. The internal walls are plastered and painted throughout & due to the glazed windows naturally well-lit throughout. In addition, the rooms are in daily use & have electric light in all the rooms as shown in the downstairs kitchen in the single storey extension in figure six below.



Figure 6 – the kitchen in the extension

The majority of the roof space is used as bedroom areas as such the ceilings are nearly up to the eaves as shown below in figure seven.



Figure 7 – ceiling in bedroom in roof space

However, there is an area of attic roof space over the bathroom & part of the bedrooms as shown in figure seven over the page. The roof space is comprised of whitewashed timbers & lined with traditional bitumastic felt lining and has no gaps at the edge or apex of the roof.

The very dense dirty cobwebs indicates there has been no flight activity within the roof area as shown below in figure eight. The lined tiles do not appear to allow any gaps for access by bats or birds into the loft space.



There was no evidence of bats within the loft area and the surprisingly well sealed nature of this building despite the age makes the loft have negligible suitability for bats. However, there is potential for individual bats to use the gaps & crevices in between the Cotswold tiles on the main roof but as the main roof will not be interrupted by this proposal as shown in the revised proposed plans in appendix five.

The only impact will be to the small area of Cotswold tiled roof above the single storey kitchen area, which also has negligible potential for use by individual bats due to the bright flood light on the apex of the roof & the light spill of the adjacent glazed windows on the gable end wall (as shown in figure two). No priority habitats will be impacted by this proposal as the surrounding area to be impacted is comprised of hard standing and gravel as shown in figure five.

4. Pond & Data search results & Ecological Assessment

4.1POND SEARCH

A pond search was carried out, using the MAGIC map service from Natural England, to within a radius of 500m of Robins Cottage. This showed there are no ponds within the search radius of 500m away from the building connected by habitats as shown in the Pond search map in appendix three. As the single storey extension is surrounded by hard standing & Gravel the proposal will have no impact on any potential Great Crested Newt (GCN) habitat & therefore the likely impact on any GCN is considered to be negligible,

4.2 THE DATA SEARCH

The data search was carried out using the MAGIC Map service from Natural England. The search results identified the site is within the Cotswold Area of Outstanding Natural Beauty. The nearest designated site is The Stoney furlong Railway cutting Special Scientific Interest (SSSI) which is situated 1.2km away from the site. The Cotswold Beechwoods SAC is identified as being 14km away from the site.

Within the 2km search radius, results showed several Priority Habitats within the wider area including:- Good quality semi-improved grassland, Lowland calcareous grassland, Wood Pasture and Parkland, Traditional Orchard, and Deciduous Woodland.

Of the Deciduous Woodland recorded within the search radius, the only site noted as Ancient Semi-natural Woodland, was Burford's Cove. It should be noted that no Priority Habitats were observed or recorded within the proposed development Boundary.

The following species were also recorded within the 2km search radius, Corn bunting, Lapwing, Common Pipistrelle, Soprano Pipistrelle, Brown Long eared, Lesser Horseshoe, Whiskered & Barbastelle bats. But no other records of European Protected Species were found.

4.3 Ecological Assessment

The habitats within the single storey part of the cottage to be affected & the adjacent areas of hard standing have negligible suitability for use by any European protected species. The natural light throughout the building from the glazed windows & roof lights, the electric lighting together with the external bright flood light on the roof make the single storey building of negligible suitability for use by bats. In addition, the main cottage attic area was confirmed as having no evidence of its use by bats or birds.

However as there is low potential for individual bats to use the area in between the Cotswold tiles on the main roof, the proposal was redesigned to reduce any potential impacts to the main roof.

By designing the replacement extension to cause no interruption to the main cottage roof the potential impact of the proposal has been reduced as the main Cotswold tile roof will be left untouched & undisturbed if all the mitigation is followed.

While the potential for bats is considered to be negligible in the small area of brightly roof on the single storey extension it is recommended that dismantling is carried out under direct supervision following a toolbox talk & outside of the main bat activity season for full details see the Mitigation in section 5.1.

There was no evidence of nesting birds within the main cottage or the single storey extension to be dismantled but a precautionary approach is always recommended to avoid harm.

There will be no adverse impacts on any amphibians including GCN by this proposal as no ponds will be affected by this proposal and there are no ponds within 500m of the site. The area to be affected by the extension is within an area of hard standing & there is no cover for amphibians as such the likelihood of any adverse impacts on individual GCN is considered to be negligible & this impact will be reduced by taking a precautionary approach.

Even though there will be no direct impacts on the Stoney Furlong Railway Cutting SSSI due to the distance of the protected site (1.2km) away & the proposal being limited to a small extension dismantling & replacement building the impacts will not go beyond the site itself. The proposal will have no adverse impacts on the Cotswold AONB or the Cotswold & Beechwood SAC which is situated 14km away from the site. However, it

is important to consider if there are any potential secondary impacts on the AONB or the Cotswold & Beechwood SAC.

But because the small extension will not increase the numbers of people living at Robins Cottage there will be no increase in the recreational use of the Cotswold & Beechwood SAC. As the adjacent area is already brightly lit up by the windows on the side, rear & front elevations & the floodlights on the cottage this proposal will not increase the current light levels in the wider AONB area. The dismantling of the single storey extension will result in the removal of the main flood light so light spill will be potentially reduced & no trees or any vegetation will be lost therefore there will be no secondary impacts such as light spill in to the wider AONB area.

However, just because this proposal has minimal impacts this does not mean that biodiversity enhancements should not be incorporated to ensure wider wildlife benefits.

5. Conclusion, Mitigation & Enhancements

The proposal is limited to the dismantling of the existing single storey cottage extension, which is situated in an area of hard standing which is well-lit by the flood light on the roof (for security). The existing single storey extension and its adjacent areas of hard standing are of limited value to wildlife, as such the proposal will not have any adverse effects on the wider area or any designated sites such as Stoney furlong Railway Cutting SSSI (which is situated 1.2km away) or Cotswold AONB or any priority habitats or any European protected species such as Bats or amphibians or reptiles in the wider area.

The lack of evidence of any potential bat use within the single storey extension or the main loft area of the cottage & its lack of suitability suggests that there are no bats currently using the single storey building or the loft of the main cottage area for roosting; this is due to the well-sealed nature of the building. Due to the high natural light levels throughout the cottage & the limited roof space & the proposed site for the two storey extension being well-lit from cottage windows & the flood light on the roof it is therefore considered to have negligible suitability for bats. The lack of cracks & crevices in the walls also reduces the potential for use by bats or birds. However, the existing roof of the main cottage roof is covered in Cotswold tiles & will therefore remain untouched by the proposed two storey extension to avoid any potential impacts. As such it can be concluded that the single storey extension to be dismantled has negligible suitability for bats.

Even though no evidence of bats was found, and the majority of the adjacent habitats are hard standing, a careful precautionary approach to works to the roofs should be taken so these impacts can be avoided all together as detailed in section 5.1 Mitigation (a precautionary approach). Although the cottage extension is surrounded by hard standing & no amphibian (included GCN) habitat will be affected by this proposal & the likelihood of any GCN being on site is concluded to be negligible a precautionary approach is recommended to avoid any potential harm.

Even though the works are deemed to have minimal impact on the local site this does not mean that enhancements cannot be designed to enable a clear biodiversity gain for wildlife as part of this proposal see section 5.2.

5.1. Mitigation (a precautionary approach)

All persons involved in the works to the house and conservatory shall receive a detailed 'Toolbox Talk' on Nesting Birds & Bats & Amphibians & the importance of the Cotswold AONB, Stoney Furlong Railway Cutting SSSI & Cotswold & Beechwood SAC from Ros Willder of Willder Ecology, or a similarly qualified ecologist.

The toolbox talk will cover the following: -

- the full legal protection of Nesting birds, Bats & amphibians & the importance of Cotswold AONB & Cotswold & Beechwood SAC & Stoney Furlong Railway cutting SSSI & their local importance for wildlife.
- the lifecycle of Bats, their identification & their potential roosting areas
- How the single storey extension roof area will be dismantled under direct supervision of a Licensed ecologist & outside of the main bat activity season (May - September).
- During the building of the two storey extension no disturbance to the main cottage roof will be permitted during the months May to September.
- ❖ The new roof of the two storey extension will be lined with traditional roofing felt not breathable membranes (lethal to bats). Two bat access tiles will be inserted into the Cotswold tiled roof on the extension.
- ❖ The lifecycle of amphibians (& Great Crested Newts) & what habitats they will be found in & how to identify a GCN.
- What to do if evidence of Bats are found during works.
- What to do if amphibians are found during works
- Where all materials should be stored & mixed on site to avoid any potential for run off from site during building of the new extension walls.

Before any works begin to the cottage, the building shall have a precommencement check to see if any birds have begun nesting in any other areas or that there is any evidence of use by bats. Any roof dismantling works will be overseen by Ros Willder of Willder Ecology. If any bats or GCN are found all works will cease until Natural England has been contacted and way forward agreed which may include a license application to permit the works to continue.

No new external lighting is planned on the walls of the extension that could cause additional light spill into the surrounding area and the existing bright flood light will be removed during dismantling of the single storey extension and replaced with low level PIR downlighters to provide natural dark skies in the area as an enhancement to the Cotswold AONB & its wider areas.

5.2 ENHANCEMENTS

Although no bats or birds were found in the cottage a stone open fronted integral bird box will be incorporated into the extension on the side elevation as shown in appendix five.

As an enhancement for bats an integral bat box will be included in the apex gable end wall to encourage future use of the building by bats as shown in Appendix five.

If all the recommendations are followed no harm will occur to either the designated sites or bats or birds and enhanced provision will be made for future use by both bats and birds as an overall enhancement for biodiversity to the site.

APPENDIX ONE LEGAL STATUS OF BATS & BIRDS

LEGAL PROTECTION OF BATS

The Wildlife and Countryside Act 1981 (WCA) transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'. The 1981 Act has been amended several times, most recently by the Countryside and Rights of Way [Crow] Act 2000, which added 'or recklessly' to S 9 (4)(a) and (b).

All species of bats are listed on Schedule 5 of the 1981 Act, and are therefore subject to the provisions of section 9, which make it an offence to:

- Intentionally kill, injure or take a bat
- ❖ Possess or control any live or dead specimen or anything derived from a bat Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose

The Conservation of Habitats and Species Regulations 2017 which consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and came into force on 30th November 2017.

All bats listed on Annex IV of the Directive, and some are also listed on the Annex II. The latter Annex relates to the designation of Special Areas of Conservation (SACs) and covers **Greater** and **Lesser Horseshoe bats**, **barbastelle** and **Bechstein's** bat.

Inclusion on Annex IV ('European protected species) means that member states are required to put in place a system of strict protection as outlined in Article 12; this is done through inclusion on Schedule 2 of the Regulations. Regulation 53 makes it an offence to;

- Deliberately capture or kill a bat Deliberately disturb a bat
- Damage or destroy a breeding site or resting place of a bat
- Keep, transport, sell or exchange, or offer for sale or exchange alive or dead bat or any part of a bat

LEGAL PROTECTION OF BIRDS

The Wildlife and Countryside Act 1981 is the main instrument for the protection of wild birds in the law of England, Wales and Scotland.

It protects all wild birdsof whatever species (certain exceptions apply within the act).

Barn Owls are listed on Schedule 1 which gives them special protection.

The act makes it an offence "if any person intentionally- Kills, injures or takes (handle)any wild bird;

Takes, damages or destroys the nest of any bird while that nest is in use or being built; (barn owls do not 'build' a nest but may make a nest scrape) or

Takes or destroys an egg of any wild bird"

It is also an offence "if any persons have in his possession or control-

any live or dead wild bird or any part of, or anything derived from, such a bird; or An egg of a wild bird or any part of such an egg" (s 1 (2)).

LEGAL PROTECTION OF AMPHIBIANS AND REPTILES

Reptiles are protected from killing and injury (two species are fully protected, this includes, but is not confined to:

Disturbance and deliberate destruction of their habitat) under The Wildlife and Countryside Act 1981 (as amended).

The Conservation (Natural habitats &c.) regulations 1994 (the habitats Regulations were recently updated by The Conservation of Habitats and Species regulations 2017

Amphibians such as Great crested newts are fully protected, including protection against:

Deliberate disturbance

Deliberately killing or capturing

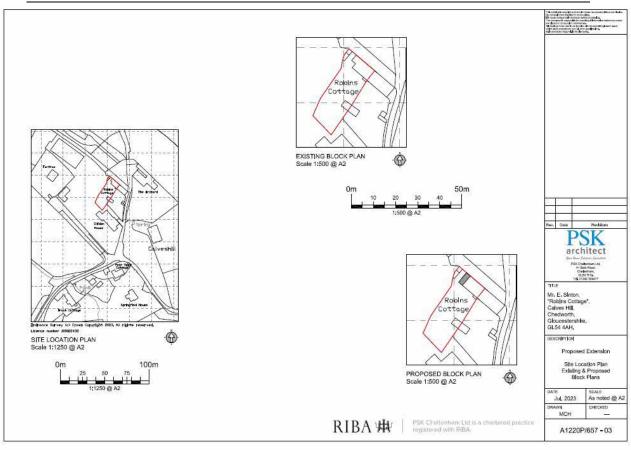
Deliberately taking or destroying eggs

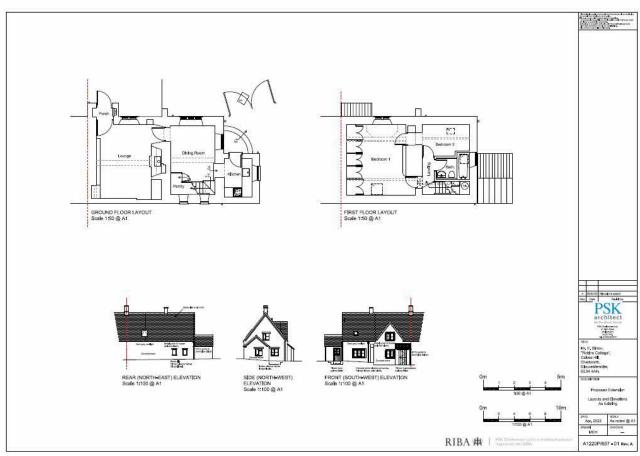
Deliberately damaging or destroying breeding sites and places of shelter.

Licensing from Natural England

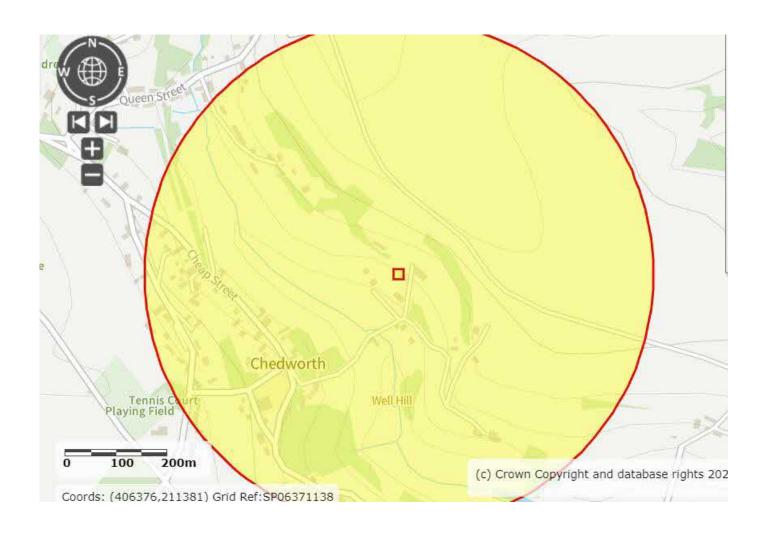
A Licence simply permits an action that is otherwise unlawful. A licence should be applied for if, on the basis of survey information and specialist knowledge, it is considered that the proposed activity is reasonably likely to result in an offence (killing, breeding site destruction, etc – see above). No licence is required if, on balance, the proposed activity is unlikely to result in an offence (this is from the great crested newt mitigation guidelines).

APPENDIX TWO EXISTING BLOCK PLAN & ELEVATION PLANS

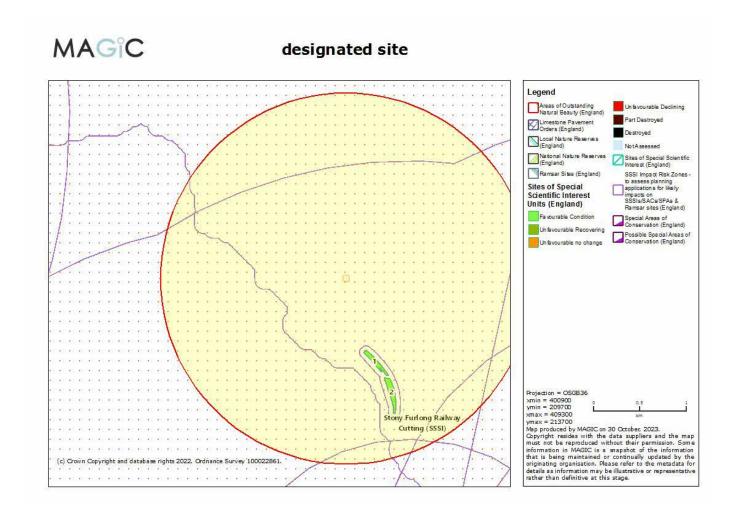




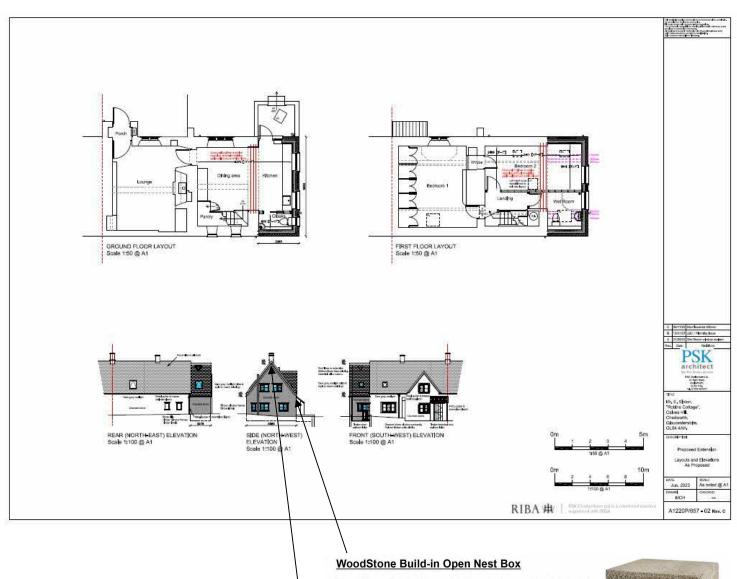
APPENDIX THREE POND SEARCH MAP



APPENDIX FOUR DESIGNATED SITE SEARCH MAP



APPENDIX FIVE PROPOSED ENHANCEMENTS



WoodStone Build-in Open Nest Box is designed for use in new build or renovations. The nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting cavities for species such as Robins, Wagtails and Black Redstarts. Constructed from FSC certified WoodStone this nest box will not deteriorate like a traditional wooden nest box. NHBS Price: £17.95 including VAT.





Integrated bat box in apex extension

Two bat lead access tiles will be incorporated into the roof of the extension marked by a black triangle on the plans on the previous page & as shown below.



