



RH
Ecological
Services

PRELIMINARY ROOST ASSESSMENT

**Oak House, 21A Acorn Drive,
Oakenshaw, Crook, DL15 0TF**



February 2022

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Document title Preliminary Roost Assessment - Oak House, 21A Acorn Drive, Oakenshaw, Crook, DL15 0TF	
Date and version Version 1 28/02/2022 DRAFT	Producer RH Checker MH

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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.

It is the client's responsibility to commission, in writing, any additional survey effort/licence requirements detailed within this report with RH Ecological Services.

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

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Preliminary Roost Assessment Oak House, 21A Acorn Drive, Oakenshaw, Crook, DL15 0TF

Summary

ADDITIONAL BAT SURVEYS ARE REQUIRED TO DETERMINE THIS ASSESSMENT FOR WORKS TO THE STABLE BLOCK/GRANNY ANNEX OUTBUILDING.

A NATURAL ENGLAND MITIGATION LICENCE IS LIKELY TO BE REQUIRED FOR WORKS TO THE OUTBUILDING AS IT IS A BAT ROOST.

A Preliminary Roost Assessment for bats and birds at Oak House, 21A Acorn Drive, Oakenshaw (NZ 20080 36819) was produced to support planning application(s) for two projects:

- Removal of the rear conservatory and a single-storey extension to the main dwellinghouse.
- Conversion of an outbuilding (stable block/'Granny annex') into a home office.

The planning application reference is DM/22/00047/FPA.

The main property has the following Potential Roost Features (PRFs) for bats noted:

- Gaps along the wall tops.
- Gaps around soffit boxes.
- Raised roof flashing.

The main property is deemed to have low-moderate potential for roosting bats due to a small number of PRFs and no signs of bats seen. These features are unaffected by the development as no work is proposed at first-floor height and no work done to the roof or within the loft void. No further survey work is deemed necessary if no work is proposed in those areas.

Two gaps were noted at the end of the uPVC soffit box on the conservatory proposed for demolition. Whilst bats may access these gaps, the low drop height for emerging bats and the uPVC construction makes it unlikely to be used by bats. A suitably qualified ecologist should be present to check for bats upon its' removal.

A couple of butterfly wings were noted in the loft void. Butterfly wings can be the remains of overwintering butterflies or can be the feeding remains of larger bat species such as natterer's or brown long-eared.

As the Potential Roost Features of the building are unaffected by the development proposals, no further survey effort on the main property is deemed necessary, as long as no work is done to the roofing area or soffit boxes away from the conservatory.

The outbuilding (stable block/'Granny annex') has the following PRFs for bats noted:

- Gaps along the wall tops.
- Gaps between wooden vertical shuttering boards.
- Gaps present where mortar is missing from the ends of the tiles.
- Missing ridge tile, creating gaps underneath the adjacent ridge tiles.
- Gaps present beneath the tiles.

Within the outbuilding were found bat droppings and butterfly wings. A sample of the droppings has been taken.

The outbuilding is deemed to be moderate potential for roosting bats. **The presence of bat droppings confirms the building is a bat roost.** These features will be lost/altered during the development and therefore further assessment is required to ascertain if the building is used by bats.

Bat survey(s) should therefore be undertaken between May and August to get an understanding of the use of the outbuilding by bats. This is in accordance with the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'.

A repeat daylight check for signs of bats will also be undertaken.

No building work should be undertaken prior to these survey(s) being undertaken. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.

A Natural England mitigation licence is likely to be required for works to the outbuilding.

Bat records have been requested from Durham Bat Group. These will be discussed once received.

There is potential for birds to nest on the property, outbuilding and around the gardens/land associated with this address. Birds are known to nest within the outbuilding.

There is one Designated [wildlife] Sites within 2km; Willington North Dene LNR lies approximately 1km south west. The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI) although no impacts are expected.

There are no Priority Habitats on/adjacent to the development site. As the development is confined to within the grounds of Oak House (21A Acorn Drive), negligible impact is expected on any nearby habitats.

Integrated features suitable for bats (such as bat access tiles) are recommended to be incorporated into the proposed new dwelling to ensure No Net Loss of bat roost potential.

A Pollution Prevention Plan should be put in place during the construction phase.

With regard to the **outbuilding**, aside from bats, any other potential impacts can be dealt with via Precautionary Working Methods which are provided within this report (**appendix 1**).

With regard to the **main property**, any other potential impacts can be dealt with via Precautionary Working Methods which are provided within this report (**appendix 1**) as long as no roof/wall top works are proposed.

This report is valid for 2 years.

An updated assessment will be required should work not commence by February 2024.

1. Introduction and proposed works

The proposal is for two projects:

- Removal of the rear conservatory and a single-storey extension to the main dwellinghouse.
- Conversion of an outbuilding (stable block/'Granny annex') into a home office.

The planning application reference is DM/22/00047/FPA.

The site location / aerial imagery is shown in **figure 1**. Existing and proposed plans are shown in **figures 2-7**.



Figure 1. Site location - aerial view¹.

¹ Reproduced with permission from Google Earth (2022).



Figure 2. Existing elevations of main dwelling.



Figure 3. Proposed elevations of main dwelling.



Figure 4. Existing elevations of outbuilding.



Figure 5. Proposed elevations of outbuilding.

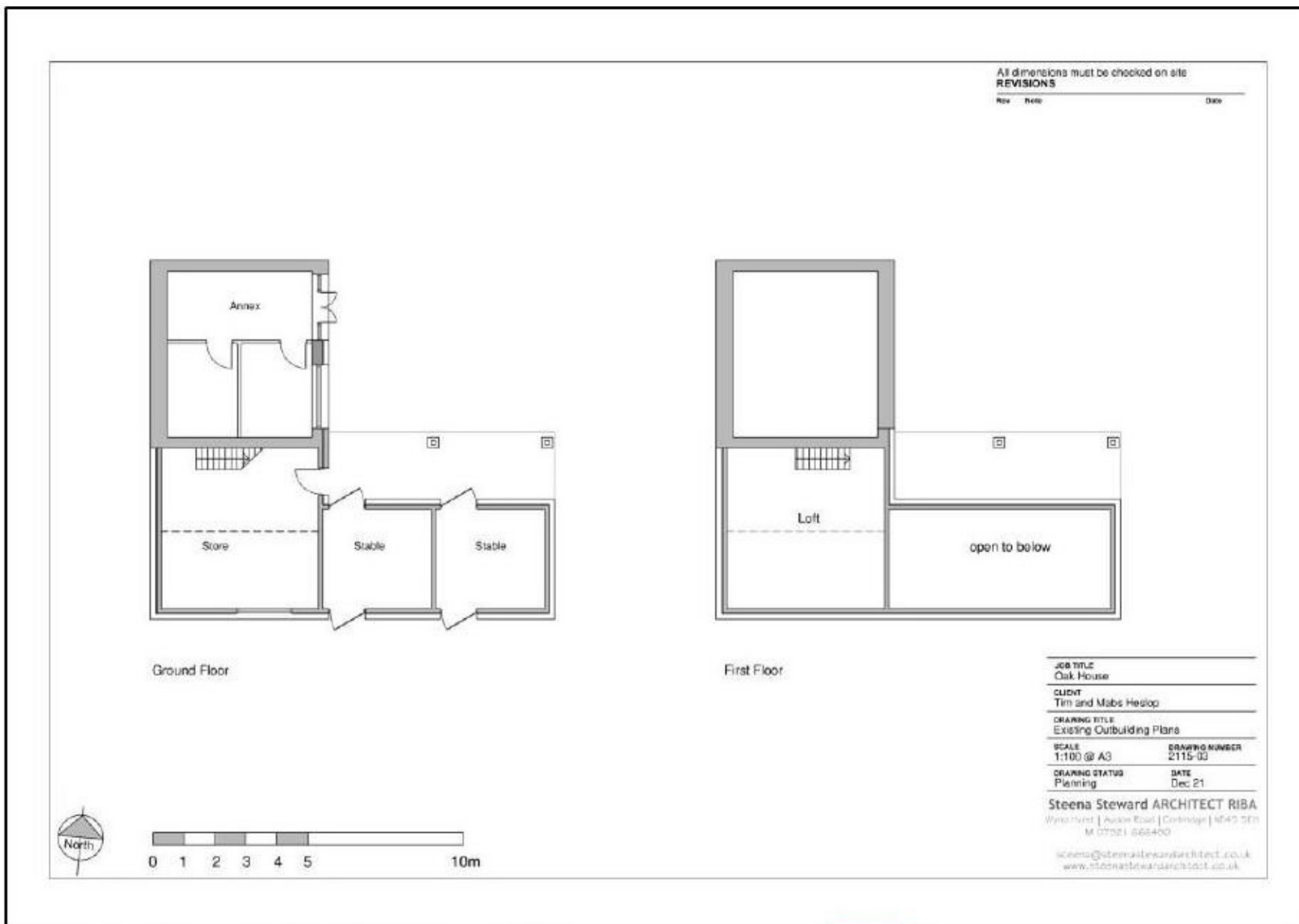


Figure 6. Existing layout of outbuilding.

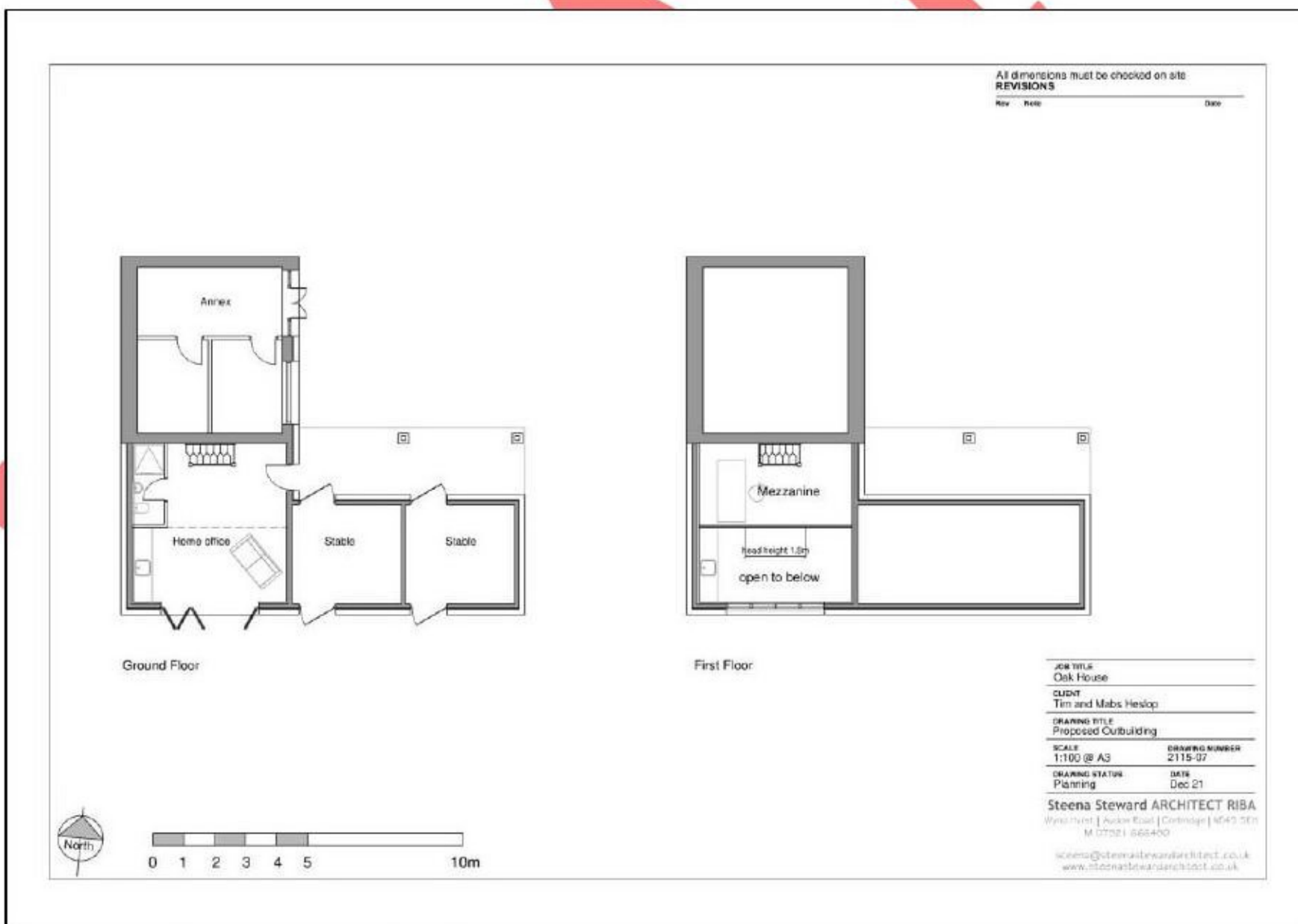


Figure 7. Proposed layout of outbuilding.

2. Relevant legislation

The applicable legislation and policies with regard to bats and birds are:

- Conservation of Habitats and Species Regulations (2017)
- Countryside and Rights of Way Act (2000)
- Directive 79/409/EEC on the Conservation of Wild Birds – ‘The Birds Directive’
- Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora – ‘The Habitats Directive’
- National Planning Policy Framework (NPPF)
- Natura 2000
- Natural Environment and Rural Communities Act (2006)
- Wildlife and Countryside Act (1981)

Further details can be found in **appendix 2**.

3. Methodology

3.1 Desktop survey

The area was surveyed using Ordnance Survey Explorer maps (1:25,000 scale) and Google Earth Pro with habitat features of value to bats such as watercourses, woodland and hedgerows noted.

Bat data records from within 2km have been requested (Durham Bat Group – 18th February 2022).

Natural England’s ‘Magic on the Map’ website was accessed for details of the citations for the designated sites and EPS licensing. The JNCC website² and Natural England websites provided further information on site designations.

3.2 Daylight assessment

The daylight assessment ‘Preliminary Roost Assessment’ was carried out **22nd February 2022**. This was conducted according to the Chartered Institute of Ecology and Environmental Management’s Guidelines for Preliminary Ecological Appraisal (CIEEM, 2012) and the Bat Conservation Trust’s Bat Surveys Good Practice Guidelines (2016) on Preliminary Roost Assessment.

The weather was 9°C, dry and windy.

The surveyor assessed the buildings for signs of bats and birds. The buildings were thoroughly checked both internally and externally for any signs of bats; including live or dead bats, droppings, feeding remains, clawing or scuff/grease/urine marks at roost entrances, and potential roost features such as cavities or gaps in roofing tiles, soffits, loose mortar *etc.* The surveyor used a headtorch, powerful compact torch, 42x8 binoculars and inspection camera (endoscope).

² <http://jncc.defra.gov.uk>

4 Surveyor

The daylight site visit and report were compiled by Rachel Hepburn, an experienced ecologist and an associate member of the CIEEM since 2013 with over 15 years' experience in ecological surveying. She holds Natural England Licences for bat surveys (2015-12969-CLS-CLS).

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5. Site description

The site lies along the western edge of the small village of Oakenshaw, approximately 1.1km north of the village of Willington. Residential housing lies to the east of the site, with grassland fields adjacent to the east.

Park House Gill, which flows into the Old House Beck is present approximately 135 metres north east of site, beyond the main road.

There are a series of small ponds in a nearby property, located approximately 100 metres south west. Two ponds can be seen on aerial imagery located approximately 10 metres south of the garden of 21A Acorn Drive, and ~110 metres south of the buildings. Waterbodies are present within the nearby 100 Acre Plantation, approximately 400 metres east of the development site. This is known as Oakenshaw Wildlife Reserve.

An extensive woodland block (Birkes Wood, Stockely Fell Plantation, Stockley Gill Plantation and Stockley Gill Wood) is present approximately 806 metres north. The Stockley Beck runs through this woodland band.

The wider area is dominated by grassland fields with small areas of woodland.



Figure 8. Surrounding area³.

³ Reproduced with permission from Google Earth (2022).

6. Desktop survey

6.1 Designated Sites

Designated [wildlife] Sites were checked on 'MAGiC on the Map'⁴. There is one within 2km; Willington North Dene Local Nature Reserve (LNR), which is located approximately 1km south west.

There is very little information about this Nature Reserve in the Public Domain.

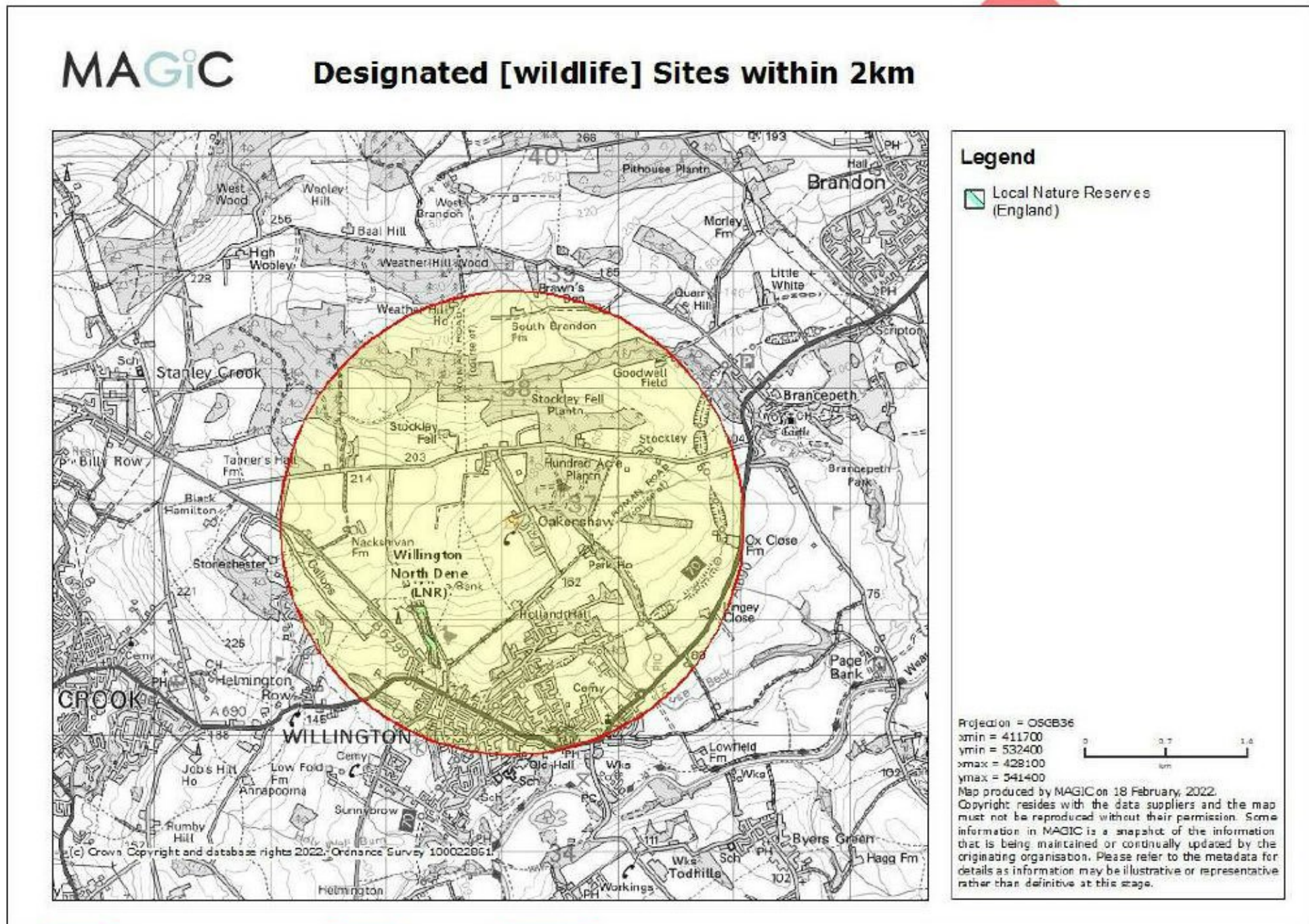


Figure 9. Designated [wildlife] Sites within 2km.

The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI). Potential impacts are discussed in the table below. No impacts are expected.

Category	Impact	Description
Infrastructure	N/A	Airports, helipads and other aviation proposals.
Discharges	N/A	Any discharge of water or liquid waste of more than 20m ³ /day to ground (<i>i.e.</i> to seep away) or to surface water, such as a beck or stream.

⁴ magic.defra.gov.uk

6.2 Priority Habitats

'MAGiC on the Map' was checked for Priority Habitats (Habitats of Principal Importance). These are habitats listed under Section 41 of the Natural Environment and Rural Communities Act 2006.

There are no Priority Habitats on/adjacent to the development site. The following are found within 2km of the site:

Habitat	Proximity
Deciduous woodland	~369 metres east
Ancient, replanted woodland	~435 metres east
Ancient and semi-natural woodland	~525 metres east
Open Mosaic Habitat on Previously Developed Land ⁵	~1.3km south east
Traditional orchard	~1.9km east

As the development is for renovation and extension works of a single residence, then negligible impact is expected on these habitats.

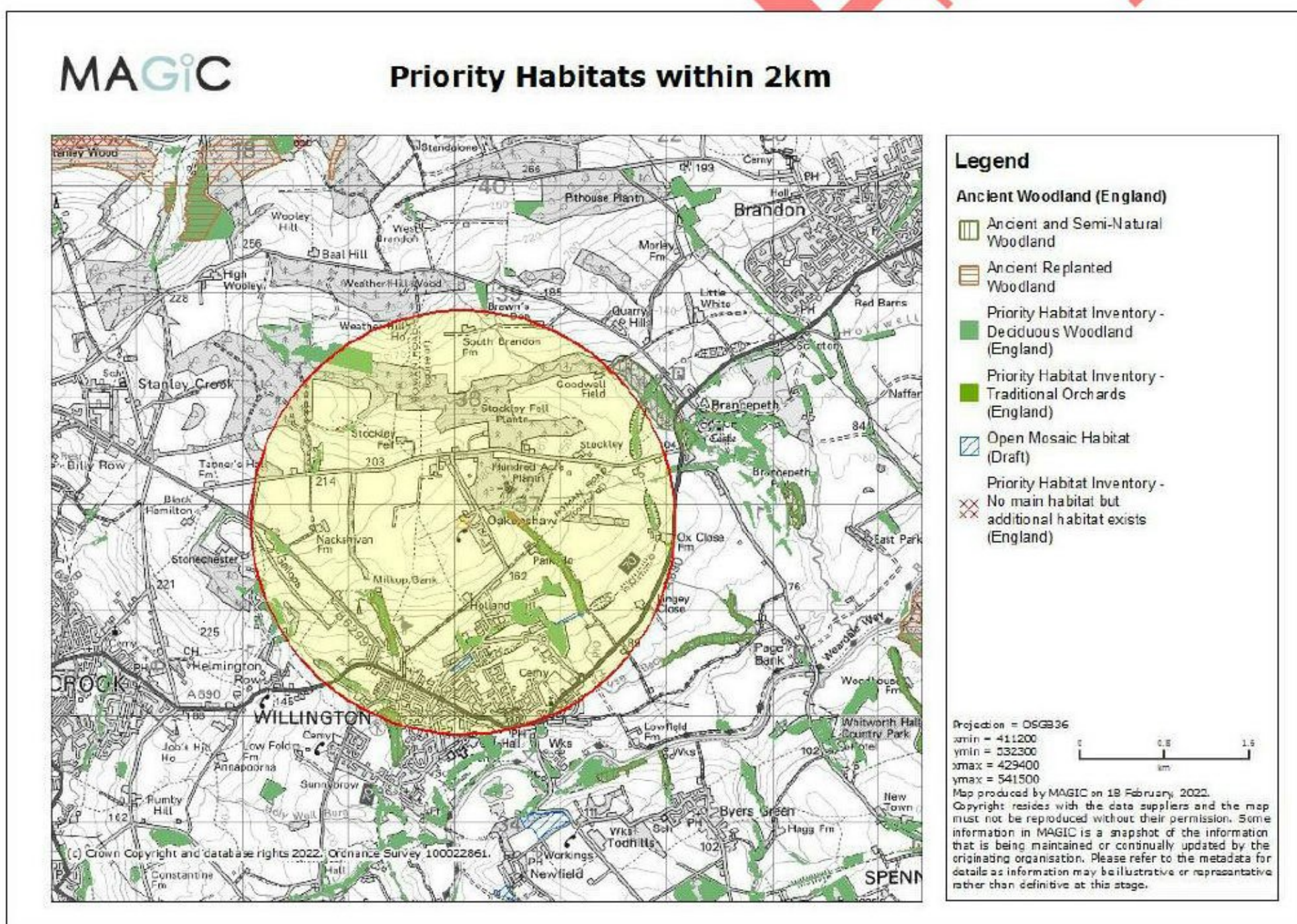


Figure 10. Priority Habitats.

⁵ Draft mapping.

6.3 EPSLs and bat records

Bat records have been requested from Durham Bat Group. These will be discussed once received and the full dataset can be made available upon request.

'MAGiC on the Map' was checked for any granted Endangered and Protected Species Licences (EPSLs) granted within 2km. This brought back no results.

6.4 Local planning portal

The site, Oak House/21A Acorn Drive, Oakenshaw, has the following previous planning history:

Address	Planning application	Description
21A Acorn Drive	2000 - 3/2000/0217	Dwelling, detached garage and stable block.
21A Acorn Drive	2000- 3/2000/0391	Garaging; garden store, stabling, tack room and covered store.
21A - 21C Acorn Drive	1998 - 3/1998/0089	Detached dwelling on former community centre site.
1-29 Acorn Drive/Mullin Close/Reed Avenue	1990 - 3/1990/0201	Residential development.
	1981 - 3/1981/0263	Housing.

There is no reference to any previous ecology assessment for the buildings or site within the Public Domain.

The local planning portal was checked for nearby (within ~250 metres) and/or recent (in the last 5 years) planning applications that have reference to ecological assessment. *References to individual trees away from the development site have been omitted.*

Address	15 Institute Street, Oakenshaw, Crook, DL15 0TB
Planning application	DM/17/00707/FPA (2017) – Double and single storey extensions to dwelling, double domestic garage in rear garden.
	DM/18/00572/FPA (2018) – Erection of 1 dormer bungalow.
Proximity	~115 metres north east

Dendra Consulting Ltd. (2017). *Bat Risk Assessment at 15 Institute Street, Oakenshaw, Crook, DL15 0TB.*

Despite the proximity to high value bat foraging habitat, the buildings are considered not to contain any suitable gaps or crevices with the potential to support roosting bats. In summary no evidence of use by bats was found either internally or externally, therefore the buildings are classified as having negligible potential to contain roosting bats under current industry guidance (Collins, 2016).

7. Daylight visit

7.1 House

The property is a detached stone-built residential dwelling.

The roof is tiled and the ends of the tiles are capped off. The tiles are all in place, with no gaps noted. Roof flashing is raised in a couple of places.

Window and doors within the property are uPVC double glazed. Skylights are present on part of the roof.

A conservatory (proposed for removal) is present on the rear (southern) elevation (**figure 12**). This has a pitched tiled roof, with no slipped/misaligned tiles noted. uPVC soffit boxes are present around this section, with a gap present at each end where it adjoins the house (**figures 13 and 14**). The conservatory external walls are wooden-cladded with no gaps noted.

Soffit boxes around the rest of the property, some sections of soffit boxing which can be seen from the front of the property have large gaps present (**figures 17 and 18**). These Potential Roost Features are not affected by the development proposals.

A portico with a pitched roof is present on the front elevation (**figure 16**). There is no access to the void above it, no gaps into it were noted and is not affected by the development proposals.

The roof void has partially been converted into two bedrooms (**figure 19**). A section of traditional loft void is still present (**figure 20**). Within the loft void insulation is present across the floor and up some of the walls. Bitumen felt is present along the tiles. Light ingress can be seen along the wall tops, suggesting there are gaps present that could be used by bats. A single butterfly wing was found (**figure 21**), which can be the remains of overwintering butterflies or can be the feeding remains of larger bat species such as natterer's or brown long-eared. No bat droppings were seen.

Brush remains, which may have been a bird's nest, were seen in the loft void (**figure 22**).

No signs of bats were noted.

See **figures 11-22**.

7.2 Outbuilding

The outbuilding is a L-shaped building, in former use as a stable block, with part of it constructed as a 'Granny annex'. It has a tiled pitched roof and is of stone-built construction, with part of the wall clad in wood, part rendered and part left as exposed stonework.

The pitched roof has a small feature with weather vane and vents present (**figure 27**).

The outbuilding (stable block/'Granny annex') has the following PRFs for bats noted:

- Gaps along the wall tops.
- Gaps between wooden vertical shuttering boards (**figure 24**).
- Gaps present where mortar is missing from the ends of the tiles (**figure 25**).
- Missing ridge tile, creating gaps underneath the adjacent ridge tiles (**figure 26**).
- Gaps present beneath the tiles (**figure 28**).

Bat droppings were found in the loft void area of the building, along with butterfly wings (**figures 34 and 37**). Butterfly wings can be the remains of overwintering butterflies or can be the feeding remains of larger bat species such as natterer's or brown long-eared.

Internally the building has 3 sections:

- Two bays for stabling horses.
- A converted 'Granny annex' with 3 rooms.
- A storage area with stairs above to loft void.

There is access for birds and bats to move throughout all 3 sections internally.

A remnant bird's nest was noted at the end of a rotten soffit box (**figure 31**).

This building is used by roosting bats and nesting birds.

Stable bays - this section is in current use as storage and is open to the roof beams above (**figure 32**).

'Granny annex' – This section has been converted into liveable rooms (**figure 38**) with uPVC doors and windows. The roof void above it cannot be directly accessed, but was viewed from an internal window in the storage area. Numerous bird droppings and the remains of nests could be seen (**figure 35**). Metal sheeting is present beneath the tiles in this section.

Storage area – This section (**figures 33 and 36**) has breeze block internal walls and a set of stairs leading to the roof void. Butterfly wings are scattered across both the ground floor (**figure 37**) and roof void. Bat droppings were found in the roof void of this section (**figure 34**).

See **figures 23-38**.

7.3 Garage

A detached garage is present within the grounds of the property. No work is proposed to this building and it was therefore not included in the assessment.

See **figure 39**.

7.4 Garden/grounds

The property has a front lawn and a large rear garden/field. Species present within the grassland are of no particular note. These areas are regularly mown.

See **figures 40-41**.

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7.5 Photos



Figure 11. Main house, front (northern) elevation.



Figure 12. Main house, rear (southern) elevation, showing conservatory proposed for demolition.

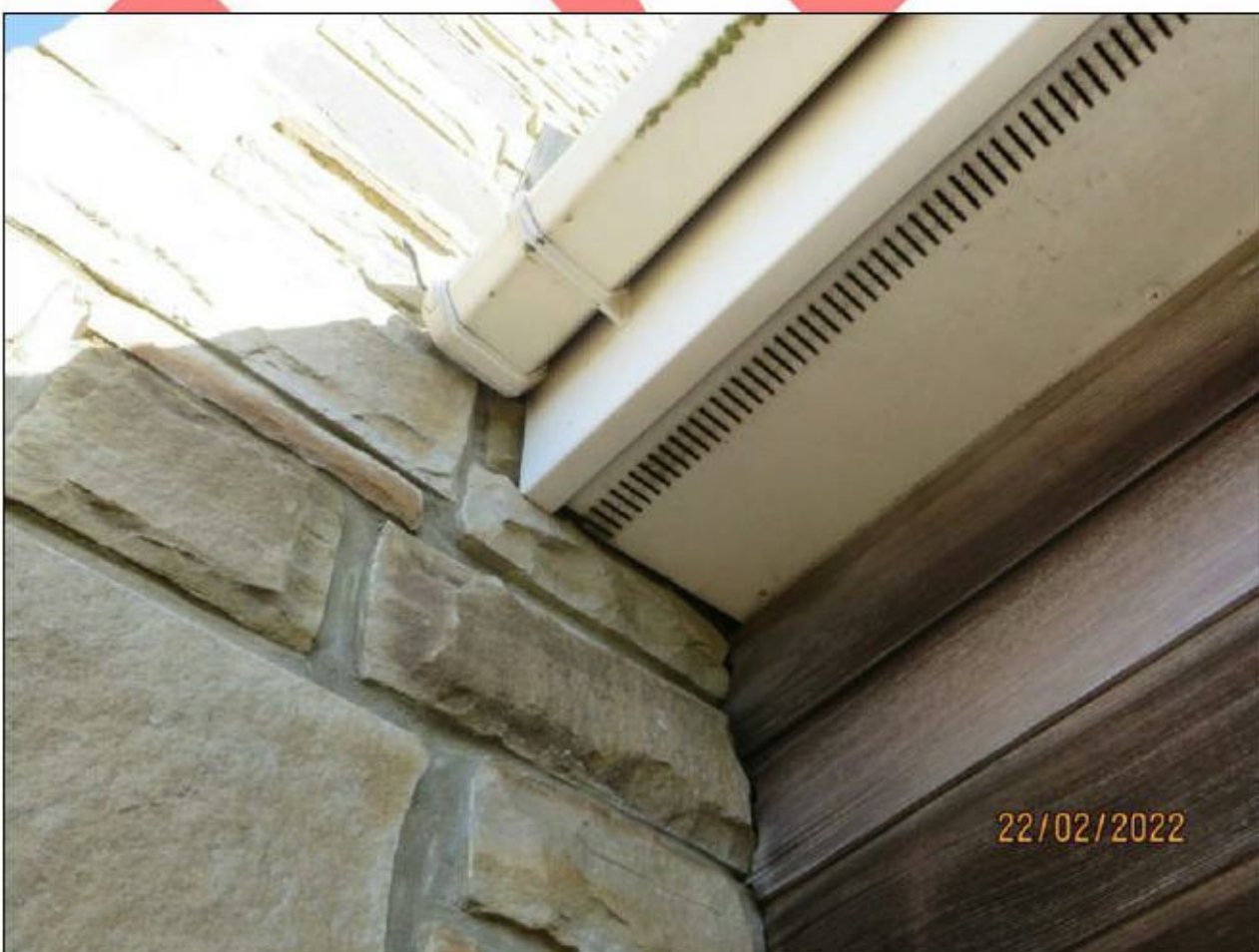


Figure 13. Gap present at end of soffit box on conservatory.



Figure 14. Gap present at end of soffit box on conservatory.



Figure 15. Rear (southern) and side (eastern) elevations.



Figure 16. Covered portico on front elevation.



Figure 17. Gap present near soffit box. Not affected by development proposals.



Figure 18. Gap present near soffit box and raised flashing. Not affected by development proposals.



Figure 19. Room within roof void.

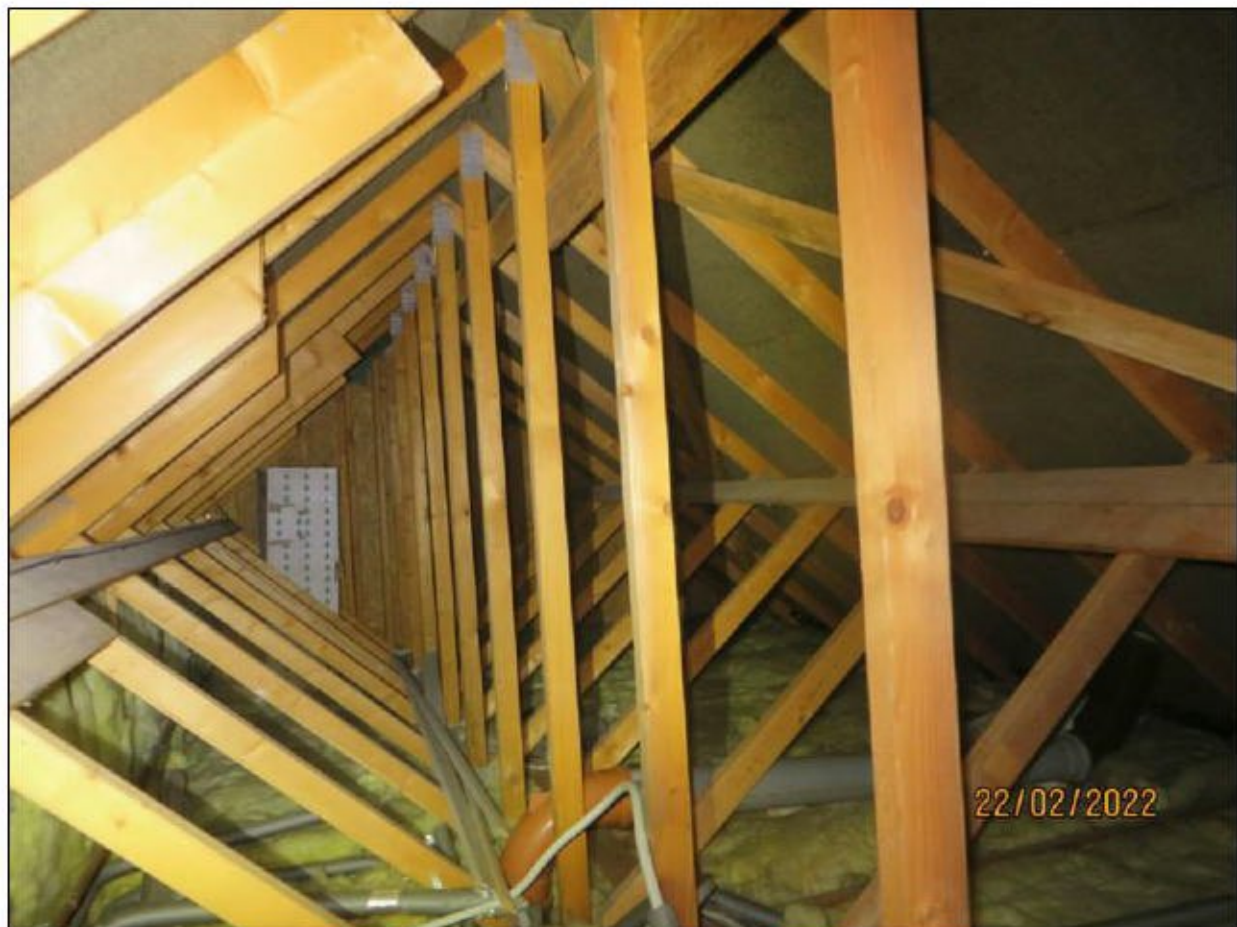


Figure 20. Main house loft void.



Figure 21. Butterfly wing in main house loft void.



Figure 22. Remains of bird's nest within main house loft void.



Figure 23. Outbuilding - 'Granny annex', showing wooden cladding.



Figure 24. Gap present into wooden cladding on outbuilding.



Figure 25. Gap at end tiles on outbuilding.

Figure 26. Missing ridge tile on outbuilding.



Figure 27. Weathervane on outbuilding.

Figure 28. Gap present under roof tiles on outbuilding.





Figure 29. Outbuilding, eastern elevations.



Figure 30. Outbuilding, southern elevation, showing rendered areas.

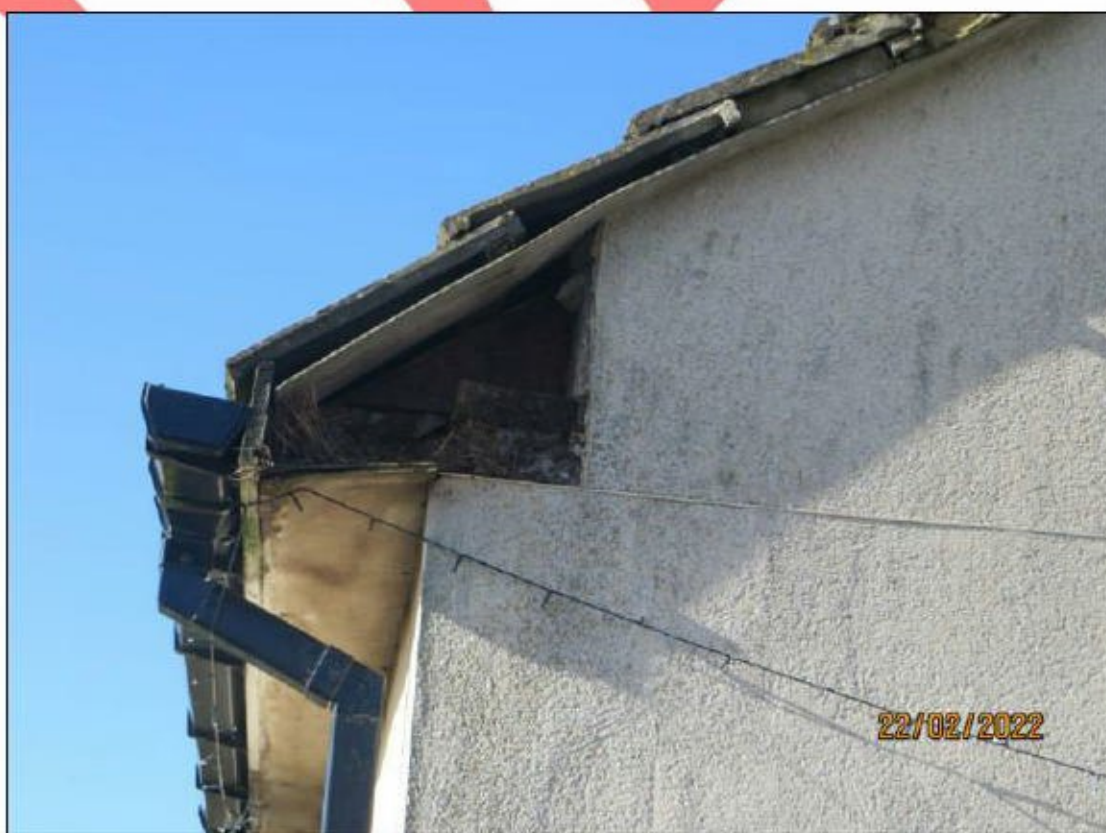


Figure 31. Remnant bird's nest in gap above rotten soffit box.

Figure 32. Roof void above stable bays.



Figure 33. Storage area upper section where bat droppings found. Light ingress can be seen along wall tops.

Figure 34. Bat droppings found on upper floor of storage section of outbuilding.





Figure 35. Bird droppings above 'Granny annex'.



Figure 36. Storage section of outbuilding.

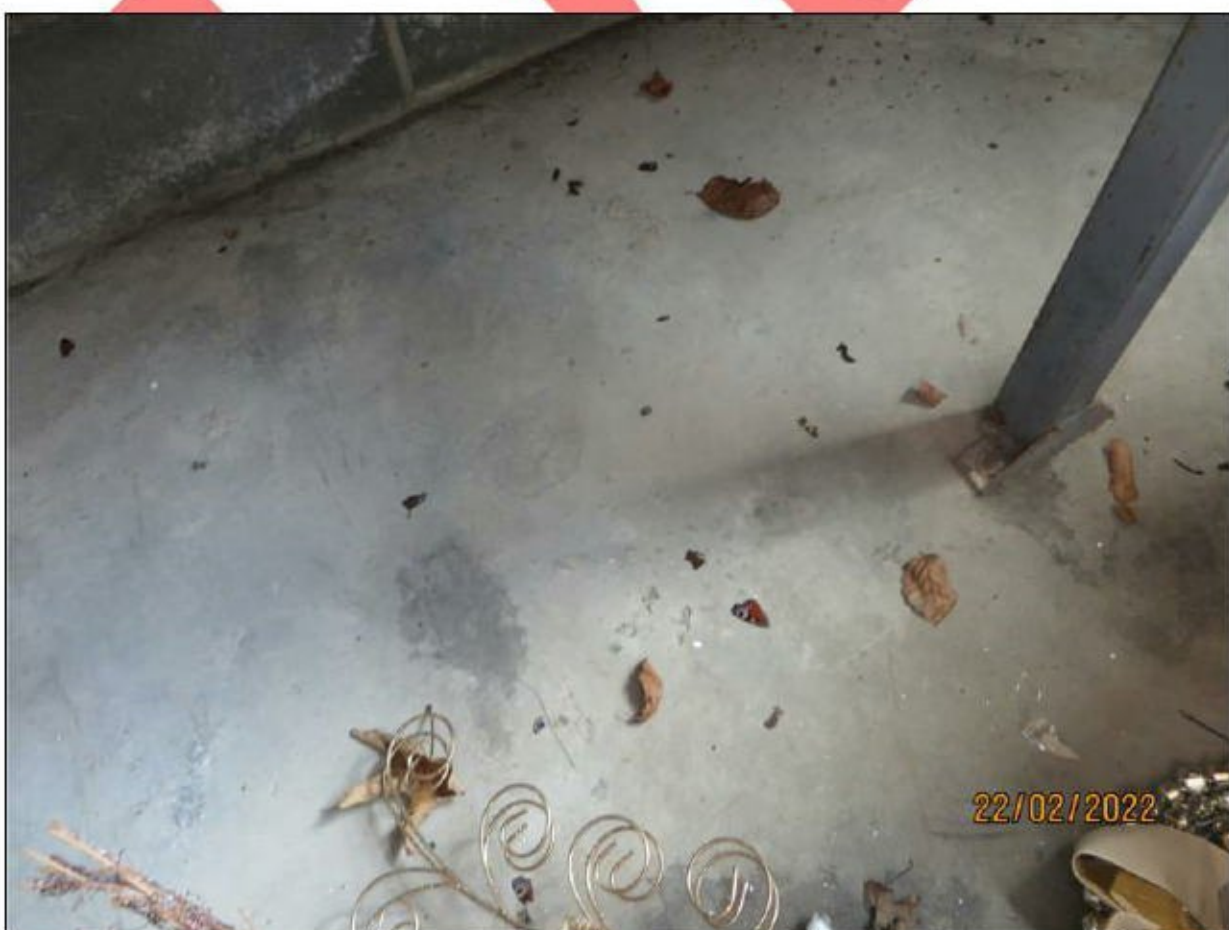


Figure 37. Butterfly wings in outbuilding.

Figure 38. Internal room of 'Granny annex'.



Figure 39. Detached garage.

Figure 40. Front garden.





Figure 41. Rear garden/field.

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8. Impact assessment and proposed mitigation

8.1 Summary

ADDITIONAL BAT SURVEYS REQUIRED TO DETERMINE THIS ASSESSMENT WITH REGARD TO THE OUTBUILDING ONLY.

A NATURAL ENGLAND MITIGATION LICENCE IS LIKELY TO BE REQUIRED FOR WORKS TO THE OUTBUILDING AS IT IS A BAT ROOST.

The main property and the outbuilding have potential to support roosting bats, with several Potential Roost Features (PRFs) noted.

- **Those within the main property are restricted to the wall tops, roof void and soffit boxes. These areas are not affected by the development proposals and therefore can be left in-situ and as is. No survey work is recommended at this time.**
- **The outbuilding is a confirmed roost with bat droppings and potential feeding remains (butterfly wings) present. Bat survey(s) should therefore be undertaken between May and August to get an understanding of the use of the property by bats (if any). This is in accordance with the Bat Conservation Trust (2016) ‘Bat Surveys Good Practice Guidelines’. No building work should be undertaken prior to these survey(s) being undertaken on the outbuilding. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.**

Birds are known to nest on and within both buildings and are able to access the roof voids.

Integrated features for bats and birds are recommended to be incorporated into the proposed extension/renovation works⁶.

There is one Designated [wildlife] Sites within 2km; Willington North Dene LNR lies approximately 1km south west. The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI) although no impacts are expected.

There are no Priority Habitats on/adjacent to the development site. As the development is confined to within the grounds of Oak House (21A Acorn Drive), negligible impact is expected on any nearby habitats.

A Pollution Prevention Plan should be put in place during the construction phase.

With regard to the outbuilding, aside from bats, any other potential impacts can be dealt with via Precautionary Working Methods which are provided within this report (appendix 1).

With regard to the main dwelling, any other potential impacts can be dealt with via Precautionary Working Methods which are provided within this report (appendix 1) as long as no roof/wall top works are proposed.

Factors supporting the recommendations are discussed in the sections below:

⁶ www.nhbs.com

8.2 Limitations

The assessment was undertaken outside the period where bats are active and therefore field signs are unlikely to be present externally.

8.3 Birds

Birds are known to nest on and within both buildings and are able to access the roof voids.

Potential impacts

- Disturbance to breeding birds.
- Destruction of active nests, causing death or injury to fledging birds.
- Loss of bird nesting provision.

Actions and mitigation

- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive).
- Construction works should avoid the bird nesting season unless a suitably qualified ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.
- Bird boxes are recommended to be incorporated into the design of the proposed works to ensure No Net Loss of nesting provision. Examples include swallow terraces or swift bricks.

8.4 Bats

ADDITIONAL BAT SURVEYS REQUIRED TO DETERMINE THIS ASSESSMENT FOR WORKS TO THE STABLE BLOCK/'GRANNY ANNEX' OUTBUILDING.

A NATURAL ENGLAND MITIGATION LICENCE IS LIKELY TO BE REQUIRED FOR WORKS TO THE OUTBUILDING AS IT IS A BAT ROOST.

The main property has the following Potential Roost Features (PRFs) for bats noted:

- Gaps along the wall tops.
- Gaps around soffit boxes.
- Raised roof flashing.

The main property is deemed to have low-moderate potential for roosting bats due to a small number of PRFs and no signs of bats seen. These features are unaffected by the development as no work is proposed at first-floor height, to the roof or within the loft void. No further survey work is deemed necessary if no work is proposed in those areas.

Two gaps were noted at the end of the uPVC soffit box on the conservatory proposed for demolition. Whilst bats may access these gaps, the low drop height for emerging bats and the uPVC construction makes it unlikely to be used by bats. A suitably qualified ecologist should be present to check for bats upon its' removal.

A couple of butterfly wings were noted in the loft void. Butterfly wings can be the remains of overwintering butterflies or can be the feeding remains of larger bat species such as natterer's or brown long-eared.

As the PRFs of the building are unaffected by the development proposals, no further survey effort on the main property is deemed necessary, as long as no work is done to the roofing area or soffit boxes away from the conservatory.

The outbuilding (stable block/'Granny annex') has the following PRFs for bats noted:

- Gaps along the wall tops.
- Gaps between wooden vertical shuttering boards.
- Gaps present where mortar is missing from the ends of the tiles.
- Missing ridge tile, creating gaps underneath the adjacent ridge tiles.
- Gaps present beneath the tiles.

Within the outbuilding were found bat droppings and butterfly wings. A sample of the droppings has been taken.

The outbuilding is deemed to be moderate potential for roosting bats. The **presence of bat droppings confirms the building is a bat roost**. These features will be lost/altered during the development and therefore further assessment is required to ascertain how the building is used by bats.

Bat survey(s) should therefore be undertaken between May and August to get an understanding of the use of the outbuilding by bats. This is in accordance with the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'.

A repeat daylight check for signs of bats will also be undertaken.

No building work should be undertaken prior to these survey(s) being undertaken. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.

A Natural England mitigation licence is likely to be required for works to the outbuilding.

Bat records have been requested from Durham Bat Group. These will be discussed once received.

The [initial] Assessment was made based on the Bat Conservation Trust (2016) 'Bat Surveys Good Practice Guidelines'. The full assessment tables can be found in **appendix 3**.

Overall suitability for bats	Habitat and settings	High
	Building (main dwelling)	Low-medium
	Building (outbuilding)	Medium
	External	Low-medium
Potential suitability of the development site for bats	Commuting and foraging habitats	Moderate
	Roosting habitats	Moderate

Potential impacts

- Disturbance to roosting bats.
- Loss of potential roosting areas.
- Disturbance and destruction of a bat roost (with regard to the outbuilding).
- Disturbance, killing or injury to bats which may use the buildings as roost(s).
- Loss of bat roosting provision.

Actions and mitigation

Example only – to be updated following the recommended survey effort with regard to the outbuilding only.

- Bat survey(s) should be undertaken between May and August to get an understanding of the use of the outbuilding by bats (if any). A repeat daylight check for signs of bats will also be undertaken.
- No building work should be undertaken prior to bat activity surveys being undertaken on the outbuilding. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.
- Soffit boxes around the conservatory on the main house should only be removed with a suitably qualified ecologist present. Should bats be found then works would be required to stop until advice is sought from Natural England.
- No roof, wall top or removal of other soffit boxes on the main house should occur without bat surveys being carried out. The proposals shown in **section 1** do not include work in these areas.
- Roofing features such the tiles, wooden boarding flashing and soffit boxes to be removed by hand, carefully checking for bats.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- Any external lighting should be low level, directional and follow the ILP/BCT 2018 guidance⁷.
- **Non-Bitumen (Breathable) Roofing Membranes⁸ should not be used as these are known to cause death to bats by entanglement. Currently the only ‘bat safe’ roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction. Breathable Roofing Membrane is not allowed to be used in a bat roost.**
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.
- Integrated features suitable for bats (such as bat access tiles/integrated bat box) are recommended to be incorporated into the proposed development works to ensure No Net Loss of bat roost potential.

8.5 Designated Sites and Priority Habitats

There is one Designated [wildlife] Sites within 2km; Willington North Dene LNR lies approximately 1km south west. The site falls within the Impact Risk Zones for Sites of Special Scientific Interest (SSSI) although no impacts are expected.

There are no Priority Habitats on/adjacent to the development site. As the development is confined to within the grounds of Oak House (21A Acorn Drive), negligible impact is expected on any nearby habitats.

⁷ ILP (2018). *Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series*. BCT

⁸ www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

8.6 Other species and habitats

There are no signs of any Protected Species on/adjacent to the development site.

Potential impacts

- Potential impact on foraging animals.
- Pollution *via* site run-off and/or materials/chemicals stored/increased traffic on site.
- Disturbance and/or injury to wildlife during the construction phase.
- Activities such as mixing cement, refuelling or storage of materials/equipment may cause significant damage to those features such as compaction or contamination.
- Pollution *via* site run-off of through discharges of waste during occupation of the site.

Actions and mitigation

- A pollution prevention strategy/plan should be put in place. This should include standard good practice measures included in PPG6 (see references). This should include both the construction phase and during the use of the site.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- Check any areas of ground thoroughly before work starts. Holes left following removal of tree stumps/rocks should also be checked.
- Remaining vegetation to be gradually reduced in size, checking for wildlife, such as small mammals and reptiles.
- Any small mammals should be given chance to move away of their own accord to a place of safety or carefully remove them to a safe area nearby, preferably in vegetation, away from the working area.
- All materials, fuel and equipment, if left on site, to be stored securely in a position away from the site boundaries.

9. References

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APPENDIX 1. Precautionary Working Method Statement

METHOD STATEMENT FOR CONTRACTORS OAK HOUSE, 21A ACORN DRIVE, OAKENSHAW, CROOK, DL15 0TF

The following precautions are necessary to prevent a legal offence being committed. All species of breeding bats and breeding birds are protected by law. Deliberate or reckless disturbance of these animals is a legal offence, punishable by fines and/or imprisonment. They are intended to reduce the impact of this development to protected species. These recommendations must be followed by all of those working on the site.

Should any protected species be found, work should immediately stop, and the project ecologist contacted.

Bats commonly roost in cavity walls and roofs. They may be present under roof tiles, ridge tiles and at wall tops or within crevices. All species of bats are strictly protected by law. Damage or destruction of a bat roost is an absolute offence with a maximum penalty of a £5,000 fine per offence, up to 6 months imprisonment, and confiscation of equipment.

Birds often nest at eaves, in roofs and in soffits. All species of breeding birds, their nests (whilst being built and when in use), eggs and chicks are also protected by law.

Example only - to be updated following bat activity survey(s) with regard to the outbuilding.

No building work should be undertaken on the outbuilding prior to bat activity surveys being undertaken. This is to reduce any impacts on any bat roosts present, which could constitute a legal offence.

- **No roof, wall top or removal of other soffit boxes on the main house should occur without bat surveys being carried out. The proposals shown in section 1 do not include work in these areas.**
- **Soffit boxes around the conservatory on the main house should only be removed with a suitably qualified ecologist present. Should bats be found then works would be required to stop until advice is sought from Natural England.**
- Roofing features such the tiles, wooden boarding, flashing and soffit boxes to be removed by hand, carefully checking for bats.
- If bats or signs of bats are found, then work must stop, and the project ecologist contacted for advice.
- **Non-Bitumen (Breathable) Roofing Membranes⁹ should not be used as these are known to cause death to bats by entanglement. Currently the only 'bat safe' roofing membrane is bitumen 1F felt that is a non-woven short-fibred construction. Breathable Roofing Membrane is not allowed to be used in a bat roost.**
- Any external paint used should be checked to ensure it will not cause harm to bats or birds.

⁹ www.bats.org.uk/our-work/buildings-planning-and-development/non-bitumen-roofing-membranes

- Integrated features suitable for bats (such as bat access tiles or an integrated bat box) are recommended to be incorporated into the proposed development works.
- All works to cease immediately if bats, bat signs or nesting birds are found, and the project ecologist contacted for advice before works can proceed.
- Any external lighting should be directional away from any roosts/valuable habitat features and follow the ILP 2018 guidance¹⁰. Any new external lighting will be directional, low intensity and controlled by motion sensor.
- Site contractors must be made aware of the law around the bird nesting season (March-August inclusive). Construction works should avoid the bird nesting season unless a suitably qualified ecologist has confirmed that no nesting birds are present 48 hours prior to the works commencing.
- Bird boxes are recommended to be incorporated into the design of the proposed works to ensure No Net Loss of nesting provision. Examples include swallow terraces or swift bricks.
- Any storage of materials on site is likely to create suitable refugia for several species and therefore should only be moved by hand.
- Any pits or holes dug during construction phase must be covered up overnight or fitted with exit ramps (scaffolding planks) for mammals to be placed at an angle of 30° from base to top.
- A pollution prevention strategy/plan should be put in place. This should include standard good practice measures included in PPG6¹¹. This should include both the construction phase and during the use of the site.
- Check any areas of ground thoroughly before work starts. Holes left following removal of tree stumps/rocks should also be checked.
- Remaining vegetation to be gradually reduced in size, checking for wildlife, such as small mammals and reptiles.
- Any small mammals should be given chance to move away of their own accord to a place of safety or carefully remove them to a safe area nearby, preferably in vegetation, away from the working area.
- All materials, fuel and equipment, if left on site, to be stored securely in a position away from the site boundaries.

¹⁰ ILP/BCT (2018) *Advice note 08/18 - Bats and artificial lighting in the UK - Bats and the Built Environment series.*

¹¹ Sepa et al (2012). *Introduction to PPG6 - Working at construction and demolition sites.*

Signed by Owners

Names

Date.....

Signed by Contractors

Name	Job Title	Date	Signature

APPENDIX 2. Relevant wildlife 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.

Paragraph 109 of the National Planning Policy Framework (NPPF) requires that the planning system minimizes impacts on biodiversity and provides net gains where possible.

In Britain all bat species and their roosts are legally protected, principally under the Conservation of Habitats and Species Regulations (2010), with additional protection under the Wildlife and Countryside Act (1981) (as amended), including under Schedule 12 of the Countryside and Rights of Way Act, 2000, which created a new offence of reckless disturbance.

The combined effect of these is that a person is guilty of an offence if they:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.

In particular where this may:

- i. Impair their ability to survive, to breed or reproduce, or rear or nurture their young.
- ii. Affect significantly the local distribution or abundance of the species.
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
 - Intentionally or recklessly obstruct access to a bat roost.

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird. Barn Owls are named in Schedule 1 of this Act.

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 dependent young of wild barn owls.

APPENDIX 3. Bat suitability tables

From 'Bat Conservation Trust (2016). Bat Surveys Good Practice Guidelines'. Those in **bold** and blue shaded boxes apply to the building/site.

Overview of site suitability for bats.				
Habitats and settings				
	Negligible	Low	Moderate	High
Habitats and cover within 200 metres.	City centre.	Open, exposed arable, amenity grass or pasture.	Hedges and trees linking site to wider countryside.	Excellent cover with mature trees and/or good hedges.
Habitats within 1km.	City centre.	Little tree cover, few hedges, arable dominated.	Semi-natural habitats e.g. trees, hedgerows.	Good network of woods, wetland and hedges.
Alternative roosts within 1km.	City centre.	Numerous alternative roost sites of a similar nature.	A number of similar buildings in the local area.	Few alternative buildings and site of good quality for roosts.
Setting.	Inner city.	Urban with little green space.	Built development with green-space, wetland, trees.	Rural Lowland with woodland and trees.
Distance to water/marsh.	>1km	500m-1000m	200m-500m	<200m
Distance to woodland/scrub.	>1km	500m-1000m	200m-500m	<200m
Distance to species-rich grassland.	>1km	500m-1000m	200m-500m	<200m
Commuting routes.	Isolated by development, major roads, large scale agriculture.	No potential flyways linking site to wider countryside.	Some potential commuting routes to and from site.	Site is well connected to surrounding area with multiple flyways.

Overview of site suitability for bats.				
Building – main dwelling				
	Minimal	Low	Medium	High
Age (approximate)	Modern.	Post 1940s.	1900-1940.	Pre 20th Century.
Building/complex type	Industrial complex of modern design.	Single, small building.	Several buildings, large old single structure.	Traditional farm buildings, country house, hospital.
Building – storeys	N/A	Single storey.	Multiple storeys.	Multiple storeys with large roof voids.
Stone/brick work	No detectable crevices.	Well-pointed.	Some cracks and crevices.	Poor condition, many crevices, thick walls.
Framework – timbers/steel	Modern metal frame with sheet cladding.	Timber purlins, sheet asbestos.	Timbers kingpost or similar.	Large timbers traditional joints.
Roof void	Fully sealed roof.	Small, cluttered void.	Medium, relatively open.	Large, open, interconnected.
Roof covering	Modern sheet materials and tightly sealed.	Good condition or very open not weatherproof modern sheet materials.	Some potential access routes, slates, tiles.	Uneven with gaps, not too open, stone slates.
Additional features	Very well maintained and tightly sealed.	No features with potential access.	Some features with potential access.	Hanging tiles, cladding, barge boards, soffits with access gaps.

Overview of site suitability for bats.				
Building – outbuilding (stable block/Granny annex)				
	Minimal	Low	Medium	High
Age (approximate)	Modern.	Post 1940s.	1900-1940.	Pre 20th Century.
Building/complex type	Industrial complex of modern design.	Single, small building.	Several buildings, large old single structure.	Traditional farm buildings, country house, hospital.
Building – storeys	N/A	Single storey.	Multiple storeys.	Multiple storeys with large roof voids.
Stone/brick work	No detectable crevices.	Well-pointed.	Some cracks and crevices.	Poor condition, many crevices, thick walls.
Framework – timbers/steel	Modern metal frame with sheet cladding.	Timber purlins, sheet asbestos.	Timbers kingpost or similar.	Large timbers traditional joints.
Roof void	Fully sealed roof.	Small, cluttered void.	Medium, relatively open.	Large, open, interconnected.
Roof covering	Modern sheet materials and tightly sealed.	Good condition or very open not weatherproof modern sheet materials.	Some potential access routes, slates, tiles.	Uneven with gaps, not too open, stone slates.
Additional features	Very well maintained and tightly sealed.	No features with potential access.	Some features with potential access.	Hanging tiles, cladding, barge boards, soffits with access gaps.
External				
Lighting	Extensive security. Lights covering much of the site.	Widespread areas above 2 lux at night.	Intermittent lights of low intensity	Minimal
Building use	Very noisy, dusty	Regular use	Intermittent use	Disused

Guidelines for assessing the potential suitability of proposed development sites for bats, based on presence of habitat features within the landscape.

Suitability	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Suitability	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used by larger numbers of bats (<i>i.e.</i> unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.