



Greenwood Environmental

Preliminary Ecological Assessment of of proposed residential development at Land at Jesmond, Pulpit Lane, Oving, Bucks HP22 4EZ

Date: 15th August 2022

Ref: JPLO_PEA_0720_1_SAD_SA Version: 1.1

Prepared for: Steve Arnold

S. Arnold Developments

Greenacres

Hulcott,

Aylesbury

Bucks, HP22 5AX

Greenwood Environmental

Grebe Cottage, 12 Milton Road, Willen Village, Milton Keynes MK15 9AD

Tel: 01908 663853

E-mail: hilary1246@gmail.com

Website: www.greenwood-env-ecology.com

Greenwood Environmental is the Trading name of Dr Hilary J. Denny MCIEEM CEnv



Contents

Limitations.....	3
Executive Summary.....	4
1.1. Background.....	6
1.2. Site description.....	6
2. Planning and legislation.....	7
2.1. Legislation.....	7
2.2. Planning policies.....	8
3. Methods.....	8
3.1. Desk study.....	8
3.2. Field surveys.....	9
4. Baseline Ecological conditions.....	10
4.1. Desk study.....	10
4.2. Site survey.....	13
5. Ecological constraints and opportunities.....	16
5.1 Designated nature conservation sites.....	16
5.2 Habitats.....	16
5.3 Species.....	18
6. Conclusions.....	20
7. References.....	22

Figures

Figure 1 Map of site.....	6
Figure 2 Map of sites of non-statutory sites.....	10
Figure 3 Phase 1 habitat map, including key to symbols.....	15


Appendices

Appendix 1 Photographs of the site.....	23
Appendix 2 Species list.....	25



Limitations

Ecological surveys can only assess a site at a particular time. This evidence can be used to draw conclusions as to the likely presence or absence of species (animals and plants), population sizes or use of the site by animals. However, any such study represents a snapshot in time; it is neither definitive nor complete. Seasonality and weather conditions influence survey results. Every effort will be taken to provide an accurate assessment of the situation pertaining to the site and subject at the time of the study, but no liability can be assumed for omissions or changes after the survey has taken place. No responsibility will be accepted for any use of or reliance on the contents of a report by any third party.

Validation	Signature	Date
Signatory: Dr Hilary J. Denny MCIEEM CEnv Senior Ecological Consultant Greenwood Environmental		15.08.22



Executive Summary

Purpose of the report

This report is provided in order to identify ecological constraints to a project, to identify whether further surveys are required to inform any Ecological Impact Assessment (EclA), to make design recommendations as appropriate and highlight opportunities for ecological enhancement.

Context of the development

The study site is located in the gardens of Land at Jesmond, Pulpit Lane, Oving, Bucks HP22 4EZ (O.S. SP 78730 21746). The site is located on a crossroads at the northern end of the village. The site is surrounded by other residential properties and roads. The wider area is dominated by arable farmland.

The purpose of the proposed development is to demolish the existing mid-20th century bungalow and build a small residential development on site.

The area surveyed comprises an approximately 0.12 Ha, roughly square site, which comprises buildings, grassland, scattered trees, paving and introduced shrub. There are hedges and fences on all boundaries.

Methods

The brief was to assess the existing ecological value of the site, identify potential ecological issues associated with the proposed development and make recommendations for general mitigation, compensation, enhancement and further surveys, as appropriate. A desk study and extended Phase 1 habitat survey were carried out, which was extended to survey for the potential presence of badger setts, bats, reptiles, which included two bat emergence surveys.

Key issues

All of the habitat to be lost is of low ecological value, and no compensation is compulsory but some small-scale suggestions for ecological enhancement are recommended. The site does include a number of trees and hedges, which if retained need to be protected from harm during construction work.

There is potential for birds to nest in vegetation and to a much lesser extent, buildings on site. The site has very limited potential to provide refuges and foraging for protected or BAP fauna (e.g. bats, reptiles, GCN and hedgehog). No evidence for the presence of bats was found. The trees and buildings on site have low potential for bat roosts and resting places. There are several trees and buildings adjacent to the site with potential for bat roosts and resting places, so bats may visit the site from time to time. Herpetofauna are not considered to be a significant issue in relation to this proposed development. Nevertheless, other fauna may visit the site from time to time, so some mitigation and protection measures will be required to ensure compliance with wildlife legislation during construction work.



Further surveys required

No further surveys are recommended in advance of planning application. However, it may be necessary to undertake a nesting bird survey prior to construction work commencing, if site clearance is to take place during the bird nesting season (March – August inclusive), and any large trees, such as the hazel on the SE corner should be surveyed for bats if lopping or felling is found to be necessary.

Conclusions

The site comprises a range of habitats all of which are of low ecological value.

There are no statutory or non-statutory sites of importance for nature conservation on or close to the site. Therefore, no significant adverse impacts are anticipated.

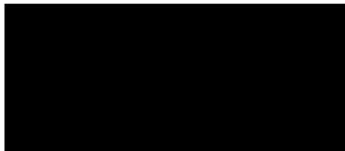
On site, the significance of the ecological impacts from the development is judged to be negligible.

Furthermore, adequate compensation for the loss of habitat and negative impacts to the site have been included in the plans in the form of the erection of bird and bat boxes, planting of suitable trees and shrubs and the avoidance of light pollution.

Providing the recommendations for species protection and ecological enhancements are implemented, it is our view that there are no further ecological constraints on the proposed works.

I confirm that the information provided in this document is truthful and accurate at the time of completion.

Consulting Ecologist: Hilary J. Denny BSc PhD MCIEEM CEnv



Date: 15th August 2022



Introduction

1.1. Background

1.1.1. The survey was carried out by Dr Hilary J Denny MCIEEM CEnv, for the client Neil Ewings of Brooke House, Wicken Park Road, Wicken.

1.1.2. The study site is located in the gardens of Land at Jesmond, Pulpit Lane, Oving, Bucks HP22 4EZ (O.S. SP 78730 21746). The site is located on a crossroads at the northern end of the village. The site is surrounded by other residential properties and roads. The wider area is dominated by arable farmland.

1.1.3. The purpose of the proposed development is to demolish the existing mid-20th century bungalow and build a small residential development on site.

1.1.4. The purpose of this report is to identify key ecological constraints, in order to inform the project planning such that significant ecological impacts are avoided or minimised. Our report also aims to highlight any further ecological surveys that may be required to inform any future Ecological Impact Assessment (EiA), so that they can be appropriately designed. Finally, the report aims to provide the information required in order to develop appropriate mitigation or compensation measures.

1.2. Site description

1.2.1. The area surveyed comprises an approximately 0.12 Ha, roughly square site, which comprises buildings, grassland, scattered trees, paving and introduced shrub. There are hedges and fences on all boundaries.

Figure 1 Map of the area with the position of the site indicated





2. Planning and legislation

2.1. Legislation

- 2.1.1. The following information provides a very brief summary of the relevant wildlife legislation, directives and policies. It is not intended to be taken as definitive or complete, and so should not be taken as a comprehensive or accurate statement of current wildlife legislation.
- 2.1.2. The Wildlife and Countryside Act 1981 makes it an offence to possess, disturb or sell any of the animals listed in Schedule 5. It is also an offence to damage or disturb the places used for their shelter or protection, which includes setts, breeding ponds and breeding or hibernation roosts, but also includes such sites as temporary bat roosts in cracks or loose bark on trees. Badgers, great crested newts and bats are covered by this legislation.
- 2.1.3. Bats are also protected under the Conservation Regulations 1994. Bats, their roosts and resting places are protected from damage and disturbance, but their adjacent habitat is not, although it could be argued that activity that degrades their foraging areas or flight routes may be disturbing to bats, or damage their breeding sites and resting places. Any activities that damage or disturb these animals and these key places need to be licensed.
- 2.1.4. Reptiles are protected from harm by the Wildlife and Countryside Act 1981, but their resting places and foraging habitat is not (except for smooth snakes and sand lizards that are not relevant to this site). Nevertheless, Natural England normally requires mitigation and compensation to be undertaken when development is permitted on reptile habitat (English Nature, 2004). This requirement includes taking the necessary preparatory steps to identify reptile populations and then protect them, which includes ensuring they have access to adequate suitable habitat.
- 2.1.5. The Protection of Badgers Act 1992 protects both individuals and their setts, making it an offence to wilfully kill, injure, or take a badger (or attempt to do so). Work that disturbs badgers whilst occupying a sett is illegal without a license. Potentially disturbing activities can only be conducted under licence from Natural England.
- 2.1.6. Great crested newts have additional protection in that the area of land around a breeding pond is also protected, (a radius of 100 m being particularly important). Special licenses are required to undertake GCN surveying and trapping.
- 2.1.7. Most bird species are protected, and so are all birds' nests during the breeding season whatever the species. It is an offence to damage a nest or disturb it to such an extent that the nest is abandoned.



2.2. Planning policies

- 2.2.1. This report is prepared with reference to the revised National Planning Policy Framework 2018. The NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, remains valid.
- 2.2.2. The NPPF places much emphasis on sustainable development, and states that this gives rise to the need for the planning system to perform a number of roles, such as 'improving biodiversity'. The specific policies within the Framework which relate to biodiversity tend to reaffirm the protection previously afforded through PPS9 to designated sites, priority habitats and priority species, ancient woodland and veteran trees.
- 2.2.3. Within the Framework, more emphasis is placed on ecological networks than in PPS9, requiring their creation rather than simply maintenance and repair. The Framework also states that the planning system should provide a net gain for biodiversity wherever possible, and contribute to the Government's commitment to halt the loss of biodiversity; which were not specifically required under PPS9. However, the Framework places less emphasis on legally protected species than PPS9, and refers instead to the need to maintain biodiversity and the protection of priority species, presumably those listed in the UK Biodiversity Action Plan.

3. Methods

3.1. Desk study

- 3.1.1. Buckinghamshire and Milton Keynes Environmental Records Centre was consulted to provide locations and details of ecological information for the site and the surrounding land to a distance of 1 km (2 km for bats). The following information was requested:
- Statutory sites (e.g. SAC, SSSI, NNR, LNR; data from Natural England).
 - Local, non-statutory sites (e.g. LWS, LGS, BNS).
 - All notable species.
 - Map(s) showing any sites and priority habitat.
 - The latest survey or citation for Local Wildlife Sites (LWS) or Local Geological Sites (LGS).
 - A short description for Biological Notification Sites (BNS) if available.
- 3.1.2. Publicly accessible websites searched for relevant ecological information included:
- www.magic.gov.uk (the Multi-Agency Geographic Information website for maps of statutory designated nature conservation sites).
 - <https://data.nbn.org.uk/>
 - <http://planningguidance.planningportal.gov.uk/>
 - <http://jncc.defra.gov.uk/page-1376> (summary of nature conservation legislation)
 - www.ukbap.org.uk (archived 2012)
 - www.google.com and www.bing.com for aerial photography



3.2. Field surveys

- 3.2.1. The survey was carried on 20th July 2022. The weather was warm, dry and sunny with light winds. The weather over the preceding week had been characterised by some rainfall and moderate to high temperatures, the ground was surface dry at the time of the survey. The temperature at the start of the survey was 21°C and 22°C at the end.
- 3.2.2. A Phase 1 habitat survey of the site was carried out. This involved systematically walking over the site and classifying each parcel of land according to the standard JNCC Phase 1 survey methodology (JNCC, 2010). Notes were made on the structure and composition of habitats and a botanical species list was collated.
- 3.2.3. The Phase 1 Habitat Survey was extended by searching for the potential presence of species or features that are protected, rare, covered by Biodiversity Action Plans or otherwise are of conservation concern.
- 3.2.4. The site and its immediate environs were searched for the presence of badger setts.
- 3.2.5. Any buildings, trees, vegetation or other relevant structures were searched for evidence of use by barn owls and other birds: signs included nesting sites, feathers, droppings and pellets.
- 3.2.6. Relevant structures on or adjacent to the site were also searched, both for signs of use by bats, including piles of droppings, greasy marks or streaks of urine staining adjacent to potential entry points and discarded insect remains.
- 3.2.7. The site was evaluated for features that would encourage occupation by reptiles.
- 3.2.8. Water bodies on or within 30m of the site that could be accessed were evaluated for the potential presence of great crested newts (GCN) with reference to the factors affecting the likely occurrence of this species (Oldham et al., 2000).
- 3.2.9. Native hedges were assessed with regard to the Hedgerow Regulations 1997 (Congreve, 2002), and the Hedgerow Evaluation and Grading Scheme (Tofts and Clements, 1994).
- 3.2.10. The information in this report is based on a single visit to the site in daylight and hence it is possible that the presence of some species may have been missed, in particular those that are active at night, reside in burrows, are very small or migratory.



4. Baseline Ecological conditions

4.1. Desk study.

- 4.1.1. Key records with respect to sites of importance for nature conservation and biodiversity are summarized in Figure 2.

Site Records:

- 4.1.2. There are no statutory sites of international importance within 5km of the site.
- 4.1.3. There are no statutory sites of national importance (SSSI) within 2 km of the site.
- 4.1.4. There are no Local Nature Reserves within 2 km of the site.
- 4.1.5. There are no non-statutory sites of importance for nature conservation within 1km of the site:
- 4.1.6. There are no areas of priority / notable habitat within 200 m of the site.
- 4.1.7. The site does fall within a non-statutory zone described as B-lines, which is an initiative promoted by Bug Life. “B-Lines are a series of ‘insect pathways’ running through our countryside and towns, along which we are restoring and creating a series of wildflower-rich habitat stepping-stones. They link existing wildlife areas together, creating a network, like a railway, that will weave across the British landscape. This will provide large areas of brand-new habitat benefiting bees and butterflies– but also a host of other wildlife.” (Buglife, 2022, <https://www.buglife.org.uk/our-work/b-lines/>), (Figure 2).
- 4.1.8. Therefore, no sites of importance for nature conservation would suffer either direct or indirect impacts as a consequence of the proposed building work.

Species Records:

- 4.1.9. *Species:* there are no records of notable or protected species for the site.
- 4.1.10. *Reptiles:* There are no records of reptiles within 1km of the site. The general area is very low on reptile records. These species are not considered to be an issue at this site.
- 4.1.11. *Amphibians:* The only record of amphibians within 1km of the site is for the common frog; a single entry. There are no records of highly protected species such as great crested newt (GCN). The site falls within a green risk zone for GCN, which means that it is considered unlikely that any GCN would be impacted negatively by the proposals. These species are not considered to be an issue at this site.

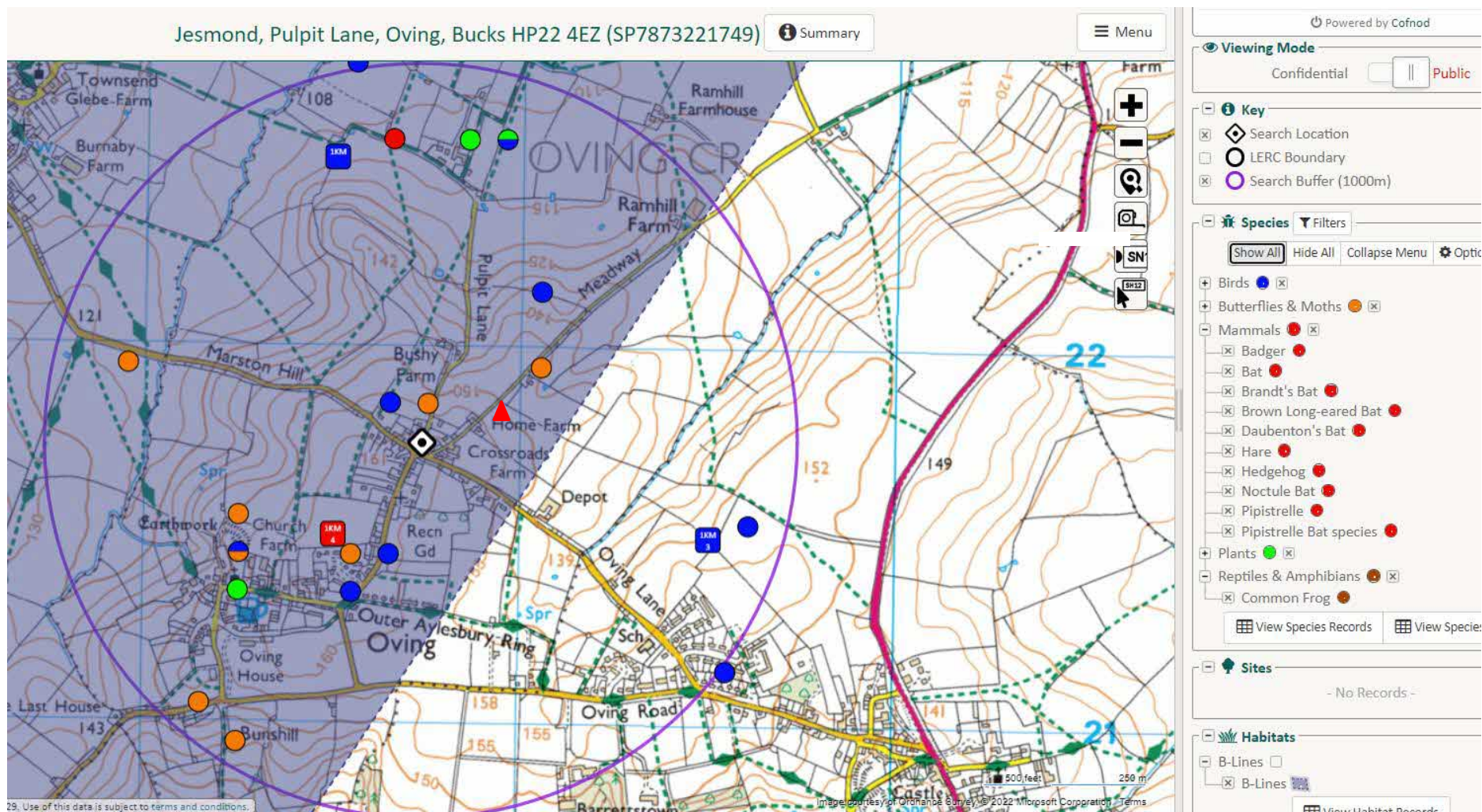
- 4.1.12. [REDACTED]



- 4.1.13. *Bats*: There are a few records of bat species within a 5km radius of the site. There are records of the following bat species for pipistrelle (*sensu latu*), brown long-eared bats, noctule, natterer, Daubenton's and Brandt's. Bats would be expected to forage over gardens, pastures, hedges and woodland. Roosts are recorded in local villages and at farms near Oving.
- 4.1.14. *Aquatic mammals*: There is a single record of an otter almost 5km away and one of water vole about 4km away. These species are not considered to be an issue at this site.
- 4.1.15. *Hedgehog*: This species has been recorded occasionally in and around the village.
- 4.1.16. *Other mammals*: There are a few records of brown hare, wood mouse, grey squirrel, mole, rabbit and Muntjac deer.
- 4.1.17. *Birds*: There are many records for notable bird species within the search area. The most relevant bird records for the purposes of this survey are for house sparrows, house martin and song thrush, which are all red listed, indicating their high conservation concern, following a dramatic decline in numbers over recent decades.
- 4.1.18. *Invertebrates*: There are some records of butterflies and especially moths, including rare and notable species for the area, but not for the site.
- 4.1.19. *Plants*: No rare plants have been recorded for the site. Hoary plantain and wild strawberry amongst others have been recorded in the vicinity, but not on site.
- 4.1.20. *Schedule 9 (W&C Act 1981 as amended)*: Invasive species listed under Schedule 9 included in the report are: *Cotoneaster horizontalis* and red-necked parakeet.



Figure 2 Sites of importance for nature conservation within 1km of Study Site: Site = black diamond with dot





4.2. Site survey

- 4.2.1. The site comprises the following habitats: buildings and paving, broadleaved and coniferous scattered trees, amenity grassland, and introduced shrub. There are fences and hedges around all the boundaries. Adjacent habitats also include buildings, amenity grassland, introduced shrub (gardens) and scattered trees. Photographs of the site are provided in Appendix 1, and a full species list is given in Appendix 2.
- 4.2.2. Buildings (Photos 1-5). There are two buildings on site: The bungalow, which is a detached, mid-20th century, private residential house, and a garden greenhouse/ shed.
- 4.2.3. The house is constructed of brick and tile with uPVC window frames to the front and south. There are a few windows with metal frames to the north and rear. The building was carefully inspected externally for the presence of bats and birds' nests. The structure features very few crevices and cavities that might support birds' nests and bat roosts, no sign of either was found. There were no obvious gaps around windows, doors eaves and gables. The flat roof was well-sealed down. (Signs of bats might include polished surrounds to crevices, dust and grease deposits, droppings, urine stains, food remains etc).
- 4.2.4. The greenhouse/ shed is mainly wooden in construction. It was inspected closely and no sign of use by birds or bats was found. An old blackbird nest was found above the entrance door into the shed. The buildings are of low ecological value.
- 4.2.5. The paving is mainly concrete slabs, with tarmac on the drive. Both are of negligible ecological value.
- 4.2.6. Scattered trees: (Photos 6 - 9). There are a few scattered trees in the survey site: They are mainly fairly mature fruit trees (apple, pear and plum) and scattered over the lawn to the front, south and rear of the bungalow. There are a few conifers and shrubby species along the west (rear) boundary (Norway spruce, sycamore, hornbeam, laurel and flowering cherry). There is also a conifer in front of the house and another Norway Spruce in the NE corner. The Norway spruce is non-native. The non-native species and cultivars are of low ecological value. They support a low diversity of invertebrates as well as lichens, fungi, bacteria etc., but do offer a few potential sites for nesting birds and resting bats. However, no evidence of either was observed during the site visit and they are considered to have low potential for bat roosts. There is moderate potential for bat resting places on the larger hazel trees on the boundary in the SE corner.
- 4.2.7. Amenity Grassland: (Photos 1, 2, 5, 6 & 8 - 10). Much of the site is covered with amenity grassland, which has been regularly cut. The species mixture contains species common in commercial lawn mixtures but has a few species typical of shadier conditions (under the trees) and a small range of typical lawn forbs (creeping buttercup, broad-leaved plantain, dandelion, ground ivy, white clover. This community is of low ecological value. It is of low structural and species diversity and could be readily recreated.
- 4.2.8. Species-poor hedge: (Photos 5, 6 & 8 - 10) There is Leyland cypress hedge along the northern boundary. This hedge, has been mostly cut short and thin. It provides nest sites for some species of birds, but it will support a low diversity of invertebrates and provide very little in the way of food for birds and other animals. This hedge is of low ecological



value, for that reason and because it could be readily recreated. The hedge along the southern boundary is also dominated by Leyland cypress but also includes small amounts of field maple, hazel, cotoneaster, lilac and holly. The hedge along the eastern boundary is mainly elm, which is sprouting up from diseased elm boles.

- 4.2.9. Introduced shrub: (Photos 1 & 10). Garden shrubs have been planted in some areas of the site, mostly near the southern boundary, which include rhododendron and rose. There is also a shrub/flower bed in the front garden, next to the front of the house (lavender). This habitat is of low ecological value because it supports a narrow range of invertebrates and because it can be readily recreated.

Adjacent habitats:

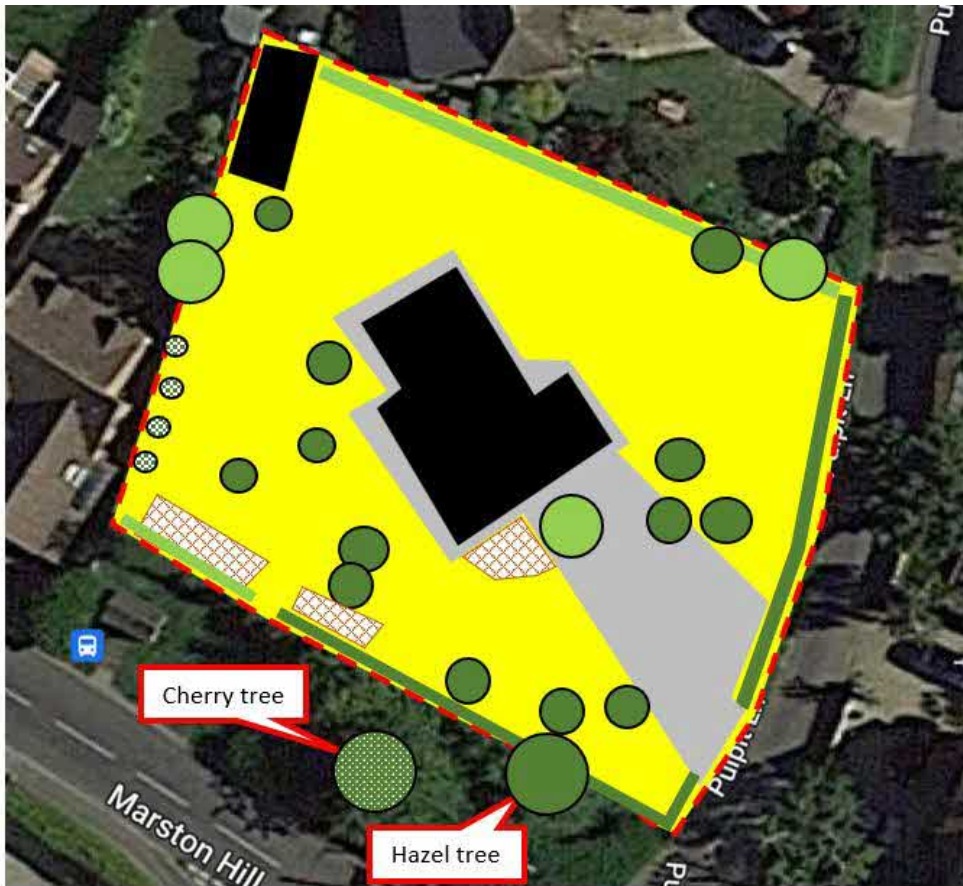
- 4.2.10. Buildings and gardens: The neighbouring houses to the north are also mid-20th century detached houses. The gardens have lawns, flower borders and shrubs, which offer habitat, including refuges, for many invertebrates as well as amphibians, reptiles and small mammals. There are a number of much older, properties towards the centre of the village and to the SW, including a medieval church, long established farms, which offer much better scope for bat roosts and birds' nests.
- 4.2.11. Amenity grassland: (Photo 11) There is a strip of mown grassland between the site boundary and the road on the southern side. This grassland is of the same low ecological value as the lawn in the garden.
- 4.2.12. Scattered trees: There is a single cherry tree on the strip grassland in 4.2.11. This tree is a non-native and of low ecological value.

Animal life:

- 4.2.13. Birds: Wood pigeons and jackdaws were the only bird species observed on site during the survey. However, the site has high potential for the presence of active birds' nests of many species of parks, gardens and woodland between March and August inclusive, particularly in the hedgerows. No active nests were observed in any of the trees on site.
- 4.2.14. Bats: As mentioned above, the buildings on site have low potential for bat roosts or resting places. An external inspection failed to reveal any evidence of bats. All obvious locations to inspect (round the window and door frames, eaves, edge of flat roofs, round flashings on the chimney) revealed few cracks or fissures. All the gaps were inspected for use by bats but were all cobwebbed up and showed no sign of use by anything other than spiders. The trees on site have low bat roost potential, but the larger hazel tree in the SE corner of the site may have bat resting place potential.
- 4.2.15. Bats would be expected to forage over the local gardens and fields. They may also utilize the hedges as flight routes.
- 4.2.16. Overall, it is considered unlikely that there are any bat roosts on site.



Figure 4 Phase 1 habitat map of the site.



Scale = 10 m

Key:

A.3.3 Scattered trees: Broadleaved (birch, cherry, apple, sycamore)

Coniferous (Norway Spruce, Lawson's cypress)

J.1.2 Amenity grassland (garden lawn)

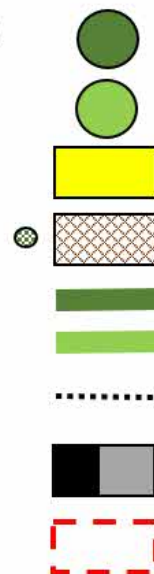
J.1.4 Introduced shrub (individual bush and bed)

J.2.1.2 Species poor hedge (elm, hazel, field maple, hawthorn)
Coniferous hedge (leyland cypress)

J.2.4 Fence

J.3.6 Building/ paving

Site boundary





4.2.17.



4.2.18. *Other mammals*: There were no signs of use by mammals such as droppings, burrows etc. However, BAP species such as hedgehogs and other small mammals may be present on site from time to time. The proposed development is unlikely to have a significant, long-term impact on local small mammal populations.

4.2.19. *Great crested newts*: Most GCN activity is concentrated within 250 m of their breeding ponds. They can use stream channels and hedgerows as dispersal routes. However, they do not thrive in rivers in streams with flowing water. There are no ponds on site, nor within a 500m radius of the site. The site falls within a green GCN risk zone (naturespace.co.uk) Therefore, this species is not considered to be a significant issue regarding this proposed development.

4.2.20. *Reptiles*: No evidence for the presence of reptiles was found during the site survey. The site offers fairly poor habitat for reptiles. It has little cover or suitable hibernation sites on site, and there are very few records of reptiles in the area. Therefore, it is considered unlikely that reptiles are present on site.

Schedule 9 invasive species

4.2.21. No Schedule 9 species were observed on site apart from a cotoneaster in the southern boundary hedge.

5. Ecological constraints and opportunities

5.1. Designated nature conservation sites

5.1.1. Due to the nature of the proposed development and the distance between the site and any statutory sites of international, national or local importance in the local area, no impacts are anticipated as a result of the proposed development and as such, no recommendations are made in relation to these sites.

5.1.2. In terms of non-statutory designated sites there are none within the 1km search area: Therefore, the proposed development will have no direct nor indirect impacts on them either.

5.2. Habitats

5.2.1. The habitats on the site are of negligible ecological value on account of the abundance, low structural and species diversity and/or low potential to support rare or protected species (Regini 2000). All of the vegetation habitats could be readily re-created.

5.2.2. The amenity grassland, paved ground, buildings, introduced shrub and scattered, non-native trees would be permanently lost, but given the small extent and low ecological value of the habitats lost, this loss would be of negligible ecological significance (Regini, 2000).



- 5.2.3. The mature apple trees are of greatest ecological value. However, most of them are reaching the end of their lifespan. They could be readily replaced with new healthy stock.
- 5.2.4. Hedges are at risk of damage from buildings works.
- 5.2.5. The proposed works provide some additional opportunities for ecological enhancement.
- 5.2.6. In the case of the adjacent habitats, no significant impacts in the long term are anticipated to neighbouring retained habitats of buildings, garden, hedges and the various scattered trees.
- 5.2.7. Action: Plant new trees and shrubs (and hedges) of value to wildlife to replace any lost during the proposed construction work. Suitable species include native species and non-native species that provide food such as berries, seeds and other fruits, nest sites or cover e.g. evergreen shrubs, fruit trees, birch, rowan, whitebeam.
- 5.2.8. In the short term, shrubs and trees near the boundaries are at risk of harm from construction activities.
- 5.2.9. Action: All works should be carried out in line with environmental best practice as described in the CIRIA guidelines: Environmental good practice on site (CIRIA C502) and Environmental good practice- Working on site (CIRIA C503).
- 5.2.10. Action: All the semi-mature/mature native trees and hedges should be retained wherever possible. Protective fences around trees and hedges should be provided in accordance with legislation and British Standard guidelines: BS5837:2018 Trees in relation to design, demolition and construction – recommendations. Protective fences should be erected around all mature, native standard trees and hedges. A tree protection plan should be prepared and implemented.
- 5.2.11. Action: Where possible, any trees or timber that is produced as a result of felling or lopping should be retained to create log piles near cover such under retained trees on site or within the adjacent garden. In this way the ecological value of the old wood can be preserved.
- 5.3. Species
- 5.3.1. Birds: The site, provides potential nest sites for a range of bird species. Many of these habitats will be retained, However, some small loss of habitat, especially those associated with crevice nesting in buildings (e.g. tits, house sparrows and robins) is inevitable. Furthermore, active bird's nests are legally protected from harm.
- 5.3.2. Action: Therefore, any vegetation clearance on site should take place outside the bird nesting season (i.e. undertaken between September and February inclusive).
- 5.3.3. Should it prove impossible to adhere to these timings, an appropriately experienced ecologist should undertake a nesting bird survey immediately prior to vegetation clearance commencing. The ecologist should identify active nests and provide mitigation guidance, which must be implemented in full.



5.3.4. The ecologist should be present on site at all times when vegetation clearance is underway. Active birds' nests must be protected until nesting is finished, which can cause significant delays and rescheduling of planned works.

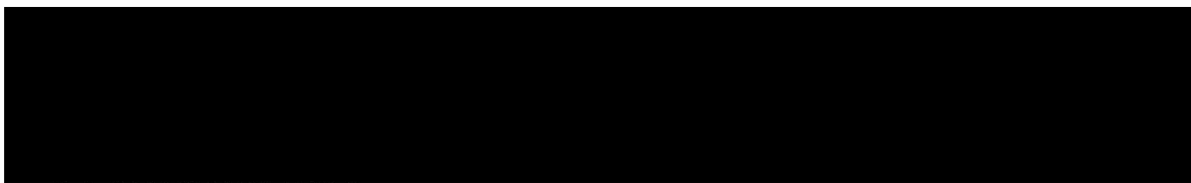
5.3.5. **Action:** It would also be beneficial to install nest boxes for these species:

- 3 x Tits: <https://www.nhbs.com/cedarplus-modern-nest-box>
- 2 x house sparrow terrace: <https://www.nhbs.com/cedarplus-triple-sparrow-house?bkfno=193072>
- Tit boxes can be erected on existing mature trees, more than 2m off the ground and not facing south.
- Sparrow terraces, are best erected on or within walls, near to the eaves, also not facing south.
- Examples available from:
http://www.nhbs.com/species_specific_bird_boxes_eqcat_430.html



Schwegler sparrow terrace fitted externally and integral to the wall

5.3.6.



(e.g. foundation trenches).

5.3.7. **Action:** Therefore, boundary fencing around the construction and storage areas should be erected, so that larger animals cannot enter it. Planks should be left overnight in all excavations over 60 cm deep as escape ramps.

5.3.8. **Bats:** It is considered unlikely that there are bat roosts on site. Therefore, no further bat surveys are deemed necessary.

5.3.9. There are large and/or senescent trees and buildings in the neighbourhood have the potential to support bat roosts, which are protected by wildlife law, and there are many bats, including a range of species that occur in the locality, which use the southern boundary as a flight route. Therefore, construction work and the new development may impact negatively on local bat populations in the short term.

5.3.10. **Action:** Should it be necessary to fell or lop any large trees or those with loose bark, holes or fissures, a licenced bat worker should carry out a survey of the trees. Should any bat roosts or resting places be found, any recommendation made by the bat worker should be implemented.



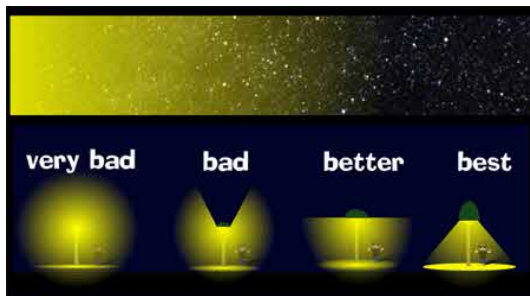
5.3.11. Action: In order to avoid affecting the behaviour of local bat populations, it is recommended that in the short term no construction work is undertaken with the aid of flood lighting, or earlier than 1 hour after sunrise or 1 hour before sunset.

5.3.12. Action: In the long term, negative impacts could be avoided by ensuring that lighting (street lighting, flood lights, security lights etc.) is of a design, location and use that avoids unnecessary light spill onto adjacent habitats, especially hedges and trees along the southern boundary.

Note: Low-level lighting should be adopted where possible and hoods or cowls should be used to avoid upward spread of light.

Add instruction to plans – “Uplighting of trees and light-spill on to the tree-lined drainage ditch should be avoided”

Ensure bollard lighting is compliant



Hood design is crucial to limiting light spill



Bollard lighting is bat friendly

5.3.13. Action: Another beneficial enhancement would be to erect three bat boxes on site. Suitable sites include around the trunk of a large tree (at least 4m up) or near the eaves of buildings. (Possible source: <https://www.nhbs.com/improved-crevice-bat-box?bkfno=187782>).

Place them either in a groups round three sides of a mature tree, not facing north, see below.

Or, under the eaves/gables to protect them from bad weather.

Ensure at least 20-30 feet of clear flight space around the bat house and easy access to cover e.g. hedge, trees etc.

The existing retained large trees would be a good place – OR

Around the corners of new buildings would be a good place, e.g. high up on side walls, which face out onto the adjacent trees and gardens.

5.3.14. GCN: This species is not considered to be an issue in relation to the proposed development.

5.3.15. Reptiles: There is a low probability of finding these species on site. The construction zone provides poor habitat for these species. Reptiles are protected from individual harm by wildlife legislation. Grass snakes may pass by along the banks of the damp ditch.

5.3.16. Action: Any piles of building stone and other materials on site should be dismantled carefully by hand vegetation should be kept mown or strimmed, especially around stored building materials.



- 5.3.17. Action: Should any animals that are not afforded legal protection be found (e.g. hedgehogs, toads, frogs) then work should be suspended until they have either moved off or been moved gently to a place of safety (e.g. under a hedge some distance).
- 5.3.18. Action: Should any animals covered by wildlife legislation be found, then work should be suspended and the advice of an ecologist should be sought. Work should not recommence until the ecologist has advised that it is safe to do so.
- 5.3.19. Schedule 9 species: This is the legislation that deals with invasive species such as Japanese Knotweed and giant hogweed etc. In this case there is a small amount of cotoneaster in the southern hedge.
- 5.3.20. Action: Care should be taken to avoid dispersing berries from these plants beyond the boundaries of the property. If it is to be removed, it should be grubbed up and allowed to dry out on site, before incinerating it.

6. Conclusions

- 6.1.1. The vast majority of the habitats on the site are of negligible ecological value on account of the abundance, low species diversity and/or low potential to support rare or protected species (Regini, 2000). All of these habitats could be readily re-created. Any retained trees and shrubs require protection during construction activities, in accordance with British Standard guidelines: BS5837:2018 Trees in relation to design, demolition and construction – recommendations.
- 6.1.2. Habitats and species already in the adjacent habitats are unlikely to suffer significant long-term negative impacts because of the proposed development, providing steps are taken to protect the trees and shrubs from damage.
- 6.1.3. On site the existing habitats will be totally lost. However, these habitats are of low ecological value and so the long term ecological significance of the loss will be negligible.
- 6.1.4. There is a risk that some animal species could also be harmed during construction. However, opportunities exist to protect wildlife during construction and mitigate for the loss of habitat in the long-term.
- 6.1.5. The only potential protected species issues relate to nesting birds.
- 6.1.6. Active birds' nests are protected from harm by law, so vegetation removal should take place outside the nesting season or failing that, under the supervision of a qualified ecologist.
- 6.1.7. It is considered unlikely that there are bat roosts on site. However, if it proves necessary to fell or lop large, mature trees (the hazel in the SE corner), a bat survey of the trees should be carried out to ensure no bat roosts or resting places are harmed during tree works.



- 6.1.8. Additional precautions should be taken to avoid negatively affecting bat behaviour. Light-spill onto flight routes and foraging areas should be minimized through the careful use and design of lighting both during and after construction.
- 6.1.9. Long-term harm to [REDACTED] GCNs are not currently considered to be an issue in relation to this development. However, some basic actions to avoid potential harm to individual reptiles, amphibians, hedgehogs and other species that may be temporarily present close to the construction zone are provided and should be implemented. To protect herpetofauna and small mammals the piles of building stone and materials should be cleared by hand.
- 6.1.10. It is anticipated that ecological impacts of the proposed development will be negligible given the low quality of the existing habitat that will be lost. However, some ecological enhancement is recommended, including the erection bird boxes and bat boxes to enhance the breeding resources for these taxa. Furthermore, where possible any felled timber should be used to create log piles in quiet locations.
- 6.1.11. Retained trees and shrubs should be protected during construction by implementing a tree and hedge protection plan in accordance with legislation and British Standard guidelines: BS5837:2018 Trees in relation to design, demolition and construction – recommendations
- 6.1.12. No significant long term adverse impacts on local statutory or non-statutory sites of importance for nature conservation are anticipated.
- 6.1.13. Providing the recommendations for species protection, mitigation for habitat loss or damage and biodiversity gains are implemented, it is our view that this planning proposal should not be constrained on ecological grounds.



7. References

Bat Conservation Trust, 2016, Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Ed, pp96, Bat Conservation Trust

Congreve, A. (2002), How to survey a hedge according to the 1997 Regulations, (<http://www.naturenet.net/trees/survey.html>) accessed 27.07.22

JNCC, (1993), Handbook for phase 1 habitat survey – a technique for environmental audit, Joint Nature Conservancy Council, Peterborough, UK

Natural England, Magic Map, <http://www.natureonthemap.naturalengland.org.uk/> accessed 27.07.22

National biodiversity Network data base <https://data.nbn.org.uk/> accessed 27.07.22

Regini, K. (2000), Guidelines for ecological evaluation and impact assessment. In Practice: Bulletin of the Institute of Ecology and Environmental Management, 29, 1-7

Stace, C. (1997), New Flora of the British Isles. 2nd Ed., Cambridge University Press.

Tofts, J.J. & Clements, D.K. (1994), The development and testing of HEGS, a methodology for the evaluation and grading of hedgerows, Waterman CPM Ltd.



Appendices

Appendix 1 Photographs of the site



Photo 1. View north of front elevation of bungalow. Most windows on these sides are uPVC framed. Tarmac drive and slabs next to house. Conifer and small shrub bed in front of house



Photo 2. View south of north elevation. Brick and tile construction with metal window frames on this and the rear parts of the house. Note dry lawn around house.



Photo 3. View north of rear single storey extension. Metal window frames. Flat roof in good condition and no gaps for bat or bird access.



Photo 4. South elevation with uPVC windows. No visible cracks or holes to be exploited by birds or bats.



Photo 5. View NW across side lawn. Not greenhouse/ shed [rear], and Leyland cypress [right].



Photo 6. Fruit trees in front garden. Introduced shrub bushes in front garden – lavender [front]; Note larger hazel tree on boundary in SW corner [arrow]; southern hedge with hazel, field maple and hawthorn.



Photo 7. Fruit trees in back garden. Well maintained with lopping, so no obvious loose bark or holes.



Photo 8. Fruit trees, and rowan in front garden. Elm hedge by road behind.



Photo 9. Shrubs and trees along western boundary; laurel, cherry, sycamore and hornbeam. Note Norway spruce [arrow]



Photo 10. Fruit trees in back garden, note border with roses next to Leyland cypress hedge [arrow]



Photo 11. Amenity grassland with semi-mature cherry tree next to road on southern boundary of site.



Appendix 2 Species list

Location: Jesmond, Pulpit Lane, Oving OS map ref: SP 78730 21746 Date: 20.07.22

Scientific name	Common name
<i>Lolium perenne</i>	Perennial ryegrass
<i>Senecio vulgaris</i>	Groundsel
<i>Urtica dioica</i>	Nettle
<i>Lapsana communis</i>	Nipplewort
<i>Holcus lanatus</i>	Yorkshire fog
<i>Trifolium repens</i>	White clover
<i>Hedera helix</i>	Ivy
<i>Taraxacum officinale</i>	Dandelion
<i>Festuca rubra</i>	Red fescue
<i>Trifolium repens</i>	White clover
<i>Senecio jacobaea</i>	Ragwort
<i>Geum urbanum</i>	Wood avens
<i>Digitalis purpurea</i>	Foxglove
<i>Fragaria x ananassa</i>	Strawberry
<i>Cirsium arvensis</i>	Creeping thistle
<i>Bromus ramosus</i>	Hairy brome
<i>Valeriana officinalis</i>	Valerian
<i>Hordeum muralis</i>	Wall barley
<i>Trifolium pratense</i>	Red clover
<i>Ranunculus repens</i>	Creeping buttercup
<i>Agrostis stolonifera</i>	Creeping bent
<i>Cirsium vulgare</i>	Spear thistle
<i>Medicago lupulina</i>	Black medic
<i>Tanacetum parthenium</i>	Feverfew
<i>Arrhenatherum elatius</i>	False oatgrass
<i>Epilobium montanum</i>	Broadleaved willowherb
<i>Ilex europaeus</i>	Holly
<i>Cotoneaster</i> sp	Cotoneaster
<i>Lavandula</i> sp	Lavender
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Ulmus procera</i>	Elm
<i>Buddleia</i> sp	Butterfly bush
<i>Prunus</i> sp	Flowering cherry
<i>Cupressus leylandii</i>	Leyland cypress
<i>Chamaecyparis lawsoniana</i> Ellwoodii	Lawson's cypress
<i>Acer pseudoplatanus</i>	Sycamore
<i>Malus domestica</i>	Domestic apple
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Picea norvegicus</i>	Norway spruce
<i>Prunus domestica</i>	Plum
<i>Pyrus communis</i>	Pear
<i>Sorbus aucuparia</i>	Rowan



Syringa spp	Lilac
Corylus avellana	Hazel
Acer pseudoplatanus	Sycamore
Acer campestre	Field maple
Prunus spinosa	Blackthorn
Crataegus monogyna	Hawthorn
Carpinus betulus	Hornbeam
Birds	
Wood pigeon	Observed
Swifts	Observed