Preliminary Ecological Appraisal

Land Adjacent to Backbridge Farm

Persimmon Homes

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NON-TECHNICAL SUMMARY

Purpose

The aim of this survey was to provide a description of the existing habitat types, to determine the existence and location of any ecologically valuable areas and to identify the presence or potential presence of any protected species.

Methodology

A Phase 1 habitat survey and associated desk study was carried out to current best practice guidelines.

Key Issues

There are no significant impacts on ecologically receptors either on the site or within the zone of influence of the site.

A breeding bird check for active nests will be required only if suitable vegetation is to be cut back or removed between March and August.

Hand demolition of the stone wall, and habitat manipulation of the grassland will be required in order to safeguard reptiles during the development.

A pre-works check for badgers and hedgehogs will be required before development works can begin.

Conclusions

The desk study and survey work have identified the Site as being of predominantly low ecological value. The hedgerow and trees, scrub and stone wall on Site are of moderate ecological value to breeding birds, reptiles, badgers, hedgehogs and/or bats.

Recommendations have been made to ensure that the development does not affect any protected species during either the construction or the operational phase, and further survey work has been recommended under certain circumstances to ensure that no effects on protected species occur.

1 INTRODUCTION

1.1 Background

1.1.1 IES Consulting were instructed by Persimmon Homes to undertake a Preliminary Ecological Appraisal at Land Adjacent to Backbridge Farm, Malmesbury, Wiltshire and centred on Grid Reference ST928880. A site location plan can be seen in **Figure 1**.

1.1.2 The aim of this survey was to provide a description of the existing habitat types, to determine the existence and location of any ecologically valuable areas and to identify the presence or potential presence of any protected species.

1.1.3 The purpose of this report is to:

- Identify key ecological constraints;
- Inform masterplanning to allow significant ecological effects to be avoided/minimised wherever possible;
- Identify further ecological survey work which will be required;
- Develop ecological mitigation/compensation measures; and
- Form a basis for agreeing the scope of the ecological impact assessment.

1.1.4 This report was authored by Meike Simms BSc (Hons) who has 1 years' experience of ecological surveying, including preliminary ecological appraisals, and Tilly Tilbrook, (MSc CEcol MCIEEM) who has over 20 years' experience of ecological surveying.

1.1.5 IES Consulting previously surveyed the adjacent site, Backbridge Farm, between 2014 and 2016. This was in support of a planning application to build residential properties at Backbridge Farm.

1.1.6 This report should be read in conjunction with the following reports:

- Reptile Survey Report – Backbridge Farm – IES Consulting – 2017
- Grassland NCV Survey Report – Backbridge Farm – IES Consulting – 2017
- Water Vole Survey Report - Backbridge Farm – IES Consulting – 2017
- Bat Emergence Survey & Bat Activity Transect Survey Report – IES Consulting – 2017
- Great Crested Newt Survey Report - Backbridge Farm – IES Consulting – 2017
- Extended Phase 1 Habitat Survey Report - Backbridge Farm – IES Consulting – 2017
- Ecological Management Plan – Backbridge Farm – IES Consulting - 2021

1.1.7 Below is a summary of the results from the previous surveys.

Table 1: Surveys at Backbridge Farm 2014-2016

Survey Type	Year	Results
Reptile	2014	Supports low population of slow worm.
Grassland NVC	2014	Predominantly limited ecological value habitats. Small areas of BAP grasslands were found.
Bats	2014	No bats found roosting on site. Common species found to use the site occasionally for foraging or commuting purposes.
Great crested newt	2016	Previous surveys and translocations completed north to site. No ponds on site.
Extended Phase 1 Habitat	2016	Site is of high ecological value. Site suitable to support reptiles, water vole, otter, white-clawed crayfish, bats, badger, bullhead & great crested newt.

1.1.8 The development at Backbridge Farm was able to go ahead under the Ecological Management Plan outlined by IES Consulting in 2021. This included maintaining and enhancing the site for reptiles, amphibians, water voles, bats, grasslands, birds and other mammals.

1.2 Site Description

1.2.1 The Land Adjacent to Backbridge Farm is currently a rectangular section of a field. The Site has a hedgerow with scattered trees on the western border, a stone wall on the northern border, and a metal fence on the eastern border. Directly north of the Site is a small patch of trees and Malmesbury Tennis Club. Directly east is a primary school and playing field. Directly south is the continued field and directly west is a housing development in the early stages of development (Backbridge Farm). The northern, eastern and southern surroundings are urban and encompass Malmesbury town. The western surroundings are countryside. The landscape around Malmesbury town is predominantly countryside.

1.3 Development Proposals

1.3.1 It is proposed to develop the site into approximately 26 residential properties. The stone wall parts of the hedgerow will be removed.

2 PLANNING POLICY, LEGISLATION AND GUIDANCE

2.1 Planning Policy

2.1.1 A review of planning policy was undertaken to inform this report, and this is summarised below. Full details of the planning policy relevant to the site can be found in **Appendix A**.

National Policy

- National Planning Policy Framework (July 2012) – this document is a material consideration in planning decisions, and states that planning policies and decisions should provide net gains for biodiversity.

Local Policy

- The Wiltshire Core Strategy – Policy 50 outlines how development proposals must demonstrate how they protect features of nature conservation value.
- Bats Special Areas of Conservation (SAC) Planning Guidance for Wiltshire – This document lays out the expectations with respect to bats relating to the SACs for this group in Wiltshire.

2.2 Legislation

2.2.1 The following legislation has been taken into account when preparing this report, and full details are given in **Appendix A**.

- **The Environment Act 2021** – this provides clear statutory targets for recovery in four priority areas: air quality; biodiversity; water and waste. It includes a target to reverse the decline in species abundance by 2030, and provides a legal framework for mandatory 10% biodiversity net gain on development sites, which will come into force in 2023.
- **The Conservation of Habitats and Species Regulations 2017** – this provides protection for European Protected Species and European Protected Sites.
- **The Town and Country Planning (Environmental Impact Assessment) Regulations 2017** – this provides a framework to identify developments which must carry out an Environmental Impact Assessment (EIA).
- **The Natural Environment and Rural Communities Act 2006** – this extendS the duties of public bodies in relation to biodiversity. It establishes the Section 41 species and

habitats of principal importance for the purpose of conserving biodiversity, which need to be taken into account by a public body when performing any of its functions.

- **The Countryside and Rights of Way Act 2000** – this act places a duty on Government departments and the National Assembly for Wales to have regard for the conservation of biodiversity, and to maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity. It strengthens the legal protection for species named on the Wildlife and Countryside Act 1981 and creates a new offence of reckless disturbance.
- **The Hedgerow Regulations 1997** – this provides protection for hedgerows classified as 'important' under the regulations.
- **The Protection of Badgers Act 1992** – this provides legal protection to badgers and their setts, making it an offence to kill, injure or take a badger, or to damage or interfere with a sett unless you have a licence.
- **The Wildlife and Countryside Act 1981** – this act provides legal protection for wild birds, Sites of Special Scientific Interest, plants, reptiles and other amphibians and other animals, and makes it a criminal offence to kill, injure or take those species listed in the act, and to damage, obstruct or destroy their resting places, or disturb them in their resting places.

2.3 Guidance

2.3.1 This report has been prepared in accordance with the following guidelines:

- CIEEM Guidelines for Preliminary Ecological Appraisal, 2nd Edition.
- CIEEM Guidelines on Ecological Report Writing.
- Biodiversity Net Gain – Good Practice Principles for Development.
- Biodiversity Net Gain – Good Practice Principles for Development Part A: A practical guide & Part B: Case Studies.
- BS42020:2013 Biodiversity – Code of Practice for Planning and Development.

3 METHODOLOGY

3.1 Overview

3.1.1 The study has been carried out as an extended Phase 1 habitat survey following the methods laid out by Joint Nature Conservation Committee (JNCC, 1993 updated in 2007, reprint 2010). The study comprised two phases: a desk study consultation exercise and a walkover field survey. By combining the two phases it is possible to identify and evaluate the ecological value of the Site in order to determine the potential impacts of the proposals. **Appendix B** gives any notes and limitations to the survey work.

3.2 Desk Study

3.2.1 The purpose of the desk study is to review information available in the public domain. Information about designated sites, important habitats and protected and otherwise important species was obtained for the Site and an area within a 2km radius of the site. The survey radius was increased to 5km for Special Protection Areas (SPAs) and Special Areas of Conservation (SACs).

3.2.2 Data was obtained from the following sources on 12th and 14th April 2022:

- MAGIC
- Wiltshire and Swindon Biological Records Centre (WSBRC)

3.2.3 The following previous reports were also reviewed:

- Reptile Survey Report – Backbridge Farm – IES Consulting – 2017
- Grassland NCV Survey Report – Backbridge Farm – IES Consulting – 2017
- Water Vole Survey Report - Backbridge Farm – IES Consulting – 2017
- Bat Emergence Survey & Bat Activity Transect Survey Report – IES Consulting – 2017
- Great Crested Newt Survey Report - Backbridge Farm – IES Consulting – 2017
- Extended Phase 1 Habitat Survey Report - Backbridge Farm – IES Consulting – 2017
- Ecological Management Plan – Backbridge Farm – IES Consulting - 2021

3.3 Field Survey

3.3.1 The walkover field survey of the entire Site within the redline boundary was conducted on 11th April 2022. The dominant plant species were recorded, and habitats classified according to their vegetation types and presented in the standard Phase 1 habitat survey format (JNCC 2010). Target notes (TN) were made on species and habitats of conservation interest. Where access permitted, an area 30m outwith the site boundary was surveyed for signs of badger. The extent of the survey area can be seen on **Figure 2**.

3.3.2 The field survey requirements for an assessment under the Hedgerow Regulations 1997 were carried out. This included:

- Length of the hedgerow;
- Number, length and location of gaps in the hedgerow;
- Species present (including Schedule 1 birds, Schedule 5 animals and Schedule 8 plants under the Wildlife and Countryside Act 1981, red data book birds, plants, insects and other invertebrates)
- Woody species present, and the location;
- Any associated features including banks, walls, gaps, standard trees, ground flora species and ditches;
- Any obvious archaeological features or potential archaeological features.

3.3.3 The field survey was carried out by Meike Simms BSc (Hons) who has 1 years' experience of ecological surveying, including preliminary ecological appraisals.

3.3.4 The survey was carried out in dry weather conditions, a temperature of 11°C and 75% cloud cover.

3.3.5 The ecological value of existing habitats has been determined using the four-point evaluation scale below, whereby habitats are assessed for their importance. This is an arbitrary scale, which is effective at this level of assessment. Recommendations for more detailed survey and evaluation are made for features that are identified as significant:

- High ecological importance;
- Moderate ecological importance;
- Low ecological importance; and
- Not ecologically important/negligible ecological importance.

3.3.6 Evidence of any species protected by law was recorded where it was found during the field surveys. Because of the habitats present on site and the site location, special attention was paid to the potential suitability for the following species:

Bat

3.3.7 Evidence of bat (*Chiroptera*) activity and the potential for any structures such as buildings and trees to support a bat roost was searched for during the walkover survey. Any suitable roosting, foraging and commuting habitat were also recorded during the survey.

- Evidence of bat activity is usually detected by the following signs:

- bat droppings (these will accumulate under an established roost);
- insect wings (from feeding);
- oil (from fur) and urine stains;
- scratch marks;
- holes, apertures and other opportunities for bats to roost; and
- actual sightings (including corpses).

Birds

3.3.8 Bird species seen or heard during the survey were recorded and their activity noted. This does not constitute a full breeding bird survey although the results are indicative of the birds which could be expected to breed in the habitats present. Any habitats suitable for nesting birds were recorded during the survey.

3.3.9 Particular attention was paid to looking for signs of owls, particularly barn owl (*Tyto alba*). This includes nests, piles of droppings and pellets.

Badger

3.3.10 Evidence of badger (*Meles meles*) activity is usually detected by the following signs:

- presence of holes with evidence of badgers such as footprints, discarded hair, etc;
- presence of dung pits or latrines;
- presence of well used runs with subsidiary evidence of badger activity; and
- presence of other indications of badger activity, such as signs of foraging and footprints.

Reptiles

3.3.11 All reptiles are ectothermic (cold-blooded) and although activity is dependent upon weather and temperature, they are usually active between April and September inclusive. The presence of breeding and wintering habitat suitable for reptiles was recorded during the survey. A search of any suitable refugia within the study area, including logs, rocks and other discarded debris, was undertaken during the survey to search for the presence of reptiles. Any species recorded through direct observation were also noted.

Amphibians

3.3.12 Habitat on site was assessed for its suitability to support amphibians, and where appropriate, a Habitat Suitability Index assessment for great crested newts (*Triturus cristatus*) was carried out on waterbodies. Additionally, natural and artificial refugia were inspected for amphibians where possible.

Dormouse

3.3.13 Field signs of dormouse (*Muscardinus avellanarius*) including chewed nuts, nests, and suitable habitat to support this species were noted during the survey, though this does not constitute a full dormouse survey.

Invertebrates

3.3.14 Habitat suitable to support notable invertebrates was recorded. This included habitat suitable to support stag beetle (*Lucanus cervus*).

Other

3.3.15 Suitable foraging and hibernating habitat for west European hedgehog (*Erinaceus europaeus*) was noted during the field survey.

3.3.16 Presence of any other more common species on the site e.g. foxes, deer, rabbits and amphibian species were recorded where found.

Invasive weeds

3.3.17 The presence of invasive weeds such as Japanese knotweed (*Fallopia japonica*) or giant hogweed (*Heracleum mantegazzianum*) were searched for during the survey and marked on the figures were present.

3.4 Limitations and Deviation from Guidance

Hedgerow Regulations 1997 Assessment

3.4.1 Part of the requirements for establishing importance under the Hedgerow Regulations 1997 relate to historic features. It should be noted that the surveyors are not archaeologists and do not have archaeological qualifications. Every effort has been made to establish the presence of important historic features, but no reliance should be placed on this assessment, and the advice of a qualified archaeologist should be sought.

4 BASELINE ECOLOGICAL CONDITIONS

4.1 Desk Study

4.1.1 The data available on the meta-databases varies, and should not be considered to be an exhaustive list of species. The absence of data is not evidence of the absence of a particular species or habitat. The WSBRC was contacted on 8th April 2022. MAGIC was accessed on 12th April 2022.

Designated Sites

4.1.2 The locations of designated sites can be seen in **Appendix C**.

International/National

4.1.3 No Special Protection Areas (SPAs), and no Special Areas of Conservation (SAC) are located within 5km of the site. No Sites of Special Scientific Interest (SSSI) and no National Nature Reserves (NNRs) are located within 2km of the Site.

Local

4.1.4 There are 3 Local Wildlife Sites (LWRs) and 1 Local Nature Reserve (LNR) within 2km of the site. See **Table 2** below.

Table 2: Summary of Locally Designated Sites within 2km

Site Name	Designation	Distance and Direction from Site
Bristol Avon River	LWS	0.3km, South
Hyam Farm Meadows	LWS	2km, West
Conygre Mead	LWS	1.5km, South-east
Conygre Mead	LNR	1.5km, South-east

Protected or Otherwise Important Species

4.1.5 This desk study did include a data search from WSBRC. See **Table 3** below.

Table 3: Summary of Protected or Otherwise Important Species.

Common Name	Latin Name	European Legal Protection	UK Legal Protection	Section 41
Greater horseshoe bat	*Rhinolophus ferrumequinum*	Y	Y	Y
Lesser horseshoe bat	*Rhinolophus hipposideros*	Y	Y	Y
Barbastelle bat	*Barbastella barbastellus*	Y	Y	Y
Serotine bat	*Eptesicus serotinus*	Y	Y	N

Common Name	Latin Name	European Legal Protection	UK Legal Protection	Section 41
Natterer's bat	*Myotis nattereri*	Y	Y	N
Noctule bat	*Nyctalus noctula*	Y	Y	Y
Common pipistrelle bat	*Pipistrellus pipistrellus*	Y	Y	N
Nathusius's pipistrelle bat	*Pipistrellus nathusii*	Y	Y	N
Soprano pipistrelle bat	*Pipistrellus pygmaeus*	Y	Y	Y
Brown long-eared bat	*Plecotus auritus*	Y	Y	Y
European hedgehog	*Erinaceus europaeus*	N	Y	Y
Brown hare	*Lepus europaeus*	N	Y	Y
Slow-worm	*Anguis fragilis*	N	Y	Y
Common toad	*Bufo bufo*	N	Y	Y
Hawfinch	*Coccothraustes coccothraustes*	N	Y	Y

4.2 Field Survey

4.2.1 This section should be read in conjunction with **Figure 2**, which shows the extent of the survey area and the results of the field survey.

Habitats

Semi-improved Neutral Grassland

4.2.2 The majority of the site is semi-improved, neutral grassland managed as an agricultural pasture (Plate 1). The grassland is predominantly perennial rye grass (*Lolium perenne*), and Yorkshire fog (*Holcus lanatus*), which had been allowed to develop into a longer sward at the time of the survey, but which is clearly regularly managed by either grazing or cutting for hay/silage due to the lack of thatch under the sward. The field margins show a greater diversity, mostly associated with the hedgerow and stone wall, which includes stinging nettle (*Urtica dioica*), bramble (*Rubus fruticosus*), creeping buttercup (*Ranunculus repens*), bulbous buttercup (*Ranunculus bulbosus*), meadow buttercup (*Ranunculus acris*), cow parsley (*Anthriscus sylvestris*), lords and ladies (*Arum maculatum*), sticky weed (*Galium aparine*), ribwort plantain (*Plantago lanceolata*), spear thistle (*Cirsium vulgare*), ground ivy (*Glechoma hederacea*), red deadnettle (*Lamium purpureum*), white deadnettle (*Lamium album*), bird's-foot trefoil (*Lotus corniculatus*) and white clover (*Trifolium repens*).

4.2.3 This habitat has some limited potential to support invertebrates, small mammals and reptiles due to the floral diversity and lack of intensive management. However, semi-improved grassland is widespread in the local area and is easily recreated, and this along with the urban location and the lack of records from the adjacent site make this habitat of low ecological value.

Species-poor Hedgerow with Scattered Trees

4.2.4 There is a species-poor hedgerow with scattered trees on the western boundary of the Site (Plate 1) and is approx. 120m in length. At the time of the site visit the hedgerow was circa 2m tall and it covered a dry ditch. The hedgerow is predominantly blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), bramble (*Rubus fruiticosus*), and ivy (*Hedera helix*), with occasional elder (*Sambucus nigra*). The scattered tree species included hawthorn (*Crataegus monogyna*) and apple (*Malus sp.*) with an abundance of mistletoe (*Viscum album*) and/or ivy (*Hedera helix*) growing on them (Plate 6).

4.2.5 This habitat is of moderate ecological value. It provides shelter and foraging opportunities for birds, bats and small mammals but has little floral diversity. Hedgerows with scattered trees are widespread in the local area but take some time to recreate.

Wall

4.2.6 There is a stone wall on the northern border (Plate 2), which supports some plant species such as stinging nettle (*Urtica dioica*), bramble (*Rubus fruticosus*) and ivy (*Hedera helix*). The stone wall separates the Site from a small area of trees and scrub leading onto the tennis club to the north. There is a section of the wall that has fallen down (Plate 3) and is now a stone pile with vegetation growing through it (TN 1). Reptiles and hedgehogs can use the stone wall as a refuge and movement corridor, especially in conjunction with the grassland and hedgerow. However, the sites proximity to an urban area and development site makes it of moderate ecological value.

Scattered Scrub

4.2.7 There are small patches of scrub growing near or through the fence on the eastern border (Plate 4); including hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), elder (*Sambucus nigra*) and bramble (*Rubus fruticosus*). These have moderate ecological value to birds for nesting and foraging purposes and bats for foraging purposes.

Fence

4.2.8 There is a metal fence on the eastern border. This has no ecological value.



Plate 1: Grassland & hedgerow with scattered trees



Plate 2: Stone wall on northern boundary



Plate 3: Fallen section of stone wall (TN 1)



Plate 4: Scattered scrub on eastern boundary



Plate 5: Small mammal run on eastern boundary (TN 2)



Plate 6: Tree covered in ivy in hedgerow

Species and Species Groups

Plants

4.2.9 No protected or otherwise important plant species were noted during the survey. The hedgerow and scattered trees have moderate ecological value and are difficult to replace.

Invertebrates

4.2.10 The majority of the site provides little habitat for invertebrates due to the lack of floral diversity. The hedgerow and trees, scrub and grassland margins provide the most useful habitats for this group.

Amphibians

4.2.11 The site contains suitable terrestrial habitat for great crested newts, and this species is known to be present in ponds on the Dyson Headquarters site and on the adjacent Backbridge Farm. However, there are no ponds within 250m of the site which are known to support great crested newts, and during the trap and translocate exercise on the Dyson site, great crested newts were only found very close to the ponds or in association with the hedgerows. In addition, a District Level Licence is in place on the adjacent Backbridge Farm site to allow the development to proceed lawfully. Therefore it is considered highly unlikely that the site supports great crested newts since it is sufficiently isolated from any suitable aquatic habitat.

Reptiles

4.2.12 The semi-improved grassland is suitable to support reptile species for foraging and commuting purposes. The grassland is similar to the habitats found on Backbridge Farm, which were shown to support a small population of slow worm (*Anguis fragilis*) in 2014. Due to the Site's proximity to Backbridge Farm, it is likely that the same is true for this grassland.

4.2.13 There is a stone wall on the northern border with a fallen section (TN 1) that is now a pile of stone (Plate 3). This has moderate potential to be a refuge and movement corridor for reptiles due to its proximity to a grassland and hedgerow and trees, as well as the likelihood of slow worms being on Site.

Birds

4.2.14 A chiffchaff (*Phylloscopus collybita*) was heard, and a pheasant (*Phasianus colchicus*) seen on Site. The majority of the site does not provide habitat suitable for birds, however, the hedgerow, trees and scrub provides moderate shelter and foraging opportunities for this group.

Bats

4.2.15 The majority of the Site is low suitability foraging habitat for this group due to the urban surroundings. The hedgerow, trees and scrub provides some limited commuting and foraging habitat for bats. Ten different bat species were recorded within a 1km radius in the last 10 years, and several bat species were recorded on Backbridge Farm during

transect surveys in 2015. However, the number of bats using Backbridge Farm was low, indicating that bats are unlikely to use the Site for regular foraging, commuting or roosting purposes.

4.2.16 The scattered trees were assessed from the ground for bat roost potential and no evidence of bats was found. The scattered trees in the hedgerow were categorised as low potential to support a bat roost, due to the lack of potential roosting features and the likelihood of bats using the area for roosting purposes.

Badgers

4.2.17 No evidence of badgers (*Meles meles*) was found during the survey; however, the Site is suitable foraging habitat for badgers and small mammal runs (Plate 5) were found on Site (TN 2) which can be used by badgers.

Dormouse

4.2.18 No evidence of dormice (*Muscardinus avellanarius*) was found on Site and this species is not considered further.

European Hedgehogs

4.2.19 The site is suitable habitat for European hedgehog (*Erinaceus europaeus*) and is of moderate ecological value for this species. The grassland, hedgerow and trees and stone wall (TN 3) provide shelter and foraging opportunities for hedgehogs.

Other Mammals

4.2.20 Deer tracks, fox scat, rabbit fur and rabbit scat were found on Site, predominantly on small mammal runs (TN 2), indicating these groups also regularly use the site for foraging and commuting purposes.

5 ECOLOGICAL CONSTRAINTS AND OPPORTUNITIES

5.1 Key Constraints

Designated Sites

5.1.1 The proposed development is not considered likely to have any impact on the Local Wildlife Site Hyam Farm Meadows because it is on privately owned land with no public access and is sufficiently isolated from the development site that the proposed works will not affect it or the species it supports. Therefore, it is not considered further in this report.

5.1.2 The River Avon and Congyre Mead LNR may experience an increase in visitor pressure due to the development. Certainly, the River Avon where it passes south of the Site will experience an increase in disturbance by humans, dogs and likely cats from the development once it is operational.

Habitats

5.1.3 The habitats found on Site are similar to those found on Backbridge Farm during the surveys in 2014-2015. The development at Backbridge Farm has been designed to maintain and enhance its habitats for reptiles, amphibians, water voles, bats, grasslands, birds and other mammals. It will therefore have a positive impact on protected species in or around the Site. For more details see *Ecological Management Plan - Backbridge Farm - IES Consulting - 2020.*

5.1.4 The majority of the Site is semi-improved grassland. The loss of part of this habitat is not considered to be a significant ecological impact and is not considered to be a constraint on the works.

5.1.5 The hedgerow and trees and scrub on Site are of moderate ecological value, so it is recommended to retain these habitats so there will be no impact on protected species using these areas. If there is a requirement to remove them, this should be done in accordance with recommendations in section 5.3.

5.1.6 The trees which were noted as having low bat roosting potential do not require further survey work as per *The BCT Bat Survey Guidelines, page 51, Table 7.1.*

5.1.7 The grassland is suitable to support reptiles, but a reptile survey is not deemed necessary to determine the impact of the development on reptiles. This is due to the reptile surveys at Backbridge Farm in 2014 showing a small population of slow worms lived within the vicinity of the Site. In the previous survey, there was a maximum count of 2 adult slow worms across the whole of the adjacent site, and the land immediately adjacent to this plot was included in the survey. Since no land management has changed on the site, it seems reasonable to assume that if reptiles are present, they are in very low numbers and their protection during development can be managed via habitat manipulation.

Species

5.1.8 The overall impact of the proposals on species will be low. The Site is suitable to support reptiles, breeding birds, bats, badgers, European hedgehogs, and other mammals. Recommendations have been made to avoid harm to these groups in section 5.3.

5.1.9 The site is not considered likely to support great crested newts.

5.2 Ecological Impact Assessment

5.2.1 The proposals will result in the permanent loss of approximately 0.8ha of semi-improved grassland. This is a permanent, irreversible impact, however it is not considered to be a significant ecological impact within the Zone of Influence of the development. Therefore, as per the *CIEEM Guidelines for Ecological Impact Assessment*, it is scoped out of the EcIA and not considered further.

5.2.2 The development will result in the loss of a small amount of habitat suitable for reptiles and hedgehogs in the form of the stone wall. This is a permanent, irreversible impact, however it is not considered to be significant due to the small scale of the habitat within the context of the surrounding countryside. In addition, neighbouring Backbridge Farm was surveyed in 2014 and only a small population of slow worm was discovered, so it is highly unlikely an important population for conservation is located on Site.

5.2.3 During the construction phase of the development, there will be an impact of noise pollution on the Site and its surrounding habitats. This is a temporary impact that will affect the behaviour of the local population of birds, reptiles and small mammals; however it is not considered to be significant due to the small scale of the habitat within the context of the surrounding countryside.

5.2.4 The loss of the hedgerow habitat for foraging or roosting is not considered to be a significant impact on the bats due to the relatively small numbers of common bat species using Backbridge Farm. Additionally, the Site is small, and does not represent optimal foraging habitat for bats. Of greater concern is the potential loss of commuting habitat for bat species, since this site provides access to the wider countryside.

5.2.5 Unmitigated there is the potential to lose habitat due to the impacts of lighting which is known to adversely affect light sensitive species including horseshoe bats. It is lighting that perhaps presents the greatest risk to bat populations in the area as lighting impacts can at worst extend beyond the development area.

5.2.6 There is a possibility of a small increase in visitor numbers to those protected sites which are open to the public. However, these sites are all managed with public access in mind, and indeed seek to increase visitor numbers through outreach work, so it is considered that a development of this size will not lead to any significant impacts on publicly accessible designated sites.

5.2.7 Where the River Avon and Congyre Mead LNR passes south of the Site, there will be an increase in disturbance by humans, dogs and likely cats from the development once it is operational.

5.2.8 The habitats found on Site are the same/similar to those found on Backbridge Farm during the surveys in 2014-2015. The development at Backbridge Farm has been designed

to maintain and enhance its habitats for reptiles, amphibians, water voles, bats, grasslands, birds and other mammals. This includes maintaining and enhancing the grassland that extends south of the Site and onto the River Avon for protected species. The development at neighbouring Backbridge Farm will therefore have a positive impact on protected species in the vicinity of the Site. For more details see *Ecological Management Plan - Backbridge Farm – IES Consulting – 2020.*

5.3 Other Mitigation Requirements

Habitats

5.3.1 The hedgerow on the boundary should be protected using a 2m root protection zone.

5.3.2 Where possible, the hedgerow and trees and scrub should be retained. If there is a requirement to remove them, this should be done in accordance with the recommendations for breeding birds in section 5.3.6.

Species

Reptiles

5.3.3 If the stone wall is to be removed, this should be dismantled by hand under the supervision of a suitably qualified ecologist, and any reptiles allowed to move to safety. This must take place when reptiles are active, so between March and October when temperatures are consistently above 9°C during the day.

5.3.4 Habitat management should occur to encourage reptiles to move to the boundaries of the site. Initially a cut of the grassland to 10cm should occur, the arisings removed and the site left for at least 24 hours. Then the site should be cut to ground level. This should be undertaken in the active season for reptiles.

Breeding Birds

5.3.5 It is recommended that no vegetation suitable to support nests should be removed during the breeding bird season, generally considered to be March to August inclusive. If this is not possible then vegetation should be checked immediately prior to removal by a suitably qualified ecologist. Any active nests identified must be retained with a minimum 5m buffer zone until such time as the nest is deemed, by a suitably qualified ecologist, to be no longer supporting young.

Bats

5.3.6 Any lighting should be low level, motion sensitive, on timers of a minute or less and should be positioned and directed such that there is no light spill on the hedgerows and trees and scrub.

Badgers

5.3.7 It is recommended that a suitably qualified ecologist does a pre-works badger check. The ecologist must confirm the Site is clear of badgers or badger setts before development works can begin. If a badger sett is found on Site, the badgers will need to

be excluded from the sett using suitable mitigation requirements before development works can begin.

European Hedgehogs

5.3.8 It is recommended to cut grassland habitat back gradually in suitable weather conditions. Check for active nests in the grassland, hedgerow and trees and stone wall before undertaking works. If hedgehogs are found, then a boundary of 2m must be established round the nest.

5.3.9 It is recommended to use hedgehog-friendly gravel boards in any close-board fencing.

5.4 Further Surveys Required

5.4.1 If suitable nesting bird vegetation is to be removed between March and August, it should be checked immediately prior to removal by a suitably qualified ecologist. Any active nests identified must be retained with a minimum 5m buffer zone until such time as the nest is deemed, by a suitably qualified ecologist, to be no longer supporting young.

5.4.2 If the stone wall is to be removed, this should be dismantled by hand under the supervision of a suitably qualified ecologist, and any reptiles allowed to move to safety. This must take place when reptiles are active, so between March and October when temperatures are consistently above 9°C during the day.

5.4.3 It is recommended that a suitably qualified ecologist does a pre-works badger check. The ecologist must confirm the site is clear of badgers or badger setts before development works can begin.

5.4.4 It is recommended a suitably qualified ecologist check for active hedgehog nests in the hedgerow and trees, grassland and stone wall (TN 1) before undertaking works. If hedgehogs are found, then a boundary of 2m must be established round the nest.

5.5 Opportunities for Enhancement

5.5.1 In order to fulfil the requirements of the National Planning Policy Framework, all developments must show biodiversity gain. The following recommendations aim to ensure that this policy requirement is met:

- Install built in bird boxes on the northern or eastern elevations of the new buildings.
- Install built in bat boxes on the southern or western elevations of the new buildings.
- A sensitive lighting scheme should be used on the site, to ensure dark corridors are retained at the perimeter of the development for bats.
- Improve the current hedgerow habitat by planting more native and diverse hedgerow species to fill in the gaps and alter the management regime so the hedgerow is cut on a 4 year cycle, with either side or the top cut in years 1-3 and no cut made in year 4.

- Plant a hedgerow on the northern, southern and eastern boundary to increase the current hedgerow habitat and support various species (invertebrates, reptiles, hedgehogs, bats etc.).
- Install a reptile refugia in the northeast corner of the site.
- If any closed-board fencing is to be installed, then hedgehog-friendly gravel boards should be used to allow free passage of hedgehogs through the site.

5.6 Summary

5.6.1 The further survey work and the mitigation measures required or potentially required are summarised in Tables 4 and 5 below. This should be read in conjunction with **Figure 3**, an ecological constraints and opportunities plan.

Table 4: Summary of Further Survey Work Required.

Survey	Description	Timing Constraints
Breeding Birds	*Check for active nests*	Only if suitable vegetation is to be cut back or removed between March and August.
Reptiles	*Check stone wall*	Only if suitable vegetation is to be cut back or removed between March and October.
Badgers	*Check for signs of badgers & badger setts*	Pre-works check. Any time of year.
Hedgehogs	*Check for hedgehog nests*	Pre-works check. Any time of year.

Table 5: Summary of Mitigation Measures Required.

Ecological Constraint	Proposed Mitigation
Hedgerow & scattered trees	*The hedgerow on the boundary should be protected using a root protection zone.* *The hedgerow & trees should be retained and protected using a root protection zone.*
Breeding birds	*Do not remove vegetation between March and August. Undertake a check for active nests if this is not possible.*

Reptiles	*Hand removal of stone wall between March and October when daytime temperatures are consistently above 9°C.* *Habitat manipulation of the grassland on site.*
Badgers	*Pre-works check. Any time of year.* *Badger sett exclusion if badger sett found on site.*
Hedgehog	*Cut grassland habitat back gradually in suitable weather conditions.* *Check for active nests in the grassland, hedgerow & trees and stone wall before undertaking works. If hedgehogs are found, then a boundary of 2m must be established round the nest.* *Use of hedgehog-friendly gravel boards in any close-board fencing.*

6 CONCLUSIONS

6.1.1 The desk study and survey work have identified the Site as being of predominantly low ecological value. The hedgerow and trees, scrub and stone wall on Site are of moderate ecological value to breeding birds, reptiles, badgers, hedgehogs and/or bats.

6.1.2 In addition, the Ecological Management Plan being carried out at neighbouring development, Backbridge Farm, will reduce the impact of the development on the Land Adjacent to Backbridge Farm. The development at Backbridge Farm has been designed to maintain and enhance its habitats for reptiles, amphibians, water voles, bats, grasslands, birds and other mammals. For more details see *Ecological Management Plan - Backbridge Farm – IES Consulting – 2020*.

6.1.3 Recommendations have been made to ensure that the development does not affect any protected species during either the construction or the operational phase, and further survey work has been recommended under certain circumstances to ensure that no effects on protected species occur.

6.1.4 The baseline conditions described in this report are true for the time at which the survey was undertaken. If no works are undertaken within the next two years, then an update survey may need to be undertaken to ensure the baseline conditions described are accurate.

IES Consulting Ltd 2022

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Legislation and Policy

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HMSO The Hedgerow Regulations 1997

HMSO The Natural Environment and Rural Communities Act 2006

HMSO The Protection of Badger Act 1992

HMSO The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

HMSO The Wildlife and Countryside Act 1981.

MHCLG (2019) National Planning Policy Framework

The Wiltshire Core Strategy

Bats Special Areas of Conservation (SAC) Planning Guidance for Wiltshire

FIGURE 1: SITE LOCATION



Figure 1: Site Location

Key:

Site Boundary

0 85 170 m

N

0

Integrated Ecological Solutions
23 Short Lane, Long Ashton,
Bristol, BS41 9EH
www.iesconsult.co.uk
0117 9113834
info@iesconsult.co.uk

Project	Land Adjacent to Backbridge Farm		
Client	Persimmon		
Date	Apr 22	Scale	1:5000
Drawn	MS	Job #	2022/018

FIGURE 2: FIELD SURVEY



Figure 1: Phase 1 Habitat Survey

Key:

Site Boundary

Habitats

A2.2 - Scrub - scattered

B2.2 - Neutral grassland - semi-improved

J4 - Bare ground

Boundaries

J2.3.2 - J2.3.2 - Hedge with trees - species-poor

J2.4 - J2.4 - Fence

J2.5 - J2.5 - Wall

Target Notes

Target Note

0 10 20 m

N

0

Integrated Ecological Solutions
23 Short Lane, Long Ashton,
Bristol, BS41 9EH
www.iesconsult.co.uk
0117 9113834
info@iesconsult.co.uk

Project	Land Adjacent To Backbridge Farm		
Client	Persimmon		
Date	Apr 22	Scale	1:1300
Drawn	MS	Job #	2022/018

APPENDIX A: POLICY AND LEGISLATION

POLICY

National Policy

National Planning Policy Framework (February 2019) – this document is a material consideration in planning decisions, and states that planning policies and decisions should provide net gains for biodiversity. The overarching environmental objective is to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy. Paragraph 170 d) states that planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Local Policy

The following policies are applicable to the site:

Core Policy 50

Biodiversity and Geodiversity

Protection

Development proposals must demonstrate how they protect features of nature conservation and geological value as part of the design rationale. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource, and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.

Biodiversity enhancement

All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the

Biodiversity Action Plan (BAP) or River Basin/Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Local sites

Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

i. cannot reasonably be avoided

ii. are reduced as far as possible

iii. are outweighed by other planning considerations in the public interest

iv. where appropriate compensation measures can be secured through planning obligations or agreements.

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term.

Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire

This document lays out the expectations with respect to bats relating to the SACs for this group in Wiltshire.

LEGISLATION

General

The Conservation of Habitats and Species Regulations 2017

This transposes the EU Habitats Directive into UK law, and provides protection for European Protected Species and European Protected Sites.

Species and groups which are covered under Schedule 2 (animals) and Schedule 5 (plants) of this legislation, and which are known as European Protected Species are:

- Bats (all species)
- Large blue butterfly
- Wild cat
- Dolphins, porpoises and whales (all species)
- Dormouse
- Pool frog
- Sand lizard
- Fisher's estuarine moth
- Great crested newt
- Common otter
- Lesser whirlpool ram's-horn snail
- Smooth snake
- Sturgeon
- Natterjack toad
- Marine turtles (green, hawksbill, Kemp's ridley, leatherback and loggerhead)
- Shore dock
- Killarney fern

- Early gentian
- Lady's slipper orchid
- Creeping marshwort
- Slender naiad
- Fen orchid
- Floating-leaved water plantain
- Yellow marsh saxifrage

You need a mitigation licence if your work will have impacts on European protected species that would otherwise be illegal, such as:

- capturing, killing, disturbing or injuring them (on purpose or by not taking enough care)
- damaging or destroying their breeding or resting places (even accidentally)
- obstructing access to their resting or sheltering places (on purpose or by not taking enough care)

Additionally, this legislation prevents public bodies from adopting plans or granting consents which could (possibly) damage Natura 2000 sites, which are either Special Protection Areas (SPAs) or Special Areas of Conservation (SACs), known as European Sites. In England this process also applies to Ramsar sites as a matter of policy. This means that there is a requirement for a Habitats Regulation Assessment (HRA), which has three stages:

- The Likely Significant Effect test (screening) – is the plan or project likely to have a significant effect on a European site alone or in combination with other plans/projects? If the answer is yes, you must move to Stage 2, Appropriate Assessment.
- Appropriate Assessment – can the competent authority be convinced there will be no adverse effect on the integrity of any site either alone or in combination with other plans/projects? If the answer is no, you must move to Stage 3, Derogation Tests.
- Derogation Tests – The plan/project must meet the three derogation tests in order to be allowed to proceed. 1. There are no feasible alternative solutions which are less damaging. 2. There are imperative reasons of overriding public interest (IROPI). 3. It is possible to put in place compensatory measures to ensure the overall coherence of the Natura 2000 network

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

This transposes the EU Environmental Impact Assessment Directive into UK law and provides a framework to identify developments which must carry out an Environmental Impact Assessment (EIA). These thresholds are contained in Schedule 2 of the act. If an EIA

is required, then an Environmental Statement will need to be produced, which will require a chapter on ecology, and a full Ecological Impact Assessment (EcIA).

The Natural Environment and Rural Communities Act 2006

This act established Natural England, and extended the duties of public bodies in relation to biodiversity by amending the CROW Act 2000 and the Wildlife and Countryside Act 1981. It established the Section 41 species and habitats of principal importance for the purpose of conserving biodiversity, which need to be taken into account by a public body when performing any of its functions. There are currently 56 habitats of principle importance and 943 species of principle importance, which are summarised below.

Category	Group	Number
Terrestrial/Freshwater/Coastal Species	Amphibians/Reptiles	10
	Birds	49
	Fish	14
	Mammals	17
	Invertebrates	379
	Lower plants and fungi	250
	Vascular plants	152
	Total	**865**
Terrestrial/Freshwater/Coastal Habitats	Arable and horticulture	2
	Boundary	1
	Coastal	6
	Freshwater	6
	Grassland	6
	Heathland	3
	Inland rock	4
	Wetland	6
	Woodland	6
	Total	**40**
Marine Species	Marine mammals	17

Category	Group	Number
	Marine reptiles	2
	Marine fish	34
	Marine invertebrates	19
	Marine algae	6
	Total	**78**
Marine Habitats	Marine habitats	16
	Total	**16**

The Countryside and Rights of Way Act 2000

This act places a duty on Government departments and the National Assembly for Wales to have regard for the conservation of biodiversity, and to maintain lists of species and habitats for which conservation steps should be taken or promoted (those these lists have been superseded by the S41 lists of the NERC Act 2006), in accordance with the Convention on Biological Diversity. It amends the SSSI provisions of the Wildlife and Countryside Act 1981 by providing increased power for their protection and management. It strengthens the legal protection for species named on the Wildlife and Countryside Act 1981, including changing the maximum penalty to a term of imprisonment rather than a fine, and creates a new offence of reckless disturbance. This means that if a person takes an unacceptable risk, or fails to notice an obvious risk, they will be liable.

The Hedgerow Regulations 1997

This provides protection for hedgerows classified as 'important' under the regulations. It requires an application in writing to the local planning authority before a hedgerow is removed, though there are exceptions for creating new access points, and for certain hedgerows such as those bordering dwelling houses. The local planning authority can then either issue a hedgerow retention notice, or written notice giving permission to remove it. If permission to remove is given, this must be enacted with two years of the date of the notice, or a new application will need to be made. There are specific criteria for length, location and 'importance' which must be met for a hedgerow to be protected. If the local planning authority does not respond within the statutory 42 days, then the hedgerow can be removed.

The Protection of Badgers Act 1992

This provides legal protection to badgers and their setts, making it an offence to kill, injure or take a badger, or to damage or interfere with a sett unless you have a licence. In practice, this means that any works within 30m of a badger sett may require a licence, depending on the type of works and methodology proposed.

The Wildlife and Countryside Act 1981

This act provides legal protection for wild birds, Sites of Special Scientific Interest, plants, reptiles and other amphibians and other animals, and makes it a criminal offence to kill, injure or take those species listed in the act, and to damage, obstruct or destroy their resting places, or disturb them in their resting places.

Under Schedule 5 of the Act, the following animals are protected (*damage/destruction of place of shelter/protection only):

Mammals

- Water vole
- All dolphins, porpoises and whales
- Wild cat
- Otter
- Pine marten
- Dormouse
- Walrus
- Red squirrel
- Bats (all species)

Reptiles

- Slow worm
- Turtles (all species)
- Smooth snake
- Sand lizard
- Vivaparous lizard
- Grass snake
- Adder

Amphibians

- Natterjack toad
- Great crested newt

Fish

- Sturgeon
- Allis shad
- Twaite shad*
- Basking shark
- Vendace
- Whitefish
- Giant goby
- Couch's goby
- Burbot
- Seahorse (short snouted and spiny)

Butterflies

- High brown fritillary
- Marsh fritillary
- Large blue
- Heath fritillary
- Swallowtail

Moths

- Reddish buff
- Fiery clearwing
- Fisher's estuarine moth

- Barberry carpet
- Black-veined
- Sussex emerald
- Essex emerald
- New Forest burnet

Beetles, Bugs and Crickets

- Rainbow leaf beetle
- Mire pill beetle*
- Water beetles (*G. zonatus* and *P. aeneus*)
- Lesser silver water beetle
- Beetle (*Hypebaeus flavipes*)
- Violet click beetle
- New Forest cicada
- Wart-biter cricket
- Mole cricket
- Field cricket

Dragonflies and Spiders

- Norfolk aeshna
- Southern damselfly
- Fen raft spider
- Ladybird spider

Crustaceans

- White-clawed crayfish
- Fairy shrimp
- Lagoon sand shrimp
- Apus

Sea Mats and Sea Anemones and allies

- Trembling sea mat
- Marine hydroid
- Ivell's sea anemone
- Pink sea fan
- Starlet sea anemone

Molluscs

- Fan mussel
- De Folin's lagoon snail
- Sandbowl snail
- Pearl mussel
- Glutinous snail
- Lagoon snail
- Lagoon sea slug
- Northern hatchet-shell
- Roman snail

Annelid Worms

- Tentacled lagoon-worm
- Lagoon sandworm
- Medicinal leech

Under Schedule 8 of the Act, the following plants are protected:

- Least Adder's Tongue
- Small Alison
- Blackwort

- Bluebell
- Bedstraw Broomrape
- Oxtongue Broomrape
- Thistle Broomrape
- Lundy Cabbage
- Wood Calamint
- Snow Caloplaca
- Tree Catapyrenium
- Alpin Catchfly
- Laurer's Catillaria
- Slender Centaury
- Rock Cinquefoil
- Meadow Clary
- Triangular Club-rush
- Purple Colt's-foot
- Wild Cotoneaster
- Slender Cottongrass
- Field Cow-wheat
- Sand Crocus
- Lizard Crystalwort
- Broad-leaved Cudweed
- Jersey Cudweed
- Red-tipped Cudweed
- Cut-grass
- Diapensia
- Shore Dock
- Marsh Earwort
- Field Eryngo
- Dickie's Bladder Fern
- Killarney Fern
- Norfolk Flapwort
- Alpine Fleabane
- Small Fleabane
- South Stack Fleawort
- Pointed Frostwort
- Hedgehog Fungus
- Oak Polypore Fungi
- Royal Bolete Fungi
- Sandy Stilt Puffball Fungi
- Brown Galingale
- Alpine Gentian
- Dune Gentian
- Early Gentian
- Fringed Gentian
- Spring Gentian
- Cut-leaved Gentian
- Water Germander
- Wild Gladiolus
- Stinking Goosefoot
- Grass-poly
- Blunt-leaved Grimmia
- Elm Gyalecta
- Sickle-leaved Hare's-ear
- Small Hare's-ear
- Stinking Hawk's-beard
- Northroe Hawkweed
- Shetland Hawkweed
- Weak-leaved Hawkweed
- Blue Heath
- Red Helleborine
- Young's Helleborine
- Branched Horsetail
- Perennial Knawel
- Sea Knotgrass
- Lady's-slipper
- Churchyard Lecanactis
- Tarn Lecanora
- Copper Lecidea
- Round-headed Leek
- Least Lettuce
- Alpine Sulphur-tresses Lichen
- Arctic Kidney Lichen
- Ciliate Strap Lichen
- Convoluted Cladonia Lichen

- Upright Mountain Cladonia Lichen
- Coralloid Rosette Lichen
- Ear-loped Dog Lichen
- Forked Hair Lichen
- Goblin Lights Lichen
- Golden Hair Lichen
- New Forest Beech lichen
- Orange Fruited Elm Lichen
- River Jelly Lichen
- Scaly Breck Lichen
- Stary Breck Lichen
- Snowdon Lily
- Lindenberg's Liverwort
- Leafy Liverwort
- Rough Marsh-mallow
- Creeping Marshwort
- Cambridge Milk-parsley
- Moss
- Alpine Copper Moss
- Anomodon, Long-leaved Moss
- Baltic Bog Moss
- Blue Dew Moss
- Blunt-leaved Bristle Moss
- Bright Green Cave Moss
- Cordate Beard Moss
- Cornish Path Moss
- Derbyshire Feather Moss
- Dune Thread Moss
- Flamingo Moss
- Glaucous Beard Moss
- Green Shield Moss
- Hair Silk Moss
- Knothole Moss
- Large Yellow Feather Moss
- Millimetre Moss
- Multifruited River Moss
- Nowell's Limestone Moss
- Polar Feather-moss Moss
- Rigid Apple Moss
- Round-leaved Feather Moss
- Scleicher's Thread Moss
- Threadmoss, Long-leaved Moss
- Triangular Pygmy Moss
- Vaucher's Feather Moss
- Welsh Moss
- Holly-leaved Naiad
- Slender Naiad
- Stalked Orache
- Early Spider Orchid
- Fen Orchid
- Ghost Orchid
- Lapland Marsh Orchid
- Late Spider Orchid
- Lizard Orchid
- Military Orchid
- Monkey Orchid
- Caledonia Panneria
- New Forest Panneria
- Oil Stain Parmentaria
- Plymouth Pear
- Perfoliate Penny-cress
- Pennyroyal

- Alpine Moss Pertusaria
- Southern Grey Physcia
- Pigmyweed
- Ground Pine
- Cheddar Pink
- Childing Pink
- Deptford Pink
- Floating-leaved Water Plantain
- Ragged Pseudo Cyphellaria
- Rusty Alpine Psora
- Fen Ragwort
- Martin's Ramping fumitory
- Spiked Rampion
- Small Restharrow
- Alpine Rock-cress
- Bristol Rock-cress
- Western Rustwort
- Norwegian Sandwort
- Teesdale Sandwort
- Drooping Saxifrage
- Yellow Marsh Saxifrage
- Tufted Saxifrage
- Serpentine Solenopsora
- Whorled Soloman's-seal
- Alpine Sow-thistle
- Adder's-tongue Spearwort
- Fingered Speedwell
- Spiked Speedwell
- Dwarf Spike Rush
- Early Star-of-Bethlehem
- Starfruit
- Foxtail Stonewort
- Bearded Stonewort
- Strapwort
- Turpswort
- Fen Violet
- Viper's-grass
- Ribbon-leaved Water-plantain
- Starved Wood-sedge
- Alpine Woodsia
- Oblong Woodsia
- Field Wormwood
- Downy Woundwort
- Limestone Woundwort
- Greater Yellow-rattle

Species

Bat

All species of bat (*Chiroptera* spp.) and their place of rest or shelter more generally known as ‘roosts’ are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and Conservation of Habitats and Species Regulations 2017 which is the implementation of the EC Directive on the Conservation of Natural Habitats and Flora and Fauna, 1992 (the Habitats Directive). This makes it illegal to kill, injure, capture or disturb bats or obstruct access to, damage or destroy bat roosts. Under the law, a roost in any structure or place used for rest or shelter is protected. As bats tend to reuse roosts, the roost is fully protected whether the bats are present or not.

Birds

All species of wild bird and their nests are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). This makes it illegal to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; and
- Intentionally take or destroy an egg of any wild bird.

There are also additional penalties for birds listed on Schedule 1 of the Wildlife and Countryside Act 1981.

Badger

Badgers (*Meles meles*) and their setts are protected by the Protection of Badgers Act 1992, under which it is an offence to either harm badgers or disturb or damage their setts. Works within 30m of a badger sett may require a derogation licence from Natural England, to allow activity which would otherwise be illegal to proceed.

Reptiles

The common reptile species are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). The species that are most likely to occur on this site are grass snake, common lizard (*Lacerta vivipara)*, adder (*Vipera berus*) and slow worm. This means that they are protected against killing and injuring (but not 'taking') and against sale and transporting for sale.

Amphibians

Great crested newts (*Triturus cristatus*) are protected under Schedule 5 of the Wildlife and Countryside Act 1981 and are listed under Schedule 2 of the Habitats Regulations 2017, making them a European Protected Species.

Common toad (*Bufo bufo*), natterjack toad (*Epidalea calamita*) and pool frog (*Pelophylax lessonae*) are all Section 41 species of principle importance and as such are now a material consideration in planning.

White-clawed Crayfish

White-clawed crayfish (*Austropotamobius pallipes*) are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which makes it illegal to take it from the wild or to sell it. It is also included in the ICUN Red Data List (listed as Globally Endangered).

Water Vole

Water vole (*Arvicola amphibious*) are protected under Schedule 5, Section 9 of The Wildlife and Countryside Act 1981 (as amended). In 2008, the legal protection was increased, so it is now an offence to:

- Intentionally kill, injure or take (capture) a water vole;

- Possess or control a live or dead water vole, or any part of a water vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or disturb water voles while they are using such a place; and
- Sell, offer for sale or advertise for live or dead water voles.

Licences are available from Natural England for survey, research or conservation purposes, however there is no provision under the legislation for licensing what would otherwise be offences for the purpose of development, maintenance or land management. Conservation licences may be granted to destroy habitats and move water voles if it helps to conserve them. These will only be issued if water vole habitats are enhanced and the proposals benefit their conservation status.

Otter

Otter (*Lutra lutra)* are protected under the Habitats Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended). This makes it illegal to intentionally or deliberately kill, injure or capture otters, or damage destroy or obstruct any structure or place used for shelter or protection by an otter, and to disturb an otter while it is occupying a structure or place which it uses for that purpose.

Dormouse

Dormice (*Muscardinus avellanarius*) are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Habitats Regulations 1994. This makes it illegal to intentionally or deliberately kill, injure or capture dormice, or damage destroy or obstruct any structure or place used for shelter or protection by a dormouse, and to disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

Legal protection requires that due attention is paid to the presence of dormice, and that appropriate actions are taken to safeguard the places they use for shelter and protection. Licences are required from Natural England for any activities arising from development projects which may affect dormice or their habitats.

Invertebrates

Habitat suitable to support notable invertebrates was recorded. This included habitat suitable to support stag beetle (*Lucanus cervus*). Stag beetle is a Section 41 species of principle importance and is listed on section 9.5a and b of schedule 5 of the Wildlife and Countryside Act 1981 (as amended), making it illegal to sell or advertise it for sale. It is not offered any further protection under the act.

Other

West European hedgehog is a Section 41 species of principle importance and as such is now a material consideration in planning. The presence or absence of suitable foraging and hibernating habitat for this species was noted during the field survey.

Invasive weeds

British legislation applies to a number of invasive weed species that are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to plant, spread or otherwise cause these listed species to grow in the wild. Particular attention was paid to the presence of Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

APPENDIX B: NOTES AND LIMITATIONS

IES Consulting staff and their sub-consultants have endeavoured to identify the presence of protected species wherever possible on site, where this falls within the agreed scope of works.

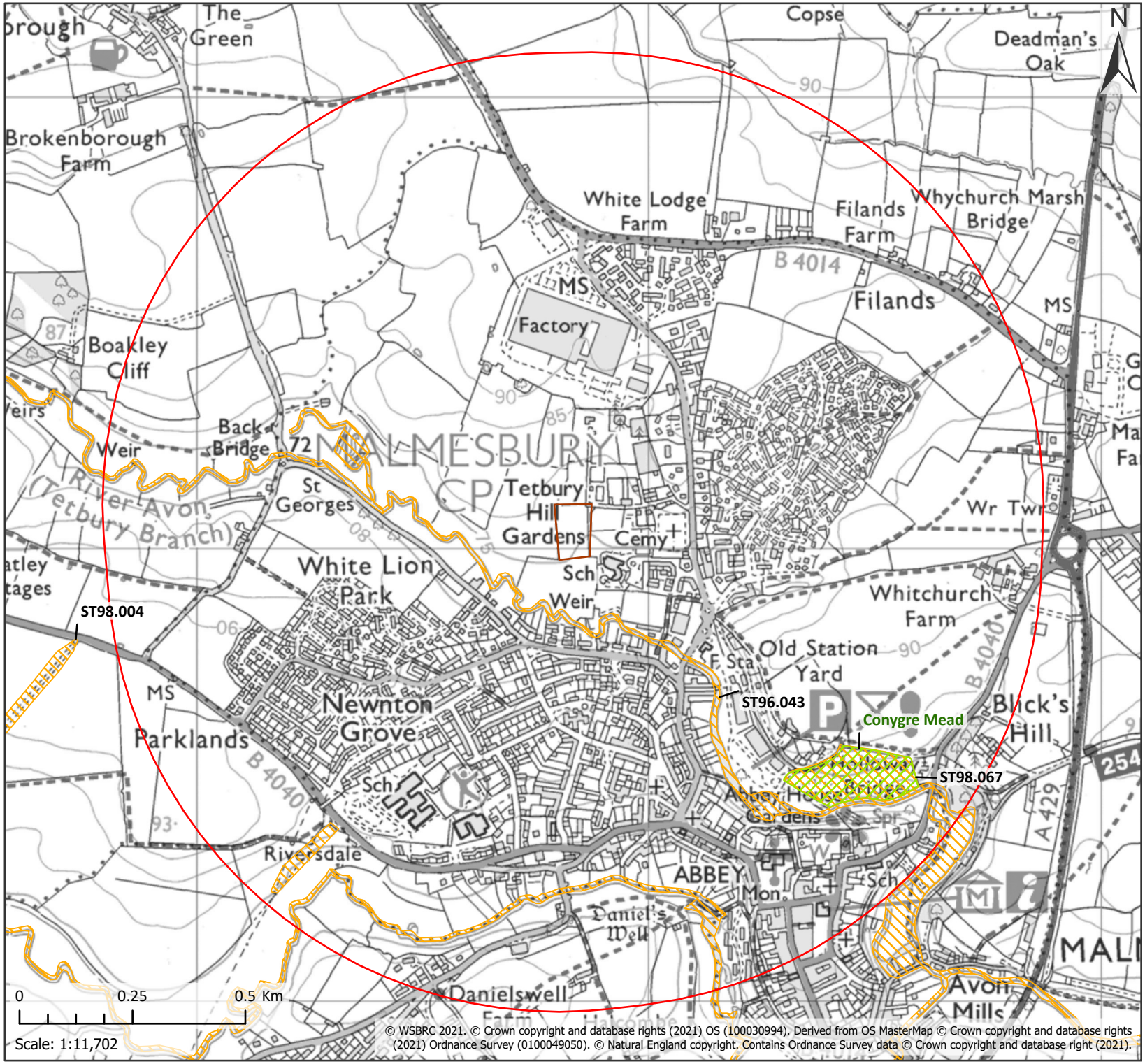
Up to date standard methodologies have been used, which are accepted by Natural England (previously English Nature) and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on site. IES cannot take responsibility where Government, national bodies or industry subsequently modify standards.

The results of the survey and assessment work undertaken by IES Consulting were representative at the time of surveying.

IES Consulting have advised on the optimum survey season for a particular habitat/species prior to undertaking the survey work. However, IES Consulting cannot accept responsibility for the accuracy of surveys undertaken outside this period.

IES Consulting cannot accept responsibility for data collected from third parties.

APPENDIX C: LOCATION OF DESIGNATED SITES



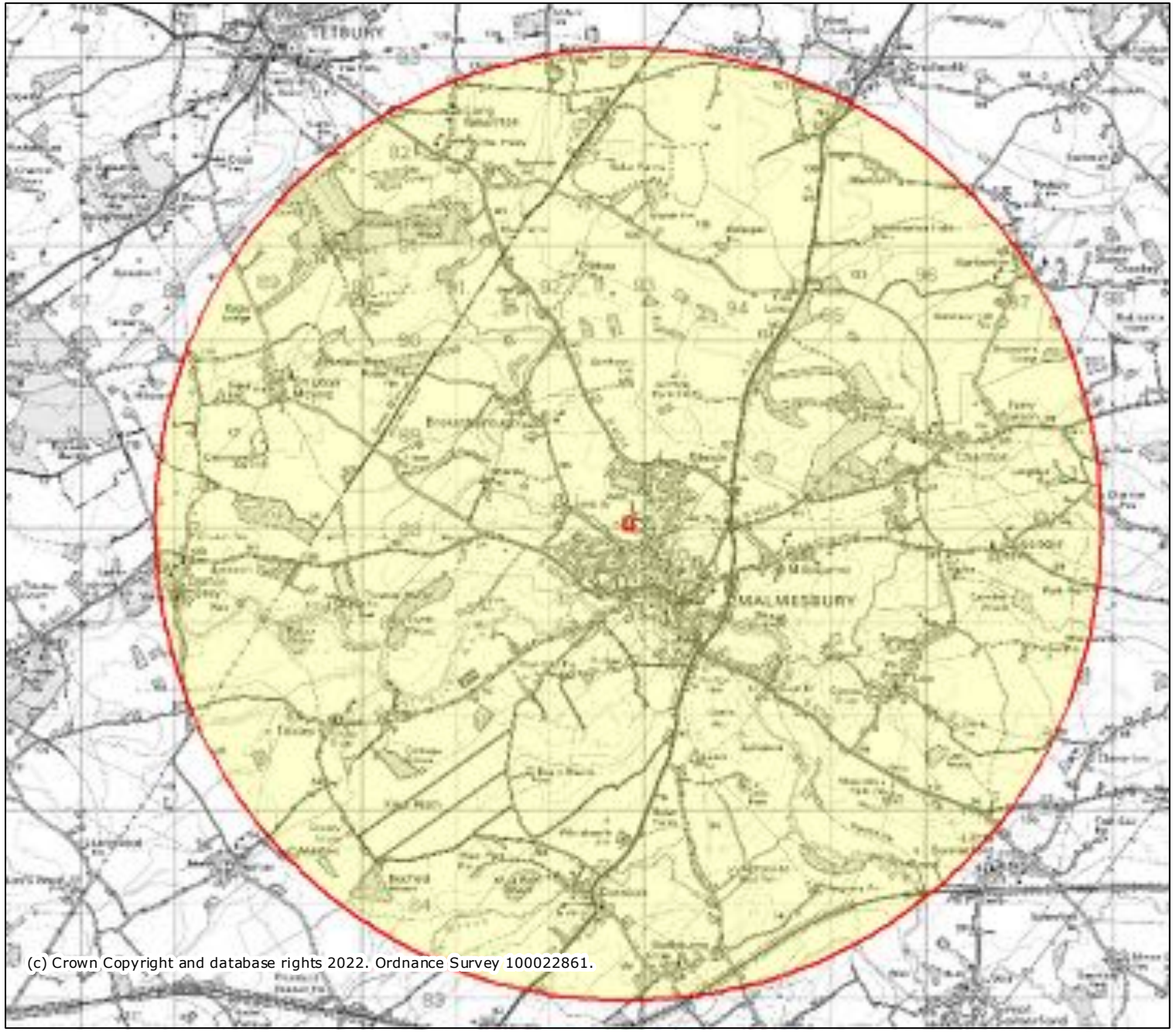
© WSBRC 2021. © Crown copyright and database rights (2021) OS (100030994). Derived from OS MasterMap © Crown copyright and database rights (2021) Ordnance Survey (0100049050). © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right (2021).

WSBRC | Wiltshire & Swindon Biological Records Centre

Wildlife Sites Within 1 km of Land Adjacent to Backbridge Farm: ST931879

13/04/2022

Magic Map



Legend

- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)

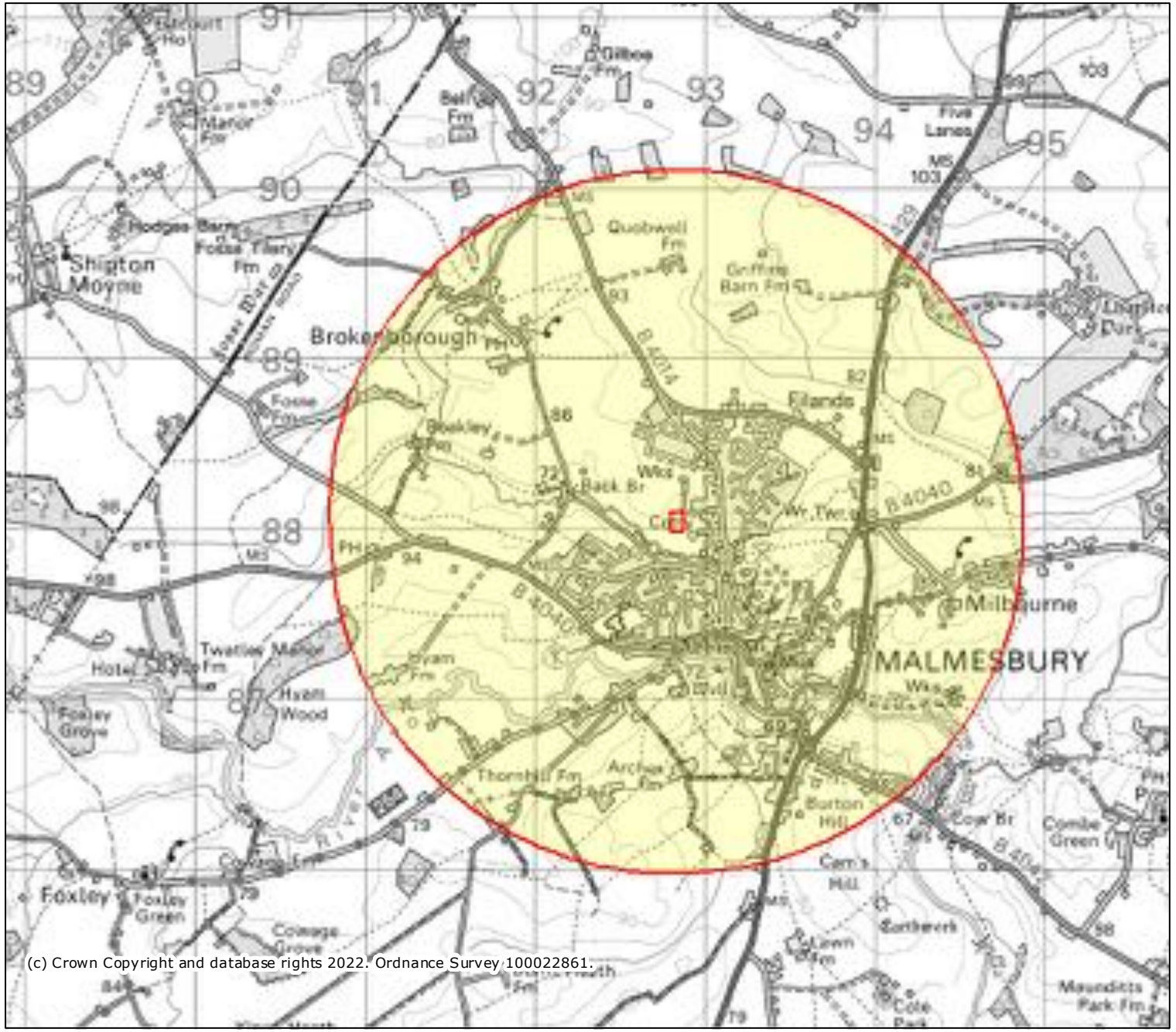
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km

Map produced by MAGIC on 12 April, 2022.

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Magic Map



Legend

- National Nature Reserves (England)
- Sites of Special Scientific Interest (England)

Projection = OSGB36
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xmax = 399200
ymax = 191100

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km

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