

# Preliminary Ecological Appraisal

of

The Gardeners Arms, Moats Tye,

Suffolk

## Carried out for:

Mr Johnny Beales

1<sup>st</sup>

## Prepared by:

**Abrehart Ecology**

The Barn, Bridge Farm  
Friday Street, Brandeston  
Suffolk IP13 7BP

Tel: 01728 684362 - 07798 941555

e-mail: toby@abrehartecology.com

Website: abrehartecology.com

Issue/ revision	1
Remarks	
Prepared by	JPR
Date	June 2023
Checked	SK
Authorised	TRA

# CONTENTS

1. BACKGROUND TO COMMISSION .....	3
SITE DESCRIPTION .....	3
<i>RELEVANT LEGISLATION</i> .....	5
2. METHODS .....	6
<i>DE SK STUDY</i> .....	6
<i>FIELD SURVEY</i> .....	6
<i>SURVEY LIMITATIONS</i> .....	6
3. RESULTS .....	7
<i>DATA SEARCH (FOR MAPS SEE APPENDIX II)</i> .....	7
<i>DATA SEARCH</i> .....	7
<i>FIELD SURVEY RESULTS</i> .....	9
4. PROTECTED AND PRIORITY SPECIES WITHIN THE SITE & POTENTIAL IMPACTS AND RECOMMENDATIONS .....	10
5. CONCLUSIONS .....	14
6. REFERENCES .....	15
APPENDIX I: SITE PHOTOS .....	16
APPENDIX II: Figures .....	18
APPENDIX III: Species list .....	19

# 1. Background to Commission

- 1.1 Abrehart Ecology Ltd was commissioned by RGP Building Design & Energy Consultancy Ltd, on behalf of Mr J Beales, to carry out a Preliminary Ecological Appraisal (PEA) of a small development site at the land adjacent to The Gardeners Arms, Moats Tye, Suffolk (central grid reference TM 04179 55008 ; Fig. 1; hereafter referred to as the Site).
- 1.2 The survey was required to inform a planning application at the Site; the creation of one residential dwelling and one outbuilding with associated infrastructure is proposed.

## *Aims of Study*

- 1.3 This report provides an ecological appraisal of the Site following the completion of a desk study and site visit. The aim of this study was to:

- Provide a description of existing habitat types;
- To determine the existence and location of any ecologically valuable areas;
- To identify the potential (or actual) presence of protected and/or notable species;
- To provide the legislative and/or policy protection afforded to any habitats present or any species assessed as likely to be associated with the site; and
- To recommend any further ecological surveys considered necessary to inform mitigation requirements for the planning application within the Site.

- To provide an assessment of potential impacts to protected species, habitats, or protected sites.

## Site Description

- 1.4 The Site is located in Moats Tye, Suffolk, to the rear of the former Gardeners Arms pub off Dedman's Lane. It is approximately 0.1ha in extent comprising a single storage building surrounded by well-managed other neutral grassland. Within and near to the boundaries of the Site were a dry ditch, mature trees, tree-lined roads, post and wire fences, amenity grassland and residential gardens.
- 1.5 Along the western boundary of the Site were residential dwellings and associated gardens, beyond these was a small road and arable fields. To the north and east of the Site was land used and amenity space (cricket ground) –which included planted/mature trees, close mown grassland, and rough grassland at the boundaries. South of the Site was a small lane, with agricultural land and residential dwellings beyond. Outside the immediate surrounding habitat, the landscape is dominated by agricultural land, pockets of woodland, and small villages (see Figure 1).

# MAGiC

## Magic Map

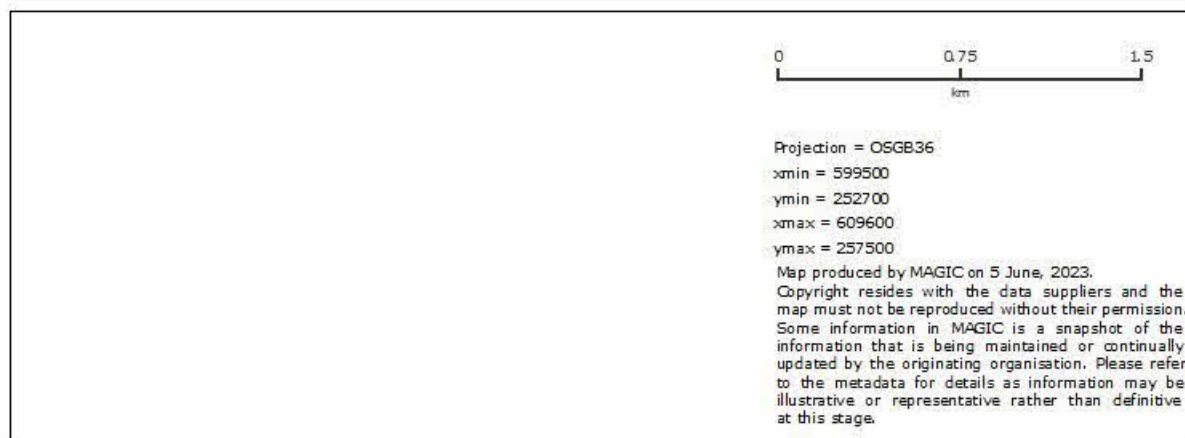
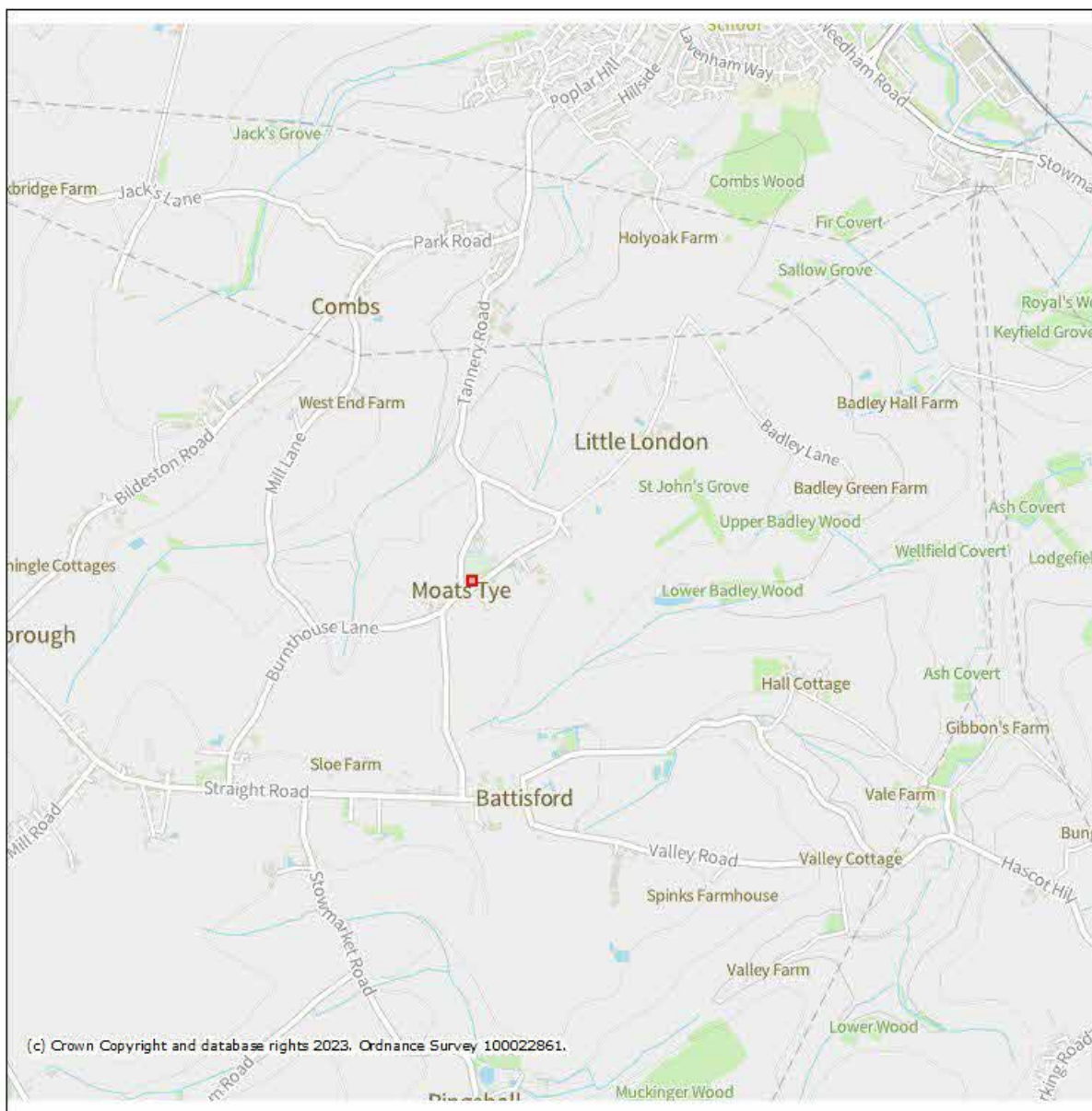


Figure 1. Site location

### *Relevant Legislation*

- 1.6 Protected species, as referred to within this report, are taken to be those protected under European Legislation (Conservation of Habitats and Species Regulations 2010, as amended) and UK legislation (Wildlife and Countryside Act 1981; Protection of Badgers Act 1992).
- 1.7 Public bodies have a duty of responsibility to consider species of principle importance in England as listed in Section 41 of the NERC Act (2006).
- 1.8 The National Planning Policy Framework (NPPF) 2021 places responsibility on Local Planning Authorities (LPAs) to aim to conserve and enhance biodiversity in and around developments. Section 40 of the NERC Act requires every public body to “have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”. Biodiversity, as covered by the Section 40 duty, is not confined to habitats and species of principal importance but refers to all species and habitats. However, the expectation is that public bodies would refer to the Section 41 list (of species and habitats) through compliance with the Section 40 duty.
- 1.9 “The Local Plan seeks to protect, retain, and enhance the high-quality natural environment and designated landscapes and sites found across the Local Plan area which contribute to the overall success of the area and provides economic and social benefits for all..The Local Plan will seek to foster in new developments and to protect, retain, and enhance in existing developments.”
- 1.10 “Development proposals should be accompanied by sufficient information to assess the effects of development on priority habitats and species, protected sites, protected species, biodiversity or geology, together with any proposed prevention, mitigation, or compensation measures..”
- 1.11 Appendix V details legislation which protects species and groups relevant to the Site (bats, reptiles, birds, and badgers).

## 2. Methods

### *Desk Study*

- 2.1 Data obtained from the Suffolk Biodiversity Information Service (SBIS) were used to conduct a standard data search<sup>1</sup> for any information regarding statutory and non-statutory sites and records of protected and priority species within a 2km radius of the Site. The data were received on the 25<sup>th</sup> of May 2023.
- 2.2 A 7km radius search for conservation areas part of the National Site Network, including Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsars was undertaken using MAGIC (<http://www.natureonthemap.naturalengland.org.uk/>).

### *Field Survey*

- 2.3 A Preliminary Ecological Appraisal was carried out by Thomas Jordan BSc (Hons) BSc (Natural England Great Crested Newt Class Survey Licence WML-CL08) on the 23<sup>rd</sup> of May 2023 in accordance with standard best practice methodology for Phase 1 Habitat Surveys set out by the JNCC (JNCC 2010). Weather conditions during the survey were 50% cloud cover, a light breeze (Beaufort Scale 3), a temperature of 14°C, and good visibility. The Site was traversed slowly by the surveyor, mapping habitats, and making notes on dominant flora and fauna. The survey was extended to identify the presence of invasive species and included an assessment of the potential for the habitats in and around the Site to support protected species.

### *Survey Limitations*

- 2.4 There were no limitations to the survey.

---

<sup>1</sup> *The standard data search identifies designated sites including:- Ramsar; Special Areas of Conservation; Special Protection Areas; Sites of Special Scientific Interest; National Nature Reserves; Local Nature Reserves; County Wildlife Sites; Regionally Important Geological Sites; Ancient Woodland; and protected and priority species identified by the:- Wildlife & Countryside Act 1981 Schedules 1, 5 & 8; Conservation of Habitats & Species Regulations 2010 Schedules 2 & 5; Protection of Badgers Act 1992; Bonn Convention Appendix 1 & 2; Bern Convention Annex 1 & 2; Birds Directive Annex 1; Habitats Directive Annex 2, 4 & 5; NERC Act 2006 Section 41; UKBAP (both local and national); IUCN Red List species; Red & Amber Bird List; Nationally Scarce / Rare; Locally Scarce / Rare; and Veteran trees.*

## 3. Results

- 3.1 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area.

### *Data Search (for maps see Appendix II)*

- 3.2 The following section details the results of the desk study and field survey. Consideration has been given to species likely to be found in the habitats recorded on site and potential impacts to designated sites within the local area. Several protected species have been 'scoped out' of the report, as the Site was not considered suitable to support them. Species scoped out were dormice, water voles, and otters.

### *Data Search*

- 3.3 There is one statutory conservation site within 2km of the proposed development: Combs Wood SSSI (approximately 2km north-east). The Site also falls within the Impact Risk Zone for this SSSI. Combs Wood is an ancient woodland with a well-developed coppice and standard structure. A range in soil types has allowed a variety of woodland types to develop. Unimproved grassland within woodland rides and a small pond provides valuable habitat for invertebrates.

- 3.4 There are three County Wildlife Sites within 2km of the Site. These are:

Church Meadow –An area of unimproved species-rich grassland that has good connectivity with other valuable habitats and surrounding hedgerows. It supports a range of wildflowers, including sulphur clover. The ponds and adjacent habitat provide habitat for great crested newts.

St John's Grove –A small woodland that is listed in the Suffolk Ancient Woodland Inventory and supports small quantities of ancient woodland indicator plant species. A large pond provides valuable habitat for dragonflies.

Upper Badley Wood –A small woodland listed in English Nature's Inventory of Ancient Woodland. Deadwood, fallen branches and standing timber, is a significant feature of the wood and provides habitat for saproxylic invertebrates and hole-nesting birds.

- 3.5 There are no European Conservation Sites (Ramsar, SAC, or SPA) within 7km of the Site.

- 3.6 The data search showed records of protected species in the area, which could potentially occur on the Site. These are detailed within the relevant sections below.

### Field Survey Results

- 3.7 The Site comprised a managed paddock/field containing one building. The northern and eastern boundaries of the field were marked by post and wire fencing, beyond which are further areas of amenity grassland (a cricket ground).
- 3.8 Grassland: The small paddock/field consisted of other neutral grassland that had been regularly managed with a short sward length. Moderate forb diversity was found, typical of managed field species; with daisy (*Bellis perennis*), spotted medic (*Medicago arabica*), cut leaved geranium (*Geranium dissectum*), creeping cinquefoil (*Potentilla reptans*), and ribwort plantain (*Plantago lanceolata*) observed.
- 3.9 Building: A small single-storey former stables/storage building was located in the north of the site. Surrounded by a small area of ruderal vegetation consisting of greater burdock (*Arctium lappa*), nettles (*Urtica dioica*) and cow parsley (*Anthriscus sylvestris*). The building was a rendered breeze block construction with wooden joists/beams, and a corrugated metal roof. Although this was partially lined with insulation, the building was very light and draughty due to a missing door and roofing panels. The space was used for storage, including garden machinery, and appeared regularly disturbed.
- 3.10 A dry ditch ran along the roadside (north-east of the Site) and terminated on the eastern boundary. Nettles (*Urtica dioica*), cow parsley (*Anthriscus sylvestris*), and grasses were growing in the southeastern corner all within the ditch or on the banks.
- 3.11 A freshly planted hawthorn hedge had been planted adjacent to the fence outside the boundary on the northeastern side of the site.
- 3.12 A map showing the habitat types on Site can be seen in Appendix II.



## 4. Protected and Priority Species Within the Site & Potential Impacts and Recommendations

### Flora

- 4.1 The desk study highlighted several species of rare plant have been previously recorded within 2km of the Site, such as bluebell (*Hyacinthoides non-scripta*), which is listed on Schedule 8 of the Wildlife and Countryside Act (1981 (as amended)), and sulphur clover (*Trifolium ochroleucon*) and corn spurrey (*Spergula arvensis*) which are listed as 'Vulnerable' on the GB Red Data List.
- 4.2 No uncommon, rare, or protected plant species were recorded during the survey.
- 4.3 **No further botanical surveys are required.**

### Bats

- 4.7 There was a single building in the centre of the Site. As described in paragraph 3.9, the interior was very light and draughty, and the space was regularly disturbed. Although the roof was partially covered by insulation (creating voids), the corrugated metal sheeting was sub-optimal/unsuitable for roosting bats as the temperatures fluctuate significantly and quickly. There were no obvious cracks within the walls for crevice roosting bat species to utilize, however, there were some exposed rough beams with gaps between them as well as gaps under the eaves, door and holes in the roof.
- 4.8 There were no trees within the Site boundary.
- 4.9 Boundary and adjacent habitats (trees and tree-lined road) could be used by foraging bats. These features connected to further tree lines, hedgerows, and small woodland blocks east of the Site.
- 4.10 The data search returned records of barbastelle (*Barbastella barbastellus*), Natterer's (*Myotis nattereri*), *Myotis* sp., common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and brown long-eared (*Plecotus auritus*) bats within 2km of the Site. All of which have been recorded roosting within Battisford (a nearby village).
- 4.11 **No further survey is necessary; however, the Site will incorporate sensitive lighting – ensuring the boundaries are not illuminated as it could be an important commuting corridor for nocturnal species.** This will follow guidance provided by the Bat Conservation Trust (Bats and Lighting in the UK, 2009), to ensure foraging and commuting bats using adjacent habitats are not negatively impacted. Lighting measures should also be applied to temporary security lighting used during the construction phase. This will include low pressure sodium lamps, with hoods, cowls, or shields, to prevent light spillage.
- 4.12

### Birds

- 4.13 The cavities and ledges within the building provided nesting opportunities for birds, including swallows (*Hirundo rustica*) and blackbirds (*Turdus merula*).
- 4.14 There were no trees, shrubs, hedgerows, or areas of scrub within the Site that could be used by nesting birds.
- 4.15 The desk study contained records of species that could use the habitats on the Site, such as sparrowhawks (*Accipiter nisus*), swifts (*Apus apus*), little owls (*Athene noctua*) and, house martins (*Delichon urbicum*).
- 4.16 **Due to the minimal amount of nesting habitat lost from the construction zone, no further survey is necessary.** This habitat will be cleared outside the nesting bird season or following a nesting bird survey (carried out by an experienced ornithologist/ecologist); should any active nests be found, then clearance will stop until young have fledged.

### Great Crested Newts & Reptiles

- 4.17 Habitats recorded within the Site boundary appear frequently disturbed due to regular management leaving a consistent short sward length, this grassland alone is unlikely to support great crested newts (GCN) (*Triturus cristatus*) during their terrestrial phase or reptiles. The grassland offered potential basking opportunities only; however, better opportunities are recorded outside the Site boundary, including an area of long grassland within the cricket grounds. The boundary ditch with ruderal vegetation and the hedgerow offer potential commuting and foraging habitat.
- 4.18 The floor of the building was well-sealed concrete and stored materials appeared regularly used/disturbed, reducing the likelihood of GCN and reptiles using the building for sheltering or hibernation.
- 4.19 There were several potential breeding ponds highlighted within the local area (500m proximity of the Site, see Appendix II) during the desk study –these were not accessible at the time of survey and so were not assessed for their potential to support breeding GCN.
- 4.20 The dry ditch and rough grassland habitats (outside the Site boundary) could provide suitable commuting routes for amphibians using these ponds or other waterbodies within the local area.
- 4.21 The data search contained eight records of great crested newts within 2km of the Site, the nearest of which was from approximately 800m south-east of the Site. There were eight records of grass snakes within 2km of the Site from 2002 to 2018 (the nearest was approximately 1.15km north of the Site) and a single record of an adder (*Vipera berus*) from 2002 (approximately 1km north of the Site).
- 4.22 **Due to the management and frequent disturbance of the grassland, the Site is unlikely to support GCN or reptiles, no further survey is considered necessary. However due to the adjacent land and boundaries being suitable for reptiles and amphibians a Reasonable Avoidance Measures Method Statement, produced by a suitably qualified and experienced ecologist will be produced. This will include methodologies for sensitive vegetation clearance and appropriate storage of materials.**

### Hedgehogs

- 4.23 The Site and immediate surrounding habitat were suitable for hedgehogs, with areas of short grassland (within the Site) and longer grassland (adjacent to the eastern/northern boundary) providing potential foraging habitat. Fallen leaves from deciduous trees (aspen and poplar) could

provide nest building material for hedgehogs in the local area.

- 4.24 Due to regular disturbance and use of machinery/stored materials, it is unlikely that the open building would offer suitable shelter or hibernation opportunities for hedgehogs.
- 4.25 Although no evidence of hedgehogs was recorded during the survey, the data search returned thirty-eight records of hedgehog within 2km of the Site from 2005 to 2020 –including one from approximately 30m west of the Site boundary. These records were primarily from Little Finborough, Combs, Stowmarket, and Batisford, with additional records from Ringshall.
- 4.26 **No further survey is necessary; however, as the Site provides suitable foraging habitat for foraging mammals, and hedgehogs and badgers have been recorded in the local area, construction works will implement several precautionary measures, including the following:**
- Covering excavations overnight to prevent animals falling in, or the provision of an escape ramp;
  - Safe storage of materials that may harm animals; and
  - Security lighting to be set on short timers to avoid disturbing nocturnal animals using the Site and immediate surrounding area –it will be directional to avoid boundary features (trees and hedgerows).

#### *Invertebrates*

- 4.27 Habitats within the Site (managed neutral grassland) was considered sub-optimal / not suitable for supporting rare and/or protected terrestrial invertebrates.
- 4.28 The ditch near to the Site was predominantly dry and overgrown and therefore not suitable for aquatic invertebrates.
- 4.29 The data search returned records of rare/protected invertebrates including small heath (*Coenonympha pamphilus*), white-letter hairstreak (*Satyrus w-album*), and white admiral butterflies (*Limenitis camilla*), these are unlikely to be using the on-site habitat.
- 4.30 **No further survey is necessary.**

## 5. Conclusions

### *Statutory Designated Areas*

5.1 The Site falls within the Impact Risk Zone (IRZ) of the Combs Wood SSSI. The development of the Site is considered unlikely to create a significant increase in public use pressure/foot traffic through the conservation area or negatively impact the features of interest found there (flowering plants and invertebrates).

5.2 The preliminary ecological appraisal found the Site contained habitats suitable for supporting breeding birds. Hedgehogs are listed as a Species of Principal Importance in England (and listed on Schedule 6 of the Wildlife and Countryside Act 1981 –making it illegal to kill or injure through certain methods) and so should also be considered as part of this application. The following measures will be implemented to minimise the risk of harm to individual animals:

The preparation and adherence to a Reasonable Avoidance Measure Method Statement – to minimise the risk of harm to reptiles and amphibians.

Covering of excavations and/or provision of exit ramps is recommended during works to prevent harm to mammals. Details on section 4.26.

To prevent infringing legislation which protects all nesting birds, it is recommended that any building or vegetation clearance is carried out outside the breeding bird season (which runs from March to September) or following a nesting bird survey by a suitably experienced ecologist.

The Site will incorporate sensitive lighting –ensuring the boundaries are not illuminated as it could be an important commuting corridor for nocturnal species.

5.3 As detailed in Paragraphs 1.9 and 1.10, the Local Policy requires new developments to have consideration for priority habitats and species, protected sites, protected species, and biodiversity. The proposed development will not cause significant harm or disturbance to such features. The development will follow the mitigation hierarchy and avoid negative impacts to biodiversity wherever possible. Any remaining short-term impacts or potential long-term impacts (such as disturbance to ecological corridors) will be adequately mitigated for through the above measures.

5.4 In addition to having a negligible impact to biodiversity within the construction boundary, the development will not negatively impact species or habitats within the wider ownership boundary or adjacent land. There will be no impact on SSSIs or National Site Network conservation areas and no requirement for a Habitat Regulations Assessment.

## 6. References

Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.). The Bat Conservation Trust, London.

Cresswell, W.J. Birks, J.D.S, Dean, M., Pacheco, M., Trehella, W.J., Wells, D. & Wray, S. (2012) UK BAP Mammals Interim Guidance for Survey Methodologies, Impacts and Mitigation. Eds. The Mammal Society, Southampton.

Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

JNCC (2010) Handbook for Phase 1 habitat survey: a technique for environmental audit (revised reprint) JNCC: Peterborough.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155.

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

### Web references

[http://www.bats.org.uk/data/files/bats\\_and\\_lighting\\_in\\_the\\_uk\\_final\\_version\\_version\\_3\\_may\\_09.pdf](http://www.bats.org.uk/data/files/bats_and_lighting_in_the_uk_final_version_version_3_may_09.pdf)

<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

## Appendix I: Site Photos



Storage building on Site



Storage building on Site



Managed other neutral grassland



Metal corrugated roofing with multiple holes



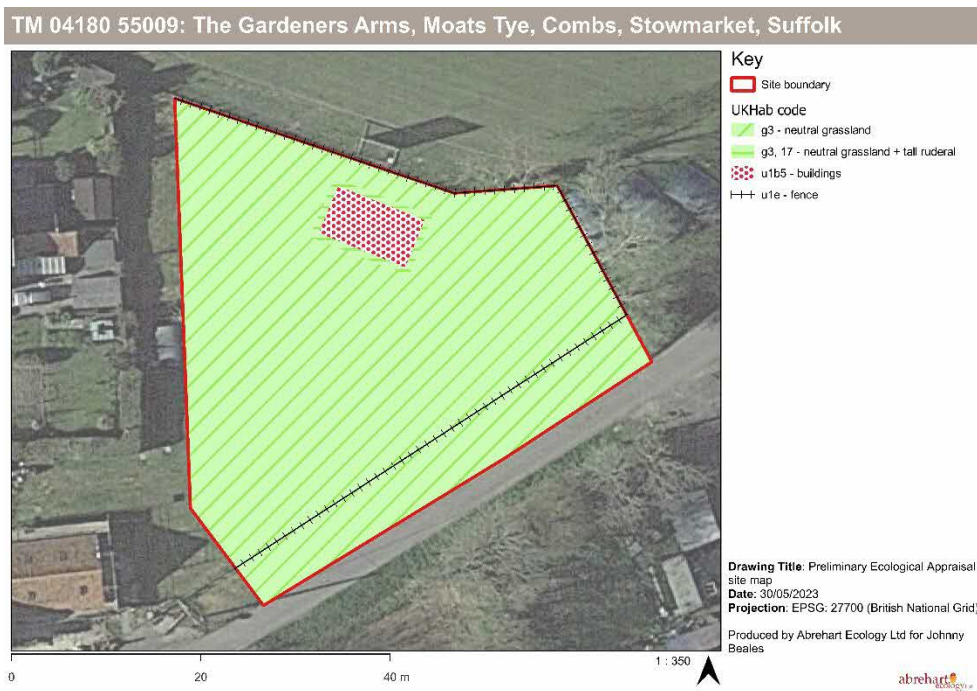
Trees bordering site (potential commuting corridor)



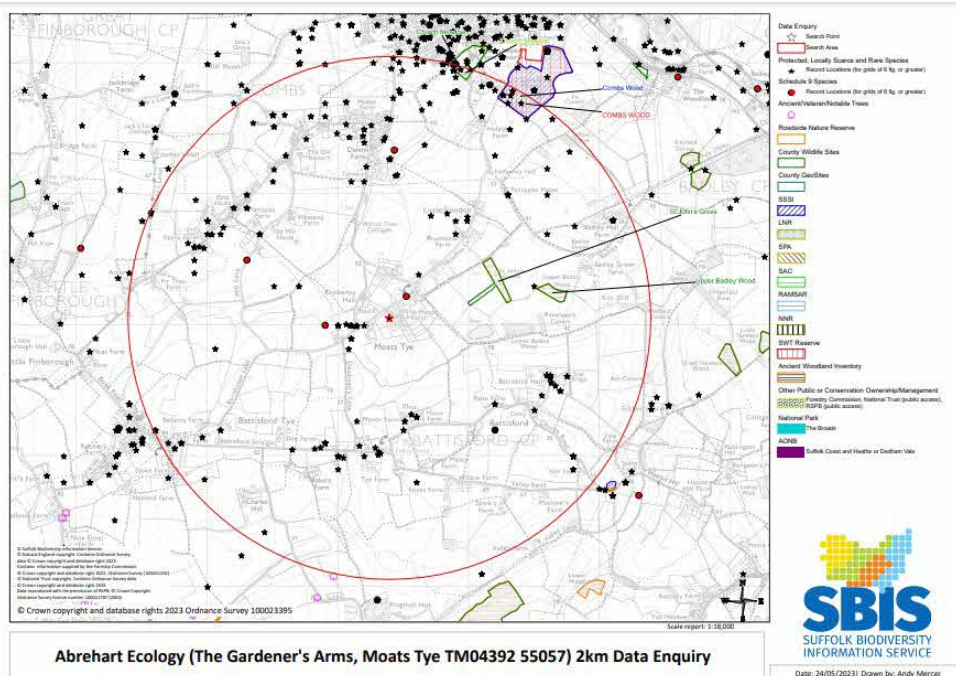
Boundary with some ruderal species

# Appendix II: figures

## Phase 1 habitat map



### Non-statutory Designated Sites within 2km of the Site.



# Appendix III: Species Lists (recorded during survey)

Johnny Beales

## Flora (plants)

---

### Species

---

*Senecio vulgaris*  
*Glechoma hederacea*  
*Lamium album*  
*Urtica dioica*  
*Ranunculus repens*  
*Helminthotheca echioides*  
*Cirsium vulgare*  
*Jacobaea vulgaris*  
*Dactylis glomerata*  
*Rumex obtusifolius*  
*Veronica sp*  
*Geranium molle*  
*Prunus spinosa*  
*Cirsium arvense*  
*Sonchus sp*  
*Geranium dissectum*  
*Potentilla reptans*  
*Plantago lanceolata*  
*Arctium lappa*  
*Anthriscus sylvestris*

---



## Appendix IV: Relevant Protected Species Legislation

Species	Legislation	Protection
<b>Bats</b>	<ul style="list-style-type: none"> <li>▪ Conservation of Habitats and Species Regulations (2010) (as amended)</li> <li>▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)</li> <li>▪ Wild Mammals Act (1996)</li> </ul>	<p>It is an offence to:</p> <ul style="list-style-type: none"> <li>▪ Intentionally kill, injure or take any bat</li> <li>▪ Intentionally or recklessly disturb a bat</li> <li>▪ Intentionally or recklessly damage, destroy or obstruct access to a bat roost</li> </ul>
<b>Great Crested Newts</b>	<ul style="list-style-type: none"> <li>▪ Conservation of Habitats and Species Regulations (2010) (as amended)</li> <li>▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)</li> </ul>	<p>It is an offence to:</p> <ul style="list-style-type: none"> <li>▪ Intentionally kill, injure or take a great crested newt</li> <li>▪ Intentionally or recklessly disturb a great crested newt</li> <li>▪ Intentionally or recklessly damage, destroy or obstruct access to any place used by a great crested newt for shelter or protection</li> </ul>
<b>Widespread Reptiles</b>	<ul style="list-style-type: none"> <li>▪ Wildlife and Countryside Act (WCA) (1981), Schedule 5 (as amended)</li> </ul>	<p>It is an offence to:</p> <ul style="list-style-type: none"> <li>▪ Intentionally kill or injure a reptile</li> <li>▪ Sell, offer or expose for sale, have in possession or transport for the purpose of sale any live or dead reptile or any part of, or anything derived from, a reptile</li> </ul>
<b>Birds</b>	<ul style="list-style-type: none"> <li>▪ Wildlife and Countryside Act (WCA) (1981) (as amended)</li> </ul>	<p>It is an offence to:</p> <ul style="list-style-type: none"> <li>▪ Intentionally kill, injure or take any wild bird</li> <li>▪ Intentionally take, damage or destroy nests in use or being built</li> <li>▪ Intentionally take, damage or destroy eggs</li> </ul> <p>Species listed on Schedule 1 of the WCA (1981) are afforded additional protection, making it an offence to intentionally or recklessly disturb such species at, on or near an active nest</p>