



**envirotech**  
Ecological Consultants

Environmental and Rural Chartered Surveyors

## Preliminary Ecological Appraisal

### Ferngrove House



Tel: 015395 61894  
Email: [info@envtech.co.uk](mailto:info@envtech.co.uk)  
Web: [www.envtech.co.uk](http://www.envtech.co.uk)  
Envirotech NW Ltd

The Stables, Back Lane, Hale, Milnthorpe, Cumbria. LA7 7BL  
Directors: A. Gardner BSc (Hons), MSc, MRICS, Dip NDEA  
H. Gardner BSc (Hons), MSc, CEnv, MRICS  
Registered in England and Wales. Company Registration Number 5028111

## ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

## Quality and Environmental Assurance

This report has been printed on recycled paper as part of our commitment to achieving both the ISO 9001 Quality Assurance and ISO 14001 Environmental Assurance standards. Envirotech have been awarded the Gold standard by the Cumbria Business Environmental Network for its Environmental management systems.

|                    |                          |      |            |
|--------------------|--------------------------|------|------------|
| Author             | Andrew Gardner           | Date | 06/01/2020 |
| Checked by         | Andrew Gardner           | Date | 19/08/2022 |
| Report Version     | 2                        |      |            |
| Field data entered | <input type="checkbox"/> |      |            |
| Report Reference   | 6810                     |      |            |

## Contents

|                                                         |    |
|---------------------------------------------------------|----|
| 1. EXECUTIVE SUMMARY.....                               | 5  |
| 2. INTRODUCTION .....                                   | 6  |
| 2.1 Background .....                                    | 6  |
| 2.2 Objectives .....                                    | 7  |
| 3. METHODOLOGY AND SOURCES OF INFORMATION.....          | 8  |
| 3.1 Data Search.....                                    | 8  |
| 3.2 Vegetation and Habitats.....                        | 8  |
| 3.3 Timing and Personnel .....                          | 8  |
| 4. SPECIES SURVEY METHODOLOGY .....                     | 10 |
| 4.1 Amphibian .....                                     | 10 |
| 4.2 Badger.....                                         | 10 |
| 4.3 Bats.....                                           | 11 |
| 4.4 Birds .....                                         | 11 |
| 4.5 Otter.....                                          | 12 |
| 4.6 Water Vole.....                                     | 12 |
| 4.7 Survey limitations .....                            | 12 |
| 5. RESULTS.....                                         | 13 |
| 5.1 Data Search.....                                    | 13 |
| 6. PHASE 1 SURVEY RESULTS .....                         | 18 |
| 6.1 Habitat Results.....                                | 18 |
| 6.2 Vegetation .....                                    | 25 |
| 6.3 Amphibian .....                                     | 25 |
| 6.4 Badger.....                                         | 25 |
| 6.5 Bats.....                                           | 25 |
| 6.6 Birds .....                                         | 26 |
| 6.7 Otter.....                                          | 26 |
| 6.8 Water vole .....                                    | 26 |
| 6.9 Other .....                                         | 27 |
| 6.10 Statutory and Non-Statutory Sites.....             | 27 |
| 7. MITIGATION/RECOMMENDATIONS.....                      | 28 |
| 7.1 Compensatory planting and habitat enhancement ..... | 28 |
| 7.2 Amphibians .....                                    | 28 |
| 7.3 Badger.....                                         | 28 |
| 7.4 Bats.....                                           | 29 |
| 7.5 Birds .....                                         | 29 |
| 7.6 Otter.....                                          | 29 |
| 7.7 Water vole.....                                     | 29 |
| 8. CONCLUSION.....                                      | 31 |

9. REFERENCES ..... 32

## 1. EXECUTIVE SUMMARY

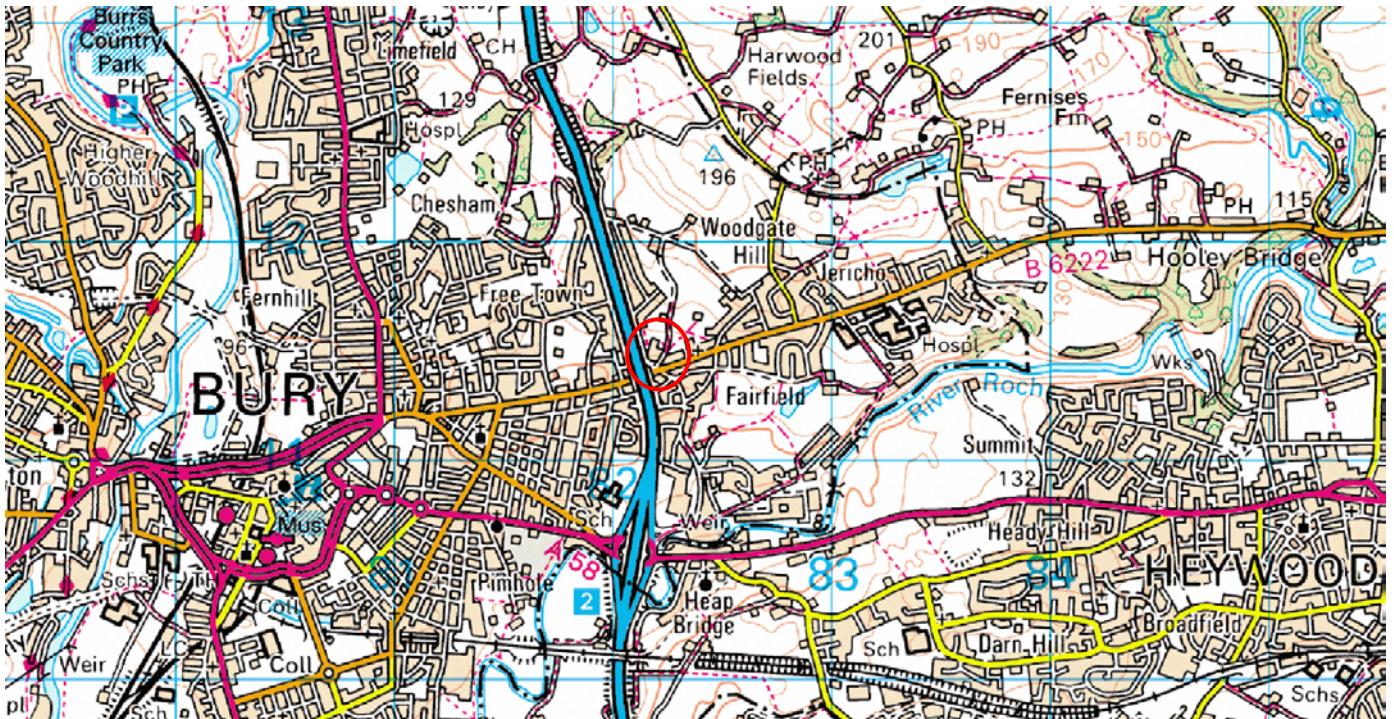
- 1.1.1 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Ferngrove House, Bury. It is proposed that new houses are constructed on the site.
- 1.1.2 A data search and desk study of the site and an area within 2km of the site were undertaken to establish the presence of protected species and notable habitats.
- 1.1.3 The site was then visited by a licenced ecologist from Envirotech NW Ltd on the 5<sup>th</sup> January 2020. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.
- 1.1.4 The plant species assemblages recorded at the site are all common in the local area and are considered to be of low ecological value. Domestic gardens and sympathetically landscaped open space is considered to offer habitat of equal or greater ecological value. Small stands of Montbretia (*Crocsmia x crocosmiiflora*) were recorded
- 1.1.5 Bats may forage over the site but the potential for use is no higher than adjacent areas.
- 1.1.6 Birds are unlikely to nest on site.
- 1.1.7 A small stream on site is confined to a plastic pipe/ underground culvert but is an open water course through the site.
- 1.1.8 Trees will be retained. Enhancement of the open stream can be achieved with reprofiling and planting. Bird and boxes can be erected in retained trees.

## 2. INTRODUCTION

### 2.1 Background

2.1.1 In December 2020 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of land at Ferngrove House, Bury, central grid reference SD 821 114 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.

2.1.2 The survey was requested in connection with the proposed construction of new houses.



**Figure 1** Site location at SD 821 114 circled red.

## **2.2 Objectives**

### **2.2.1 The main objectives of the study were:**

- The completion of a Phase 1 Habitat Survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
- The survey and assessment of all habitats for statutorily protected species.
- An evaluation of the ecological significance of the site.
- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

### **3. METHODOLOGY AND SOURCES OF INFORMATION**

#### **3.1 Data Search**

- 3.1.1 The Biological Records centre for GMEU, the Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.
- 3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.
- 3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

#### **3.2 Vegetation and Habitats**

- 3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC 2003).
- 3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (1991).
- 3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).
- 3.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.

#### **3.3 Timing and Personnel**

- 3.3.1 During the visit, weather conditions were suitable for the survey types undertaken being cool and dry in mid winter.
- 3.3.2 The site and surrounding land was visited on the 5<sup>th</sup> January 2021 by
  - (AG) Mr Andrew Gardner BSc (Hons), MSc, MRICS  
Natural England Bat Class Licence (Level 2)  
Natural England Bat Low Impact Class Licence

Natural England Barn Owl Licence  
Natural England Great Crested Newt Licence (Level 1)  
Natural England Badger Class Licence  
Natural England White Clawed Crayfish Licence

## **4. SPECIES SURVEY METHODOLOGY**

### **4.1 Amphibian**

- 4.1.1 Great crested newts (*Triturus cristatus*) are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and Schedule 5 of the Wildlife & Countryside Act (1981).
- 4.1.2 Water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts.
- 4.1.3 The criteria used in the assessment are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's Licensing process was used to determine the suitability of ponds for great crested newts.
- 4.1.4 The pond assessment was undertaken in order to determine which water-bodies, based on their potential to support great crested newts, should be subject to presence/absence surveys.
- 4.1.5 The site was however considered sufficiently low risk for GCN that no further assessments were warranted.

### **4.2 Badger**

- 4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.
- 4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.
- 4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.
- 4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.
- 4.2.5 Signs of badgers which were searched for included:
  - Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
  - Discarded bedding at sett entrances (this includes grass and leaves)
  - Scratching posts on shrubs and trees close to a sett entrance

- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcasses

### **4.3 Bats**

4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017, as a Protected Species. Taken together, these pieces of legislation make it an offence to:

- Intentionally or recklessly kill, injure or capture bats;
- Deliberately or recklessly disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts.

4.3.2 The Bat Conservation Trust (Hundt (2012) and Collins, J. (ed) (2016) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.

4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds.

4.3.4 Trees on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.

4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2016).

### **4.4 Birds**

4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as UK and or County BAP species.

4.4.2 Bird species and behaviour was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'.

## **4.5 Otter**

4.5.1 Otters (*Lutra lutra*) are given protection by the Wildlife and Countryside Act (1981) as amended and Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

This protection means that it is an offence to deliberately or recklessly:

- Kill or injure otters;
- Destroy, damage or obstruct their dens, and
- Disturb them whilst in the den.

4.5.2 Watercourses were assessed for their suitability and for the presence of otters within 10m of the banks. The banks and scrub vegetation were carefully searched for spraints, feeding remains, runs, prints and couches/holts.

## **4.6 Water Vole**

4.6.1 Water voles (*Arvicola amphibious*) and their habitat are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981). This provides protection from killing or taking by certain prohibited methods and their breeding and resting places are fully protected from destruction or obstruction, it is also an offence to disturb them in these places.

4.6.2 There is a stream on the North boundary of the site. This watercourse was surveyed and assessed for evidence of the presence of water vole.

4.6.3 This involved intensive searches by wading upstream where possible, and observing from the banks where not; looking for burrows and other signs including footprints, droppings and chewed vegetation. This was undertaken up to 5m from the water course.

## **4.7 Survey limitations**

4.7.1 The survey was undertaken in winter. At this time of year plant species are less easily identified and the activity of some species is reduced.

4.7.2 Due to the habitats present on site there were no significant constraints in respect of identifying the botanical interest of the site.

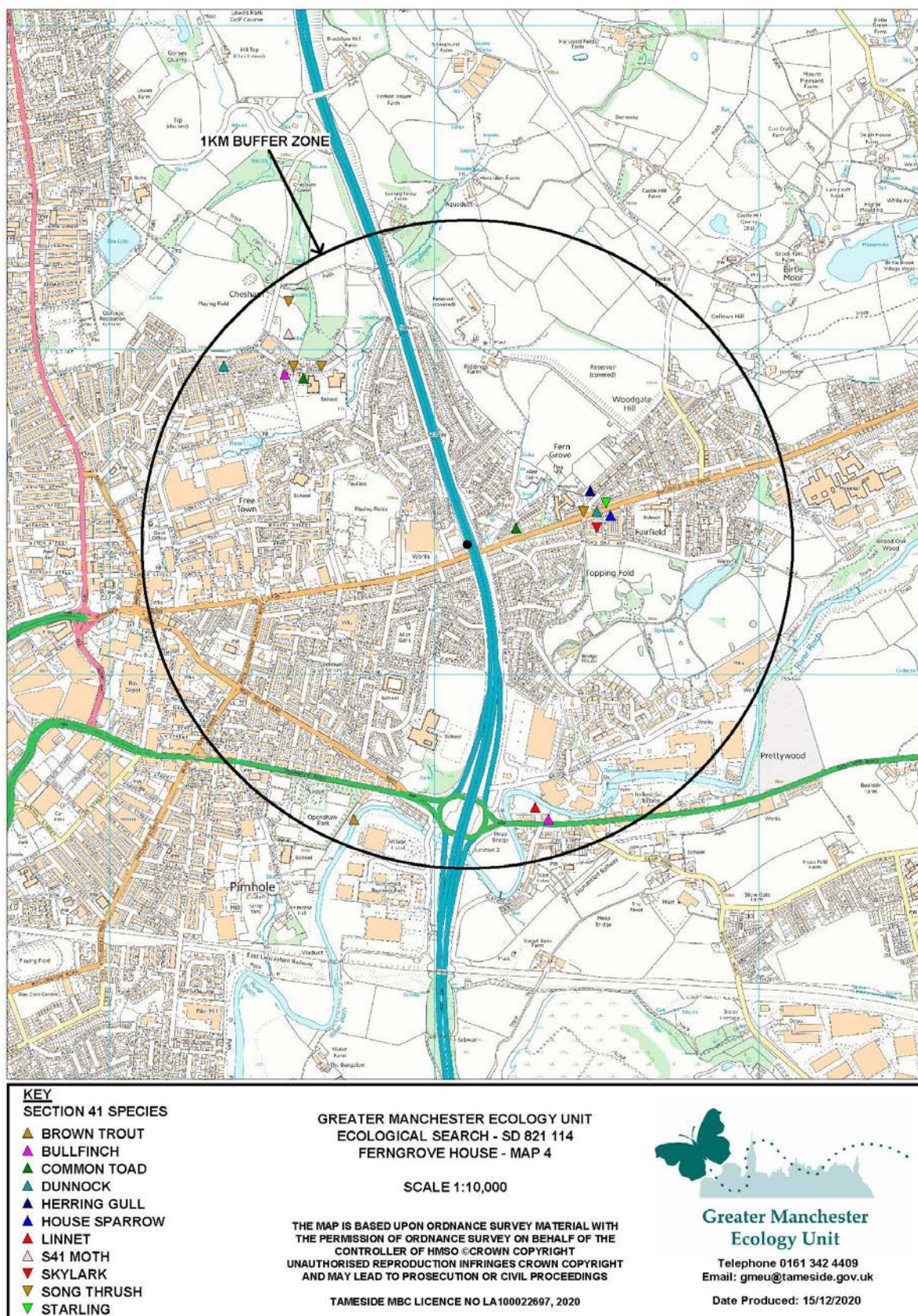
4.7.3 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.

4.7.4 No significant survey limitations were encountered.

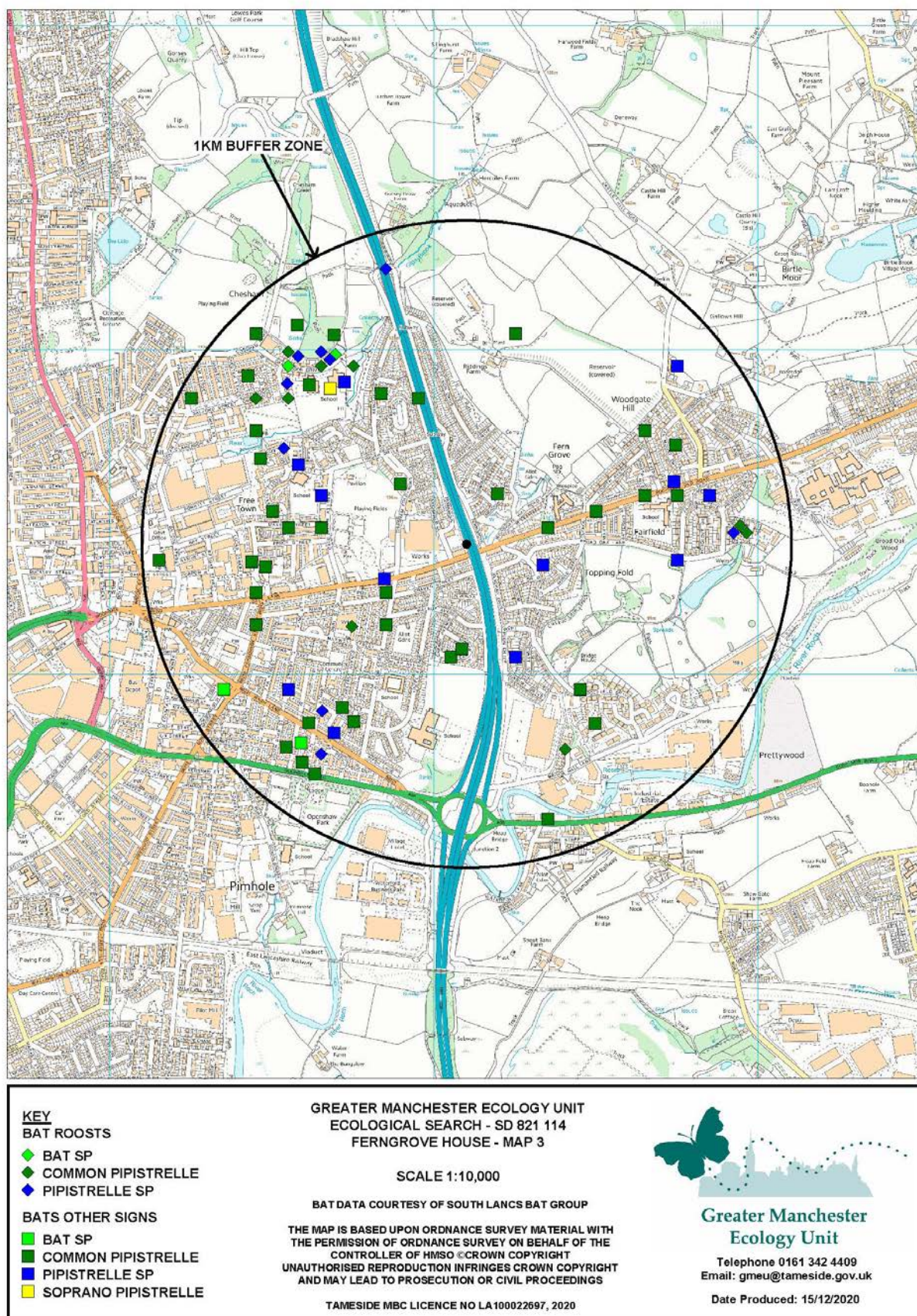
## **5. RESULTS**

### **5.1 *Data Search***

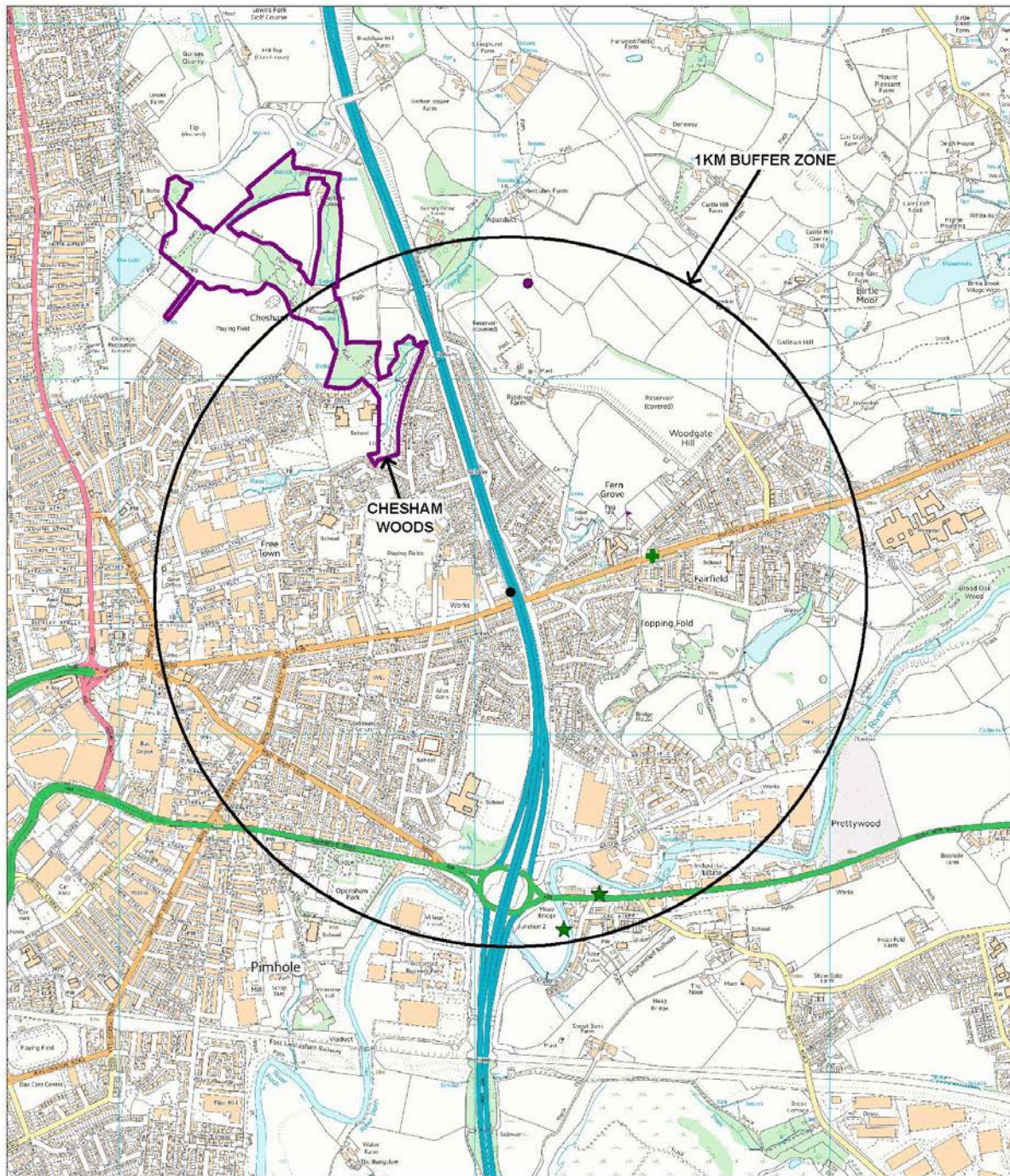
- 5.1.1 Envirotech and GMEU hold no records of protected or notable species for the site. There are however records of protected or notable species within 2km (Figure 2, 3 and 4). These are discussed in the relevant sections below.
- 5.1.2 The nearest non-statutory protected site is Chesham Woods SBI, LNR 700m to the North-west (Figure 5). This is isolated from the site by the M66 and a dense residential area.
- 5.1.3 There are no statutory protected sites within 2km of the site.



**Figure 2** Notable species records



**Figure 3** Notable species records



**KEY**  
**PROTECTED SPECIES**  
 ↑ GREAT CRESTED NEWT  
 ● GREAT CRESTED NEWT ABSENCE  
 + BROWN HARE  
 ★ KINGFISHER  
**SITES**  
 [ ] LOCAL NATURE RESERVES

GREATER MANCHESTER ECOLOGY UNIT  
 ECOLOGICAL SEARCH - SD 821 114  
 FERN GROVE HOUSE - MAP 2

SCALE 1:10,000

THE MAP IS BASED UPON ORDNANCE SURVEY MATERIAL WITH  
 THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE  
 CONTROLLER OF HMSO A.CROWN COPYRIGHT  
 UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT  
 AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS

TAMESIDE MBC LICENCE NO LA100022697, 2020

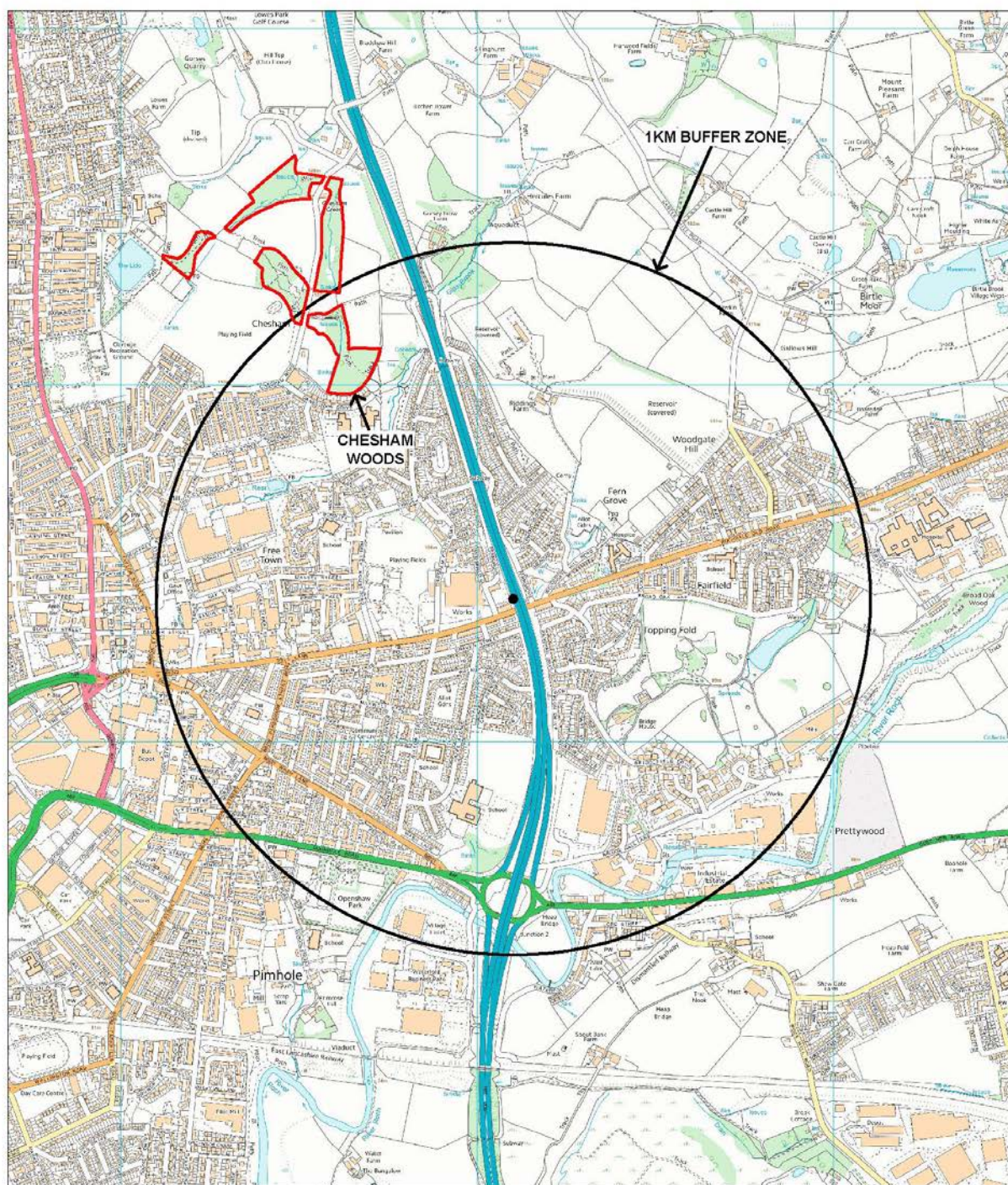


**Greater Manchester  
 Ecology Unit**

Telephone 0161 342 4409  
 Email: gmeu@tameside.gov.uk

Date Produced: 15/12/2020

**Figure 4** Notable species records



**KEY**

SITE OF BIOLOGICAL IMPORTANCE

SBI BOUNDARY

GREATER MANCHESTER ECOLOGY UNIT  
ECOLOGICAL SEARCH - SD 821 114  
FERNGROVE HOUSE - MAP 1

SCALE 1:10,000

THE MAP IS BASED UPON ORDNANCE SURVEY MATERIAL WITH  
THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE  
CONTROLLER OF HMSO A©CROWN COPYRIGHT  
UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT  
AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS

TAMESIDE MBC LICENCE NO LA100022697, 2020



**Greater Manchester  
Ecology Unit**

Telephone 0161 342 4409  
Email: [gmeu@tameside.gov.uk](mailto:gmeu@tameside.gov.uk)

Date Produced: 14/12/2020

**Figure 5 Non-statutory sites**

## **6. PHASE 1 SURVEY RESULTS**

### **6.1 *Habitat Results***

- 6.1.1 The site comprises what appears to be a former garden area associated with ferngrove house. This has more recently been fenced off to create a separate area of ground.
- 6.1.2 There is a stone wall boundary to the South and West and a new boundary comprising close boarded timber fences in concrete posts to the North and East.
- 6.1.3 See Figure 6 for the Phase 1 Habitat Plan and Table 1 for the descriptive Target Notes.

| Target Note                             | Description                     | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BTN1                                    | Garden- Semi-improved grassland | <p>Formally part of a garden to the West, the site has now been fenced off with a new close board timber fence on a concrete post frame. There appears not to have been formal flower beds in the garden, rather it was maintained as grass with occasional shrubs.</p> <p>The site now forms an open area of species poor grassland which appears to be strimmed to maintain it in a tidy condition.</p> <p>Yorkshire Fog (<i>Holcus lanatus</i>) and Common Bent (<i>Agrostis capillaris</i>) are abundant. Ribwort Plantain (<i>Plantago lanceolata</i>), Creeping Buttercup (<i>Ranunculus repens</i>) and nettle are occasional. Broad-leaved dock (<i>Rumex obtusifolius</i>), Soft Rush (<i>Juncus effusus</i>) and Scotch Thistle (<i>Onopordum acanthium</i>) rare.</p> |
| BTN2                                    | Stream                          | <p>An open stream with artificial stone faced banks rises from a plastic pipe to the north and enters a plastic pipe to the south. No in channel vegetation. Occasional Soft Rush (<i>Juncus effusus</i>) to its banks which are contiguous with the grassland adjacent.</p> <p>Plant species to the West bank more diverse than the wider site. Species include Herb-Robert (<i>Geranium robertianum</i>), Rosebay Willow herb (<i>Epilobium angustifolium</i>), Dandelion (<i>Taraxacum officinale</i>), Snow drop (<i>Galanthus Sp.</i>), Daffodil (<i>Narcissus Sp.</i>) and Cherry Laurel (<i>Prunus laurocerasus</i>) which are indicative of this part of the former garden being more formally laid out</p>                                                              |
| BTN3                                    | Deciduous trees                 | Semi-mature Beech ( <i>Fagus sylvatica</i> ) to the South-west site boundary appear in good health.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| BTN4                                    | Evergreen trees                 | A row of small Holly ( <i>Ilex aquifolium</i> ) to the West boundary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| BTN5                                    | Deciduous trees                 | Semi-mature Sycamore ( <i>Acer pseudoplatanus</i> ) to the East and South boundary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| BTN6                                    | Introduced plant                | Montbretia ( <i>Crocsmia x crocosmiiflora</i> ) occurs in discreet clumps to the West boundary and are indicative of past use of the site as a garden more formal landscaping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Table 1 Details of Target Notes.</b> |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |





The site comprises an open area of grassland formally part of a garden for the adjacent property



Stream to the site boundary comprising a new timber fence enters and leaves the site via a plastic pipe

Bankside vegetation is not associated with riparian habitat/ wetland

The stream banks are confined by a stone wall



Beech trees to the South-west boundary



Holly to the west sides of the stream and new boundary fence





Sycamore to the site boundary  
and stone wall on the East  
boundary



Montbretia to side of the stream

**Table 2** *Photographs*

## **6.2 Vegetation**

- 6.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.
- 6.2.2 The poor semi-improved grassland has a very low species diversity and ecological value. It is evident the site was formally part of a garden which has now been separated from the adjacent house with a new fence.
- 6.2.3 There are early mature trees to the site boundary comprising sycamore, beech and holly. These have some ecological as well as landscape value. There is no apparent regeneration of trees and all of the trees appear to be in a similar age class.
- 6.2.4 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. Montbretia was occasional.

## **6.3 Amphibian**

- 6.3.1 There are records for amphibians within 1km of the site including a record for a Great crested newt 300m to the East and a Common toad 100m to the East.
- 6.3.2 The core development area has a low value to amphibians being open and exposed. The site is enclosed by a wall and fence which would act as a barrier to access by amphibians.
- 6.3.3 There are no ponds on site or within 250m of the site from which amphibians could access the site.
- 6.3.4 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them.

## **6.4 Badger**

- 6.4.1 No records of badgers occur within 1km of the site.
- 6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries.
- 6.4.3 The proposed development will not impact on any existing badger runs or setts.

## **6.5 Bats**

- 6.5.1 There are records of at least two species of bat within 1km of the site.
- 6.5.2 The foraging habitat at the site is very poor for bat species being open and exposed. The poor semi-improved grassland offers negligible foraging opportunities for bats. The hedge and tree lines are poor in terms of their structure, diversity and interconnectivity.
- 6.5.3 Despite being poor, the trees on the site offer the best foraging habitat for bats on the site as the remainder of it comprises open and exposed grassland. Whilst these areas of

the site are the most structurally diverse but they are not considered exceptional in the local area. More extensive areas of medium and high quality habitat occur locally, including the gardens, woodland and existing residential dwellings adjacent.

- 6.5.4 It is not considered there would be significant degradation of foraging habitat as a result of the proposal so long as the trees are retained and or their loss is compensated for in any landscaping scheme.
- 6.5.5 All trees around the site perimeter were also assessed in accordance with Collins ed. (2016) and assigned a risk category. All of the trees on site were category 2 (low) or category 3 (negligible) risk. No indications of roosting or highly suitable roost sites were located within the trees. All of the trees could be adequately inspected.
- 6.5.6 We consider bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats will not occur on the site.

## **6.6 *Birds***

- 6.6.1 There are records of birds within 1km of the site including Section 41 Species.
- 6.6.2 The trees on site and short vegetation have limited potential for nesting birds. Predation pressure on ground nesting birds due to domestic cats in this area is likely high.
- 6.6.3 There were no rot holes or cracks in the trees within the site boundary which would support tree hole nesting species such as woodpeckers.
- 6.6.4 The habitat on site is not considered to be of anything more than of local significance, habitats present are well represented in the local area. The impact on nesting birds is therefore considered likely to be minor.
- 6.6.5 A risk assessment of the site in respect of its future potential for and value to nesting birds could be adequately made.
- 6.6.6 Precautionary mitigation is considered appropriate.

## **6.7 *Otter***

- 6.7.1 There are no records of otters within 1km of the site.
- 6.7.2 No indication of the presence or past use of the site by otter was found. The stream is considered unlikely to support fish. There are no waterbodies in proximity to the site which would be attractive to Amphibians. This species is considered as being absent from the site.

## **6.8 *Water vole***

- 6.8.1 There are no records of water voles within 1km of the site.

- 6.8.2 The stream on site is limited in its potential for use by the length of exposed channel. No signs of water voles, such as droppings, feeding piles or footprints were present. We consider this species is likely to be absent from the site.

## **6.9 Other**

- 6.9.1 The boundary hedgerows are species poor and provide little potential for use by hedgehog (*Erinaceus europaeus*). Fragmentation of habitat locally and existing land use do not provide optimal conditions for the free passage of this species across the site and slugs and snails are likely to occur only at very low numbers.

- 6.9.2 The site may be crossed by species such as fox (*Vulpes vulpes*).

## **6.10 Statutory and Non-Statutory Sites**

### Direct Impacts:

- 6.10.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.
- 6.10.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

### Indirect Impacts:

- 6.10.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

## **7. MITIGATION/RECOMMENDATIONS**

### **7.1 *Compensatory planting and habitat enhancement***

- 7.1.1 The roots of trees on the site and its boundaries should be adequately protected during work in accordance with industry standards. All trees should as far as possible be retained in the scheme.
- 7.1.2 The landscaping scheme should utilise plants which are native and wildlife friendly. In particular night flowering species would be beneficial to bats. Wildflower seed could be used to plant verges to enhance the ecological value of the site and continuity between the site and the wider area.
- 7.1.3 The stream on site should be retained and enhanced with new appropriate planting to its banks which could also be de-culverted/ graded to remove the current artificial stone banks. The vertical banks could be graded back to a 50% slope with minimal removal of soil and no disturbance to the stream bed.
- 7.1.4 Montbretia should be removed from site prior to ground works commencing by the application of herbicide or excavation.
- 7.1.5 The site is below the 1Ha size threshold against which the Defra Metrics Biodiversity Net Gain Calculator should be used.

### **7.2 *Amphibians***

- 7.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

### **7.3 *Badger***

- 7.3.1 Badger setts are not known to occur within 1km of the site but this species is common and widespread. In order to minimise impacts on badgers the following points should also be followed.
  - All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.
  - Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.

- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

## **7.4 Bats**

- 7.4.1 Work at night should be restricted, new planting within the site should enhance structural diversity and light spill onto the trees should be minimised.
- 7.4.2 New roosting provision for crevice dwelling bats could be incorporated into the buildings on site or bat boxes could be erected in retained trees.
- 7.4.3 Any trees to be felled should be re-inspected for bats to confirm they remain absent.
- 7.4.4 Overall it is considered there is more than sufficient scope for mitigation and compensation at the site such that there will be no adverse impact on the favourable conservation status of bats affected by the proposal.

## **7.5 Birds**

- 7.5.1 Nesting by birds within the development area is considered unlikely to occur.
- 7.5.2 New planting within the site and the retention of trees on the site boundary will maintain the ecological functionality of the site for breeding birds.
- 7.5.3 Artificial bird nesting sites for swallow could be incorporated into the new buildings under the eaves in suitable locations and or nest boxes could be erected in retained trees.
- 7.5.4 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

## **7.6 Otter**

- 7.6.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any otter activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.6.2 The points in respect of not working at night and leaving open trenches with means of escape detailed for badgers are also applicable to this species which is only likely to pass through the site at night.

## **7.7 Water vole**

- 7.7.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any Water vole activity is subsequently found, all site works should cease and further ecological advice should

be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

- 7.7.2 Re-grading of the stream and its ecological improvement will provide better opportunities for use of the site post development than currently occur.

## **8. CONCLUSION**

- 8.1.1 Ecological surveys, site appraisals and impact assessments were carried out with respect to land comprising open ground at Ferngrove House, Bury. It is proposed new houses will be constructed on the site.
- 8.1.2 Amphibians, bats and nesting birds are known to occur in the local area, there was however no conclusive evidence of any specifically protected species regularly occurring on the site or the surrounding areas which would be negatively affected by site development following the mitigation proposed.
- 8.1.3 The vegetation to be cleared has a low ecological significance in the local area; the trees close to but outside the development area are generally of low quality but are to be retained.
- 8.1.4 The protection of trees on the site boundary and landscaping will promote structural diversity in both the canopy and at ground level and will encourage a wider variety of wildlife to use the site than already occurs.
- 8.1.5 Contractors will be observant for protected species and all nesting birds. Should any species be found during construction, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

## 9. REFERENCES

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

Hundt, L. (2012) Bat Surveys: Good Practice Guidelines (Second Edition). BCT, London.

Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit. Reprinted by JNCC, Peterborough. - See more at: <http://www.cieem.net/habitats-general#sthash.mJYlrP8L.dpuf>

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. (1991). *New Flora of the British Isles*. Cambridge University Press.