



Well House Farm,  
Duddon Common Lane,  
Chester.

On behalf of CB Homes.

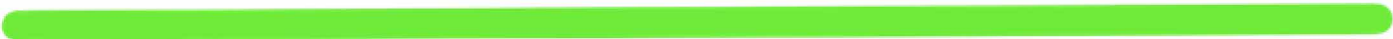
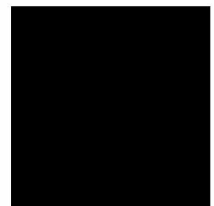
**Ecological Appraisal**

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Author:

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Appendix 1 – Phase 1 Habitat plan and Key

# 1 EXECUTIVE SUMMARY

- 1.1 Leigh Ecology Ltd was commissioned to undertake a preliminary ecological assessment of Well House Farm, Duddon Common Lane. This survey was undertaken on 22<sup>nd</sup> March 2022.
- 1.2 The large site comprises predominantly semi-improved grassland, with bordering species-rich and species-poor hedgerows. A building atop hard standing ground also features on site.
- 1.3 The proposed development plans to replace the current building with another dwelling.
- 1.4 Trees noted along the boundaries, as well as adjacent dwellings and suitable features found throughout the site offer ideal bat foraging habitat.
- 1.5 During a bat survey undertaken within the building, several instances of bat droppings were identified throughout the second floor. The building has been left in an abandoned state during a renovation, meaning the roof space is open; several large gaps feature within the walls.
- 1.6 The building is classified as **high bat potential**; therefore, further bat activity surveys are required to determine the presence of bats within the building and onsite.
- 1.7 Bordering hedgerows, planted shrub and amenity features on site all offer ideal bird nesting habitat.
- 1.8 
- 1.9 No ponds occur within 250m from the proposed site.
- 1.10 Proposals include the removal of the current building, with a subsequent replacement dwelling being built in its place. Therefore, the current proposals should not have a detrimental impact on aforementioned species.
- 1.11 Any vegetation clearance to facilitate the development should be undertaken outside the bird-nesting season, April – August.

## 2 INTRODUCTION

### Background

- 2.1 Leigh Ecology Ltd was commissioned by CB Homes to undertake an Ecological Appraisal of an abandoned development of a dwelling named Well house farm, Duddon. (approx. National Grid Reference (NGR) SJ519653); refer to redline boundary shown on Figure 2.1 below.
- 2.2 Sites of biodiversity conservation value, habitats and species in UK and Local Biodiversity Action Plans (BAPS) and protected species are material considerations in the planning process (Department for Communities and Local Government. 2012).
- 2.3 The study is documented in this report and includes the following:
1. Preliminary ecological baseline for the site;
  2. Protected mammals' assessment of the site;
  3. Potential ecological constraints to the development of the site; and
  4. Further ecological work necessary for a planning submission.
- 2.4 All Work was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Practice.



Figure 2.1: Site Location.

### 3 METHODOLOGY

- 3.1 A preliminary understanding of the ecological baseline of the development site (hereafter referred to as 'the site') was derived through desk study and site survey.

#### Site survey

- 3.2 An Ecological Assessment was undertaken on 22<sup>nd</sup> March 2022 following Joint Nature Conservation Committee (JNCC) methodology (2010). This identified the habitat types on the site and the presence/absence of protected/notable species<sup>1</sup>. The results of the survey are detailed on a Phase 1 Habitat plan; refer to Appendix 1. Target notes were used to identify specific features of ecological interest; refer to Appendix 2.
- 3.3 Water bodies within 250m of the site were also identified from Ordnance Survey (OS) maps and through aerial photography.

#### Bat Surveys

##### Building and Trees Internal and External Inspection

- 3.4 An external inspection of the building and trees on site was undertaken; the primary objective of the survey was to locate any signs of bat activity, for example:

Bat droppings;

Feeding remains;

Grease staining / urine marks;

- 3.5 As tree roosts are extremely difficult to locate, it is prudent to note all potential roost entrances, cracks, cavities, woodpecker holes, fissures, in order to undertake emergence surveys should there be an impact on the trees. The detailed survey of the building is covered later within this report.

#### Bird Surveys

- 3.6 Habitats that may contain bird nests were checked for current and historic nests and breeding

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<sup>1</sup> Notable species are those which hold a specific conservation status e.g., Biodiversity Action Plan Priority Species, IUCN Red Data Species etc. Some notable species may also be legally protected.

activity. Bird activity occurring on site was also noted.

3.7



## 4 RESULTS

### Site survey

#### Habitats within the survey area

- 4.1 The locations of the habitats within the survey area are shown in Appendix 1, which should be read together with the accompanying Target Notes (TNs); refer to Appendix 2 and Photographs within the text. Habitat descriptions are provided below; plant species are referred to using their English names.
- 4.2 A map showing the habitat areas is presented in Appendix 1.
- 4.3 The following paragraphs describe the habitats within the proposed site, providing a basic description of the most dominant species occurring.
- 4.4 The target site is a large, predominantly semi-improved grassland site, with a parcel of hard standing ground with an abandoned development dwelling atop. Several amenity features can be found across the site, and dense hedgerows border.
- 4.5 The approximate site grid reference is SJ519653.
- 4.6 The proposed development will see the removal of the abandoned development and the subsequent replacement with another dwelling.



Photograph 1: A view of the southern corner of the site. A wooden fence and adjacent hawthorn hedgerow border this corner.





Photograph 2: Two parcels of planted shrubs and bushes run adjacent to the hard standing driveway. These shrubs offer ideal bird nesting habitat.



Photograph 3: A front view of the dwelling on site. The building was found with boarded windows and sections of the external roof have been removed.



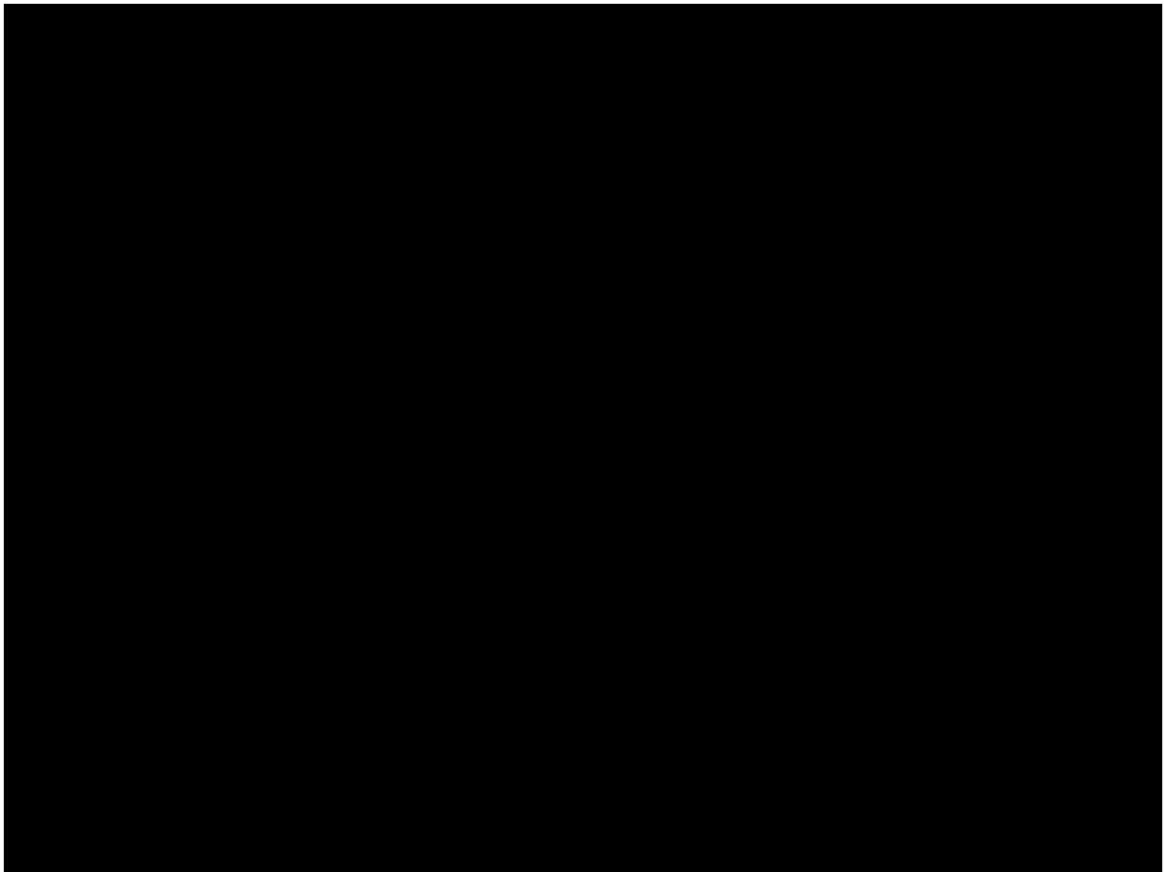
Photograph 4: A view of the rear of the building. Large entry points can clearly be seen (circled) creating ideal opening to a sheltered foraging space for bats.



Photograph 5: A distant view from the south-westerly corner of the site. An adjacent garage building offers negligible bat roost and bird nesting potential. The stripped roof atop the main building can be seen.



**Photograph 6:** A view of the surrounding land. A ribbon of bare ground can be seen from the building. The majority of the land surrounding the buildings on site comprises semi-improved grassland.





Photograph 8: Amenity features are found throughout the site. A line of fruit trees sits toward the centre of the site.



Photograph 9: A blackthorn hedge also features toward the western boundary of the site. Several common bird species were noted throughout the hedge such as robin, blackbird and blue tit.



Photograph 10: Large fields of semi-improved grassland feature throughout, bounded by dense, species-rich hedgerow.



Photograph 11: A brook runs from south to north. This running water must be considered throughout the development process, ensuring no material run off leaks into the brook.

## Site Boundaries

- 4.7 The northern site boundaries comprise both species-rich and species-poor hedgerows. Common bird species feature throughout these boundaries, which directly link the site to the wider area. A wooden fence is found along the southern boundary of the site, accompanied by hedgerow in parts. Along the north-western border, a metal fence is present, creating a hard border.

## Surrounding habitats

- 4.8 The site is adjacent to neighbouring dwellings, with large open fields and bordering hedgerows making up the surrounding area.

## Protected and notable species

### Invertebrates

- 4.9 No notable invertebrate species were recorded.
- 4.10 It is possible that some of the commoner moth and butterfly species may frequent the site, particularly the tall ruderal vegetation when they are in the flowering period.

### Amphibians

- 4.11 Great crested newts are protected by Schedule 2 of the Convention of Habitats and Species Regulations (2010) and Schedule 5 of the Wildlife and Countryside Act (1981, as amended), which provide protection to both the individuals and the areas they use for rest, shelter or breeding. Great crested newts are also a UK BAP and LBAP priority species.
- 4.12 The desktop study and site survey identified no ponds within 250m from the proposal site.

### Reptiles

- 4.13 The wider landscape is dominated by rural environment; however, the habitat provided within the scrubby areas offers low to moderate habitat for reptiles. South facing banks with open sunny spots were lacking within the proposed site. Additionally, the site is fragmented from any potential preferred habitats.

### Birds

- 4.14 The site provides suitable nesting and foraging habitat (e.g., scrub areas and shrubby hedgerows) for a range of bird species, including UK BAP and LBAP species such as duncock, song thrush, starling, house sparrow, tree sparrow, bullfinch and garden and woodland birds. House sparrow were noted entering the building above the boarded windows.

## Bats

- 4.15 The trees within the proposed site and located within the western boundary hedgerow were assessed as providing low bat roosting potential, i.e., they possess little in the way of features suitable for roosting bats, such as rot-holes, fissures, cracks and hollows.
- 4.16 The main dwelling building that occurs on site was subject to a full bat scoping survey (subject to BCT Guidance), which covered the whole of the building. Various signs of bat activity were identified during the survey, with a large number of bat droppings and feeding remains found throughout.

## Otters and Water Voles

- 4.17 The brook on site was assessed for suitability for otters and water vole. After consideration, it is deemed that the water body offers no suitable habitat for these species.



Photograph 12: An internal view of the first floor of the building. The roof space has been stripped back in places, as a renovation on the previous dwelling has been abandoned.



Photograph 13: Another view of the internal roof space. Large openings have been created by wall demolition.



Photograph 13: Droppings found on the first floor.



## Other mammals

- 4.19 The proposed site also provides suitable habitat for hedgehog *Erinaceus europaeus* and for other mammal species such as grey squirrel *Sciurus carolinensis*, fox *Vulpes vulpes*, rabbit *Lepus curpaeums* and small mammals such as voles and mice.
- 4.20 Signs of fox usage is pictured (below) and mole hills were scattered across the southern section of the site. The development will likely be contained within the footprint of the current hard standing, meaning that these species will not be impacted.



Photograph 14: Fox faeces found on site

## 5 CONSTRAINTS AND RECOMMENDATIONS

- 5.1 The proposed development (within the red line site boundary as shown in Figure 2.1) will consist of a replacement dwelling.
- 5.2 Construction and post construction impacts are therefore possible upon both the habitats and species within and immediately adjacent to the site. Ecological constraints and recommendations with regard to any development of the site are discussed below.

### Habitats

- 5.3 The precise proposals have not been provided, but it is thought that the subsequent development will occur within the current footprint on site. Meaning small amount of planted shrub or semi-improved grassland may be lost.
- 5.4 It is uncertain whether bordering hedgerows will be retained within development plans.
- 5.5 The subject dwelling on site will be removed during the development. Bat activity and nesting birds are likely within the building; therefore, additional surveys must be undertaken.
- 5.6 Trees retained on site should be protected through the site clearance and construction phases.
- 5.7 This should be achieved by erecting temporary fencing around a standard root protection zone and maintaining it throughout the period of the works, in accordance with BS 5837: 2012 'Trees in relation to design, demolition and construction'.
- 5.8 There is the potential for some of the habitats on site to support protected species; this is discussed below.

### ***Protected species***

- 5.9 The proposal site is fragmented from any potential reptile habitats; therefore, it is unlikely that the proposal will impact on reptiles.

## Amphibians

- 5.10 A small brook runs adjacent to the western site border; however, the running water is unsuitable for amphibians and will also act as a barrier to immigration of amphibians to the site.
- 5.11 Furthermore, on site habitats were considered to be of low quality for protected amphibian species such as GCN.

## Birds

- 5.12 Nesting house sparrow were noted during the site survey within the building.
- 5.13 Any potential removal of habitat associated with this development is regarded as relatively insignificant for birds given the abundance of similar habitat in the surrounding landscape. However, nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments) and it would be an offence to damage or destroy a nest or otherwise disturb a nesting bird.
- 5.14 The target building provides habitat for nesting birds, house sparrows were noted nesting within the building during the survey; therefore, it is suggested that any works are carried out outside the bird-breeding season (at least March to August) and subsequent mitigation proposals in the form of house sparrow bricks should be implemented within proposal plans.
- 5.15 Because of the possible presence of nesting birds, it is recommended that any necessary removal of bordering hedgerow takes place outside of the bird-breeding season as above.
- 5.16 Should this not be possible, a pre-works check by a qualified ecologist should be undertaken to ensure that nesting birds are absent.
- 5.17 Some compensation in order to mitigate the loss of habitat may be required; this should be located to ensure linkage to foraging habitat, such as planting of hedgerows within the proposed site and along boundaries.

## Bats

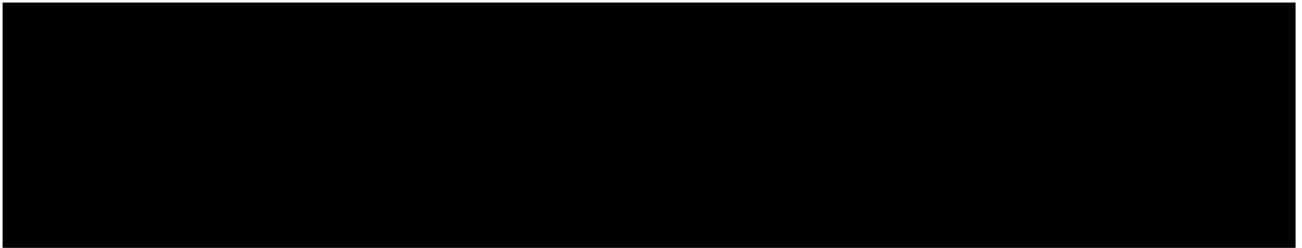
- 5.18 All bat roosts are fully protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010, which defines these animals as European Protected Species. An offence would be committed if roosts, whether occupied or not, were destroyed, damaged or obstructed, or if bats themselves were harmed or disturbed.
- 5.19 The target building on site was fully checked for roosting bats; several bat droppings and feeding remains were found on the first floor. It is likely, due to the building's composition, that it is used for sheltered foraging habitat due to the large openings and suitable features for visiting bats.
- 5.20 The trees within the site provide little opportunity for roosting bats.
- 5.21 Foraging habitat could be provided by the adjacent hedgerows for bats as navigational flight lines, which could potentially hold some importance for colonies of roosting bats that may be near the site.
- 5.22 Given the composition of the habitat, which is likely to be removed during construction, it is possible that severance and loss of linear features will impact on bat usage of the site, resulting in a negative impact on the local bat population.
- 5.23 Due to the findings of the survey, a set of 3 bat activity surveys should be undertaken between May-August to determine the presence and usage of bats on site.

## Other mammals

5.26 Further hedgehog surveys are not considered necessary given the abundance of suitable habitat for this species in the surrounding landscape.

## Summary

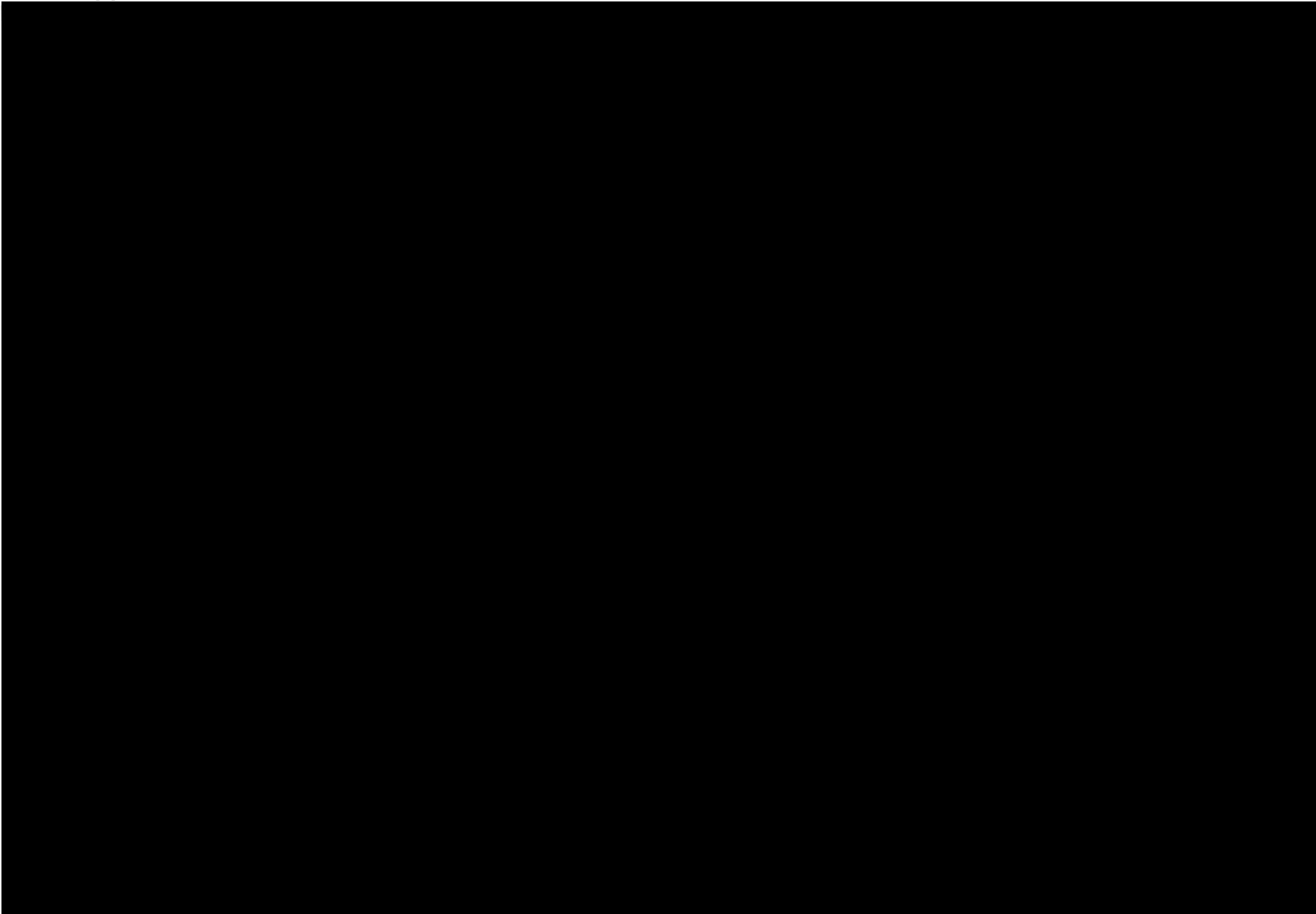
5.27 In conclusion, further bat activity surveys are to be commissioned to determine the presence of bats on site. Subsequent mitigation proposals based on bat activity and house sparrow activity should then be implemented.



5.29 The brook which flows around the site should be protected from pollution from building materials, therefore it is suggested that a 5m buffer no go area is established during the demolition and construction works.

## 6 REFERENCES

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## Appendix 2 Target Notes

