



## UPDATE ECOLOGICAL APPRAISAL

### **GILES FARM**

HIGHAM, KENT

## DISCLAIMER

This report has been prepared by Native Ecology in its professional capacity as consultants in accordance with the terms and conditions set out within the contract with the commissioning party (the 'Client').

This report is issued to the Client for their sole use and for the intended purpose as stated in the agreement between the Client and Native Ecology under which this work was completed. No part of this report may be copied or reproduced by any means without written permission from Native Ecology. The use of this report by unauthorised third parties is at their own risk and Native Ecology accepts no duty of care to any such third party. Opinions, information and recommendations provided within the report should be read and relied upon only in the context of the document as a whole. Opinions and recommendations are based upon Native Ecology using due skill and diligence with the information made available at the time that Native Ecology performed the work. The content of this report has been provided in accordance with the provisions of the CIEEM Code of Professional Conduct and to the principles and requirements of British Standard BS42020.

Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be sought.

|                      |                                           |
|----------------------|-------------------------------------------|
| Reference            | Ref: 1512_R01_Update Ecological Appraisal |
| Report status        | Information                               |
| Author               | Miriam Anderson BSc (Hons)                |
| Checked by           | Amy Wright BSc MSc CEcol MCIEEM           |
| Issue date           | 27th March 2024                           |
| Revision history     | -                                         |
| Revision description | -                                         |

*Native Ecology LLP is a Limited Liability Partnership registered in England and Wales, number OC424800.*

*Any reference to a partner in relation to Native Ecology LLP means a member of Native Ecology LLP.*

*Registered Office: Camburgh House, 27 New Dover Road, Canterbury, Kent, CT1 3DN*

Native Ecology, Unit 90, Waterham Business Park, Highstreet Road, Waterham, Faversham, Kent. ME13 9EJ

t: 01227 656757

e: [info@native-ecology.co.uk](mailto:info@native-ecology.co.uk)

w: [www.native-ecology.co.uk](http://www.native-ecology.co.uk)

**CONTENTS**

|            |                                                                        |           |
|------------|------------------------------------------------------------------------|-----------|
| <b>1.</b>  | <b>SUMMARY</b>                                                         | <b>4</b>  |
| <b>2.</b>  | <b>INTRODUCTION</b>                                                    | <b>6</b>  |
| <b>3.</b>  | <b>SITE LOCATION PLAN</b>                                              | <b>8</b>  |
| <b>4.</b>  | <b>EXISTING SITE PLAN</b>                                              | <b>9</b>  |
| <b>5.</b>  | <b>PROPOSED SITE LAYOUT</b>                                            | <b>10</b> |
| <b>6.</b>  | <b>METHODOLOGY</b>                                                     | <b>11</b> |
| <b>7.</b>  | <b>CURRENT ECOLOGICAL CONDITIONS</b>                                   | <b>15</b> |
| <b>8.</b>  | <b>PHOTOGRAPHS</b>                                                     | <b>23</b> |
| <b>9.</b>  | <b>ECOLOGICAL CONSTRAINTS</b>                                          | <b>24</b> |
| <b>10.</b> | <b>FURTHER SURVEY WORK / ASSESSMENT</b>                                | <b>27</b> |
| <b>11.</b> | <b>AVOIDANCE AND MITIGATION MEASURES</b>                               | <b>29</b> |
| <b>12.</b> | <b>SUGGESTED ENHANCEMENT MEASURES</b>                                  | <b>32</b> |
| <b>13.</b> | <b>REFERENCES</b>                                                      | <b>34</b> |
| <b>14.</b> | <b>APPENDIX 1: SUMMARY OF PLANNING POLICY AND LEGISLATION</b>          | <b>35</b> |
| <b>15.</b> | <b>APPENDIX 2: SUITABILITY ASSESSMENT OF ROOSTING HABITAT FOR BATS</b> | <b>40</b> |
| <b>16.</b> | <b>APPENDIX 3: HABITAT PLAN</b>                                        | <b>41</b> |
| <b>17.</b> | <b>APPENDIX 4: WATERBODY LOCATION PLAN</b>                             | <b>42</b> |

## 1. SUMMARY

- S.1 This report details a updated Ecological Appraisal undertaken in respect of proposed development at Giles Farm, Higham, Kent, ME3 7LR.
- S.2 The original survey area has been divided into two phases. This report details Phase 1, which includes the survey area of 0.01ha of the original survey site.
- S.3 Proposals include the conversion of a former office building into a residential unit, including replacing materials where needed.
- S.4 A PEA site visit was undertaken by Native Ecology on the 4th March 2024.
- S.5 The application site comprises predominately of hardstanding and buildings, with small areas of sparsely vegetated land.
- S.6 The application site lies directly adjacent to the Thames Estuary and Marshes Ramsar, SPA and SSSI and therefore could result in direct and indirect impacts to the designated Site. As part of the planning process, a Habitat Regulations Assessment (HRA) will be required to formally assess whether proposals will impact the adjacent Ramsar site and SSSI and the nearby SPA. The first stage of the HRA process, the 'screening' stage, will assess the potential for 'likely significant effects' of development proposals on the SPA and Ramsar site, such as noise produced during the construction phase and ascertain whether further surveys, such as winter bird surveys, are required to inform the assessment.
- S.7 The proposed development, comprising the conversion of former office buildings to residential units, within the Site may result in indirect and in-combination impacts, including an increase in visitor pressure to the designated sites. Consideration would need to be made by the Local Authority to ensure that the proposals adhere to the agreed approach within the North Kent Strategic Access Management and Monitoring Strategy (SAMMS) to mitigate for additional recreational impacts and that suitable measures are in place to secure appropriate mitigation.
- S.8 Further survey work/assessment (detailed in Section 10) is recommended to determine the presence / likely absence of roosting bats in buildings and great crested newt. The results of this further survey work will inform suitable mitigation and compensation measures (if required).
- S.9 Mitigation, without the requirement for further survey work, is recommended for foraging and commuting bats, hedgehog and reptiles (detailed within Section 11).
- S.10 In accordance with the Environment Act 2021, the Site qualifies as a 'small site' and will be subject to the general biodiversity gain condition requiring a 10% biodiversity net gain from **2nd April 2024**.
- S.11 Section 12 includes initial recommended appropriate biodiversity enhancement measures which could be included within development proposals. These measures will also be informed through a biodiversity net gain assessment.

- S.12 It is recommended that the results of the update Ecological Appraisal report and any other further ecological survey work is incorporated into an Ecological Impact Assessment (EclA) report, which should be submitted with the planning application. The EclA report should assess the impacts of proposed development on ecological features and provide an Ecological Mitigation Strategy detailing the measures that will be implemented to avoid, minimise and compensate for impacts.

## **APPENDICES**

Appendix 1: Overview of relevant legislation, which should be read in conjunction with this report.

Appendix 2: Overview of the suitability assessment of bat roosting habitat (structures and trees).

Appendix 3: Habitat Plan in accordance with UKHab 2.0

Appendix 4: Plan showing location of waterbodies within 250m of the Site boundary.

## 2. INTRODUCTION

- 2.1 This report details a update Ecological Appraisal undertaken in respect of proposed development at Giles Farm, Higham, Kent, ME3 7LR.

*Table 1. Site Location*

|                            |                                   |
|----------------------------|-----------------------------------|
| Site address               | Giles Farm, Higham, Kent, ME3 7LR |
| Grid reference (at centre) | TQ 71575 74071                    |
| Local Planning Authority   | Higham Parish Council             |
| County                     | Kent                              |
| National Character Area    | Greater Thames Estuary            |

- 2.3 Figure 1, Section 3 provides a site location plan.

### COMMISSION

- 2.4 Native Ecology was commissioned by Duncan Graham Partnership in February 2024 to undertake an updated Ecological Appraisal within the application site.

### APPLICATION SITE

- 2.5 The application site, hereafter refereed to as ‘the Site’, comprises predominately of hardstanding and buildings, with small areas of sparsely vegetated land. The Site extends to approximately 0.01ha.
- 2.6 Figure 2, Section 4 provides an existing site plan.

### PROPOSED WORKS

- 2.7 Proposals include the conversion of a former office building into a residential unit, including replacing materials where needed.
- 2.8 Figure 3, Section 5 provides a proposed site layout plan.

### PREVIOUS ECOLOGICAL SURVEY WORK

- 2.9 A Preliminary Ecological Appraisal (PEA) was undertaken by Native Ecology in June 2020. Subsequent survey work was undertaken for bats and reptiles within the Site in 2020 (Native Ecology, 2020).
- 2.10 Table 2 below provides a summary of survey results.

*Table 2. Summary of survey results (continued overleaf)*

| Survey        | Results                                                                                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Roosting bats | Bat presence / absence survey work was undertaken within the Site between July and September 2020. A day roost for one common pipistrelle was recorded within Building B4. |

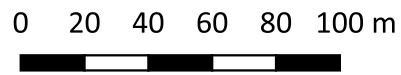
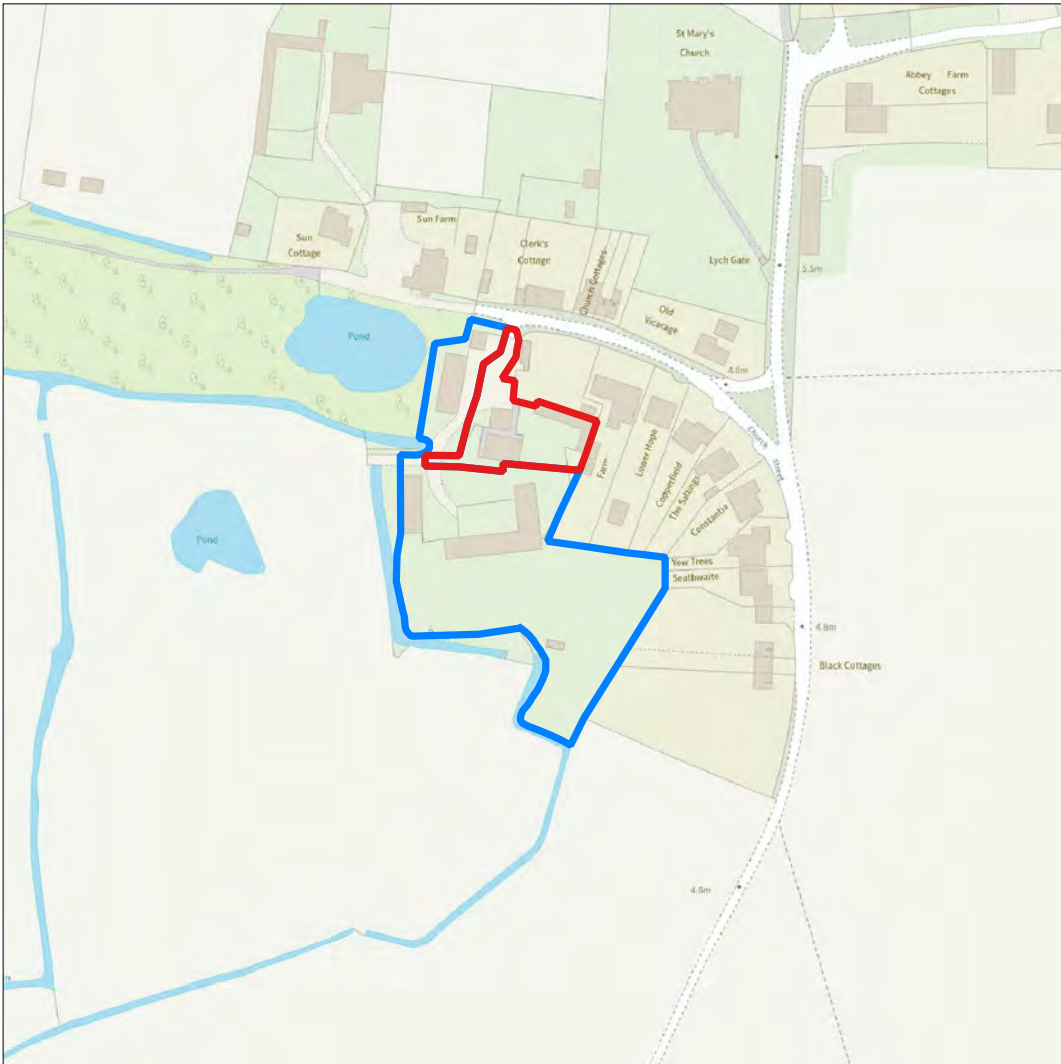
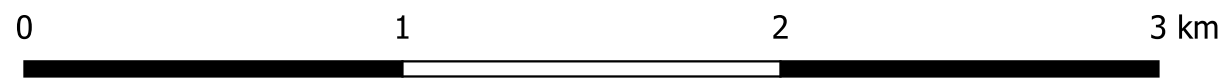
|          |                                                                                                                                                                                                                                                             |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reptiles | Presence / absence surveys were undertaken between July and August 2020. A small population of slow worm was recorded, associated with the southern boundary and the north-western corner of the Site. A peak count of four adult slow worms were recorded. |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## PURPOSE OF REPORT

2.12 This report aims to provide general advice on ecological constraints associated with proposed development within the Site and includes recommendations for mitigation and further survey work, where required.

2.13 The objectives of the report are to:

- Describe the current ecological conditions present within the Site.
- Identify any key ecological constraints to the proposed development both with regards protected species and sites.
- Identify where mitigation will allow significant ecological effects to be avoided or minimised wherever possible.
- Identify any update ecological surveys required in order to assess the possible impact on protected and important / notable species.
- Recommend ecological enhancements to be incorporated into the development proposals.



|                                                                                                                                               |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <br>native ecology<br>PROMOTING BIODIVERSITY INTEGRATION |                           |
| Site location plan                                                                                                                            |                           |
| Giles Farm<br>Higham<br>Kent                                                                                                                  |                           |
| Drawing ref:                                                                                                                                  | Figure 1                  |
| Revision:                                                                                                                                     | -                         |
| Date:                                                                                                                                         | 26/03/2024                |
| Scale:                                                                                                                                        | 1:20,000<br>(Main canvas) |
| Paper size:                                                                                                                                   | A3                        |

4. EXISTING SITE PLAN

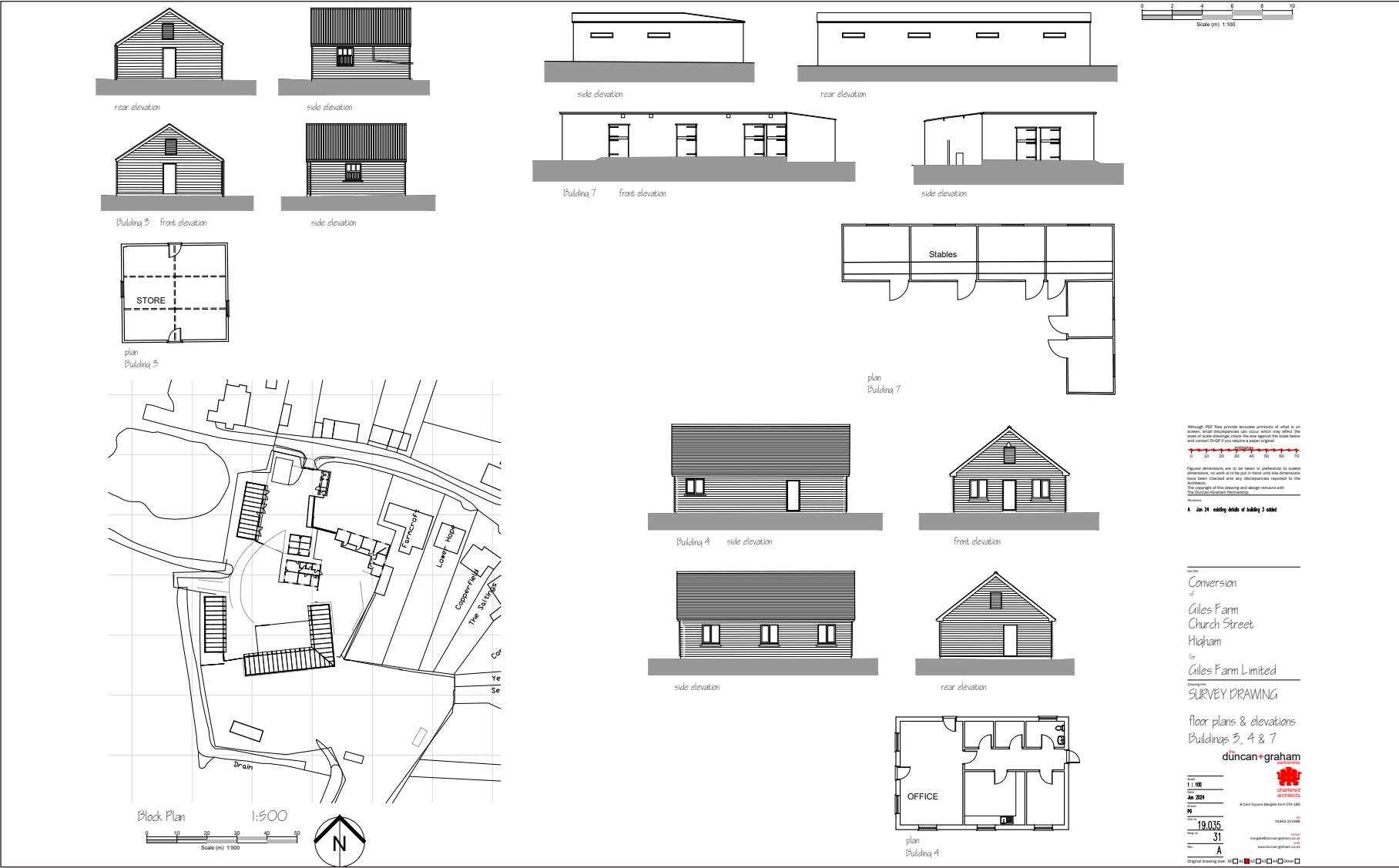


Figure 2. Existing Site Plan (The Duncan + Graham partnership, Drawing No. 19.035 31, Revision A, dated Jan 2024).

## 5. PROPOSED SITE LAYOUT



Figure 3. Proposed Site Layout (The Duncan + Graham Partnership, Drawing No. 19.035 33, Revision A, dated Jan 2024).

## 6. METHODOLOGY

### FIELD STUDY

- 6.1 An update Ecological Appraisal Site visit was undertaken by Megan Knapp of Native Ecology on the 4th March 2024.

*Table 3. Survey details*

|              |                                                        |
|--------------|--------------------------------------------------------|
| Survey date  | 4th March 2024                                         |
| Surveyor     | Megan Knapp BSc (Hons)                                 |
| Time on site | 9:40 - 11:00                                           |
| Weather      | 11°C, 0% cloud cover, calm breeze, no rain, ground dry |

### DESK STUDY

#### Zone of Influence

- 6.2 The 'zone of influence' for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2017a). This report provides an assessment of the effects of a proposed development on protected or ecologically valuable sites, habitats or species where these effects extend beyond the development boundary of the Site.

#### Designated sites

- 6.3 Potential impacts to designated sites, including National Site Network (NSN) sites and SSSIs, have been considered.
- 6.4 The Multi Agency Geographic Information for the Countryside (MAGIC) website was used to obtain information about statutory designated sites of international importance such as Special Protection Areas (SPA) within 7.2km of the Site.
- 6.5 Information was obtained about statutory designated sites of national importance such as Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR) within 2km of the Site and ancient woodland within 500m of the Site.
- 6.6 Kent Landscape Information System (KLIS) was used to identify Local Sites, such as Local Wildlife Sites (LWS), located within 1km of the Site.

#### Data search

- 6.7 Records were obtained from the Kent Reptile and Amphibian Group (KRAG) within 1km of the Site in February 2024.
- 6.8 Ordnance survey maps, the Multi Agency Geographic Information for the Countryside (MAGIC) website and aerial images were used to identify waterbodies within 250m of the Site boundary. MAGIC Map was also used to obtain information on locations where European Protected Species Mitigation (EPSM) Licences for great crested newt, roosting bats and dormice have been issued by Natural England within 1km of the Site.

### UK Habitat Classification 2.0

- 6.9 Habitats within the Site were mapped and classified in accordance with the The Professional Edition of the UK Habitat Classification 2.0.
- 6.10 There are 5 levels of hierarchy, which provide an increasing level of detail. For the purpose of this assessment, habitats have been mapped for Primary Habitats up to Level 4.
- 6.11 Secondary codes have been assigned, where appropriate. These Secondary Codes allow recording of additional information, linked to the Primary Habitats. In some cases, habitat types are defined by a Secondary Code only, where Primary Habitats do not sufficiently represent the habitat present.

### Protected species and habitats

- 6.12 During the survey the species and habitats identified within the Site were recorded. An assessment was also made as to the presence or potential presence of protected, important or Nationally Rare species.
- 6.13 Protected species and habitats considered include those listed under the Schedules of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and of the Wildlife and Countryside Act 1981.
- 6.14 In addition, an assessment has been made as to the possible impacts of the proposed development on nature conservation interests, in accordance with information relevant to the National Planning Policy Framework and Local Planning Policy.

### Bats

- 6.15 The suitability of roosting habitat and foraging and commuting habitat within the Site was assessed following recommendations provided within Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition, Bat Conservation Trust (Collins, 2023) (see Appendix 2 for suitability assessment and survey effort required for structures and trees).

### *Roost Assessment (buildings and structures)*

- 6.16 A systematic search of the exterior and internal of buildings within the Site was undertaken to identify potential bat access points and roosting places and to locate any evidence of bats such as bat droppings, urine staining and fur-oil staining. The inspection included exterior features of the buildings, such as sills, window panes, walls and the ground beneath potential access points to look for signs of bats, such as droppings. Buildings were categorised as none, negligible, low, moderate or high suitability.
- 6.17 No internal access was available for Buildings B1 and B2.
- 6.18 There are no trees present within the Site, therefore a preliminary ground level roost assessment of trees was not undertaken during the update Ecological Appraisal site visit.

*Badger*

- 6.19 During the Site survey any badger field signs observed were recorded and mapped. These included; sett entrances, latrines, pathways, snuffle holes, footprints, and push-throughs.

*Reptiles*

- 6.20 The suitability of habitats within the Site to support reptiles was assessed during the Preliminary Ecological Appraisal Site visit. Any incidental sightings were recorded.

*Hazel dormice*

- 6.21 The suitability of habitats within the Site to support hazel dormice was assessed during the Preliminary Ecological Appraisal Site visit. Any incidental sightings or field signs, such as natural nests, were recorded.

*Great crested newt*

- 6.22 The level of survey effort and data collection required to support a Planning Application or European Protected Species Mitigation (EPSM) Licence for great crested newts is relative to the potential impact. For EPSM Licence applications, typically ponds within 250m of the construction zone are surveyed for the presence (and population assessment) of great crested newts.
- 6.23 Following the guidance of Natural England (2021) waterbodies located beyond 250m from the development are only surveyed if all of the following conditions are met:
- ponds have potential to support a large great crested newt population;
  - the development footprint contains particularly favourable habitat, especially if it constitutes the majority available locally;
  - the development would have a substantial negative effect on that habitat; and
  - there is an absence of dispersal barriers.
- 6.24 Based on the listed criteria above, a proportionate survey area for the Site includes the assessment of any ponds within 250m of the construction zone.

*Riparian mammals*

- 6.25 The suitability of habitats within the Site to support riparian mammals (such as beaver, otter and water vole) was assessed during the update Ecological Appraisal site visit. Any incidental sightings or field signs were recorded.

*Habitats and Species of Principal Importance*

- 6.26 An assessment was made as to the likely presence of Habitats and Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

## LIMITATIONS

- 6.27 This report aims to provide general advice on ecological constraints associated with the development of the Site, it does not include detailed information on particular species or species groups but instead makes recommendations for further, species-specific surveys required.
- 6.28 Although any invasive plant species recorded during the update Ecological Appraisal survey were noted, this survey does not comprise a Schedule 9 plant survey.
- 6.29 Internal access was not provided for Buildings B1 and B2 during the update Ecological Appraisal site visit.
- 6.30 In accordance with CIEEM guidance, consideration should be given to the validity of survey data after a period of 12 month from the date of the survey. This may require a Site visit to assess whether ecological conditions within the Site have changed and may require further ecological survey work due to the transient nature of some protected species.

## 7. CURRENT ECOLOGICAL CONDITIONS

### DESIGNATED SITES

#### Statutory Sites of International Importance

7.1 There are two Special Protection Area (SPA) and two Ramsar located within 7.2km of the Site.

*Table 4. Details of Statutory Sites of International Importance within 7.2km of the Site boundary (continued overleaf).*

| DESIGNATION | SITE NAME                  | DISTANCE & DIRECTION FROM SITE                                                                                                           | QUALIFYING FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ramsar      | Thames Estuary and Marshes | Directly adjacent to the south-west corner of the Site.<br><br>The majority of the Site is located approximately 12m east of the Ramsar. | Qualifies under Criterion 2 for supporting one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.<br><br>Qualifies under Criterion 5 for supporting large assemblages of waterfowl of international importance in winter.<br><br>Qualifies under Criterion 6 for supporting species/ populations of wetland birds that occur at levels of international importance.<br>(JNCC, 2000)                                                                                                                                                                                                                         |
| SPA         | Thames Estuary and Marshes | 0.2km north                                                                                                                              | Article 4.1 of the Habitats Directive for supporting populations of European importance of over wintering hen harrier ( <i>Circus cyaneus</i> ) and breeding avocet ( <i>Recurvirostra avosetta</i> ).<br><br>Article 4.2 of the Habitats Directive for supporting dunlin ( <i>Calidris alpina alpina</i> ), red knot ( <i>Calidris canutus</i> ), black-tailed godwit ( <i>Limosa limosa islandica</i> ), grey plover ( <i>Pluvialis squatarola</i> ) and redshank ( <i>Tringa totanus</i> ).<br><br>The site regularly support on passage common ringed plover ( <i>Charadrius hiaticula</i> ). Article 4.2 of the Habitats Directive for supporting an internationally important assemblage of birds.<br>(JNCC, 2015) |

| DESIGNATION | SITE NAME                  | DISTANCE & DIRECTION FROM SITE | QUALIFYING FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|----------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ramsar      | Medway Estuary and Marshes | 6.4km south east               | <p>Qualifies under Criterion 2 for supporting several nationally scarce plants, at least 12 British Red Data Book species of wetland invertebrates and a significant number of non-wetland British Red Data Book species.</p> <p>Qualifies under Criterion 5 for supporting large assemblages of waterfowl of international importance.</p> <p>Qualifies under Criterion 6 for supporting species/populations of wetland birds that occur at levels of international importance. (JNCC, 2008)</p>                                                                                                                                                                                                                                                                                                                                 |
| SPA         | Medway Estuary and Marshes | 6.4km south east               | <p>Article 4.1 of the Habitats Directive for supporting populations of European importance of breeding avocet (<i>Recurvirostra avosetta</i>) and little tern (<i>Sterna albifrons</i>) and over-wintering avocet.</p> <p>Article 4.2 of the Habitats Directive for supporting ringed plover (<i>Charadrius hiaticula</i>) on passage and over-wintering black-tailed godwit (<i>Limosa limosa islandica</i>), dark-bellied brent goose (<i>Branta bernicla bernicla</i>), dunlin (<i>Calidris alpina alpina</i>), grey plover (<i>Pluvialis squatarola</i>), pintail (<i>Anas acuta</i>), redshank (<i>Tringa totanus</i>), ringed plover (<i>Charadrius hiaticula</i>) and shelduck (<i>Tadorna tadorna</i>).</p> <p>Article 4.2 of the Habitats Directive for regularly supporting at least 20,000 waterfowl. (JNCC, 2015)</p> |

7.3 Statutory sites of international importance are considered further in Section 9.

#### Statutory Sites of National Importance

7.4 There is one Site of Special Scientific Interest (SSSI) located within 2km of the survey area.

Table 5. Details of Statutory Sites of National Importance within 2km of the Site boundary.

| DESIGNATION | SITE NAME                  | DISTANCE & DIRECTION FROM SITE                                                                                                                | QUALIFYING FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SSSI        | Thames Estuary and Marshes | <p>Directly adjacent to the south-west corner of the Site.</p> <p>The majority of the Site is located approximately 12m east of the SSSI.</p> | <p>The South Thames Estuary and Marshes SSSI from Gravesend to the eastern end of the Isle of Grain forms a major component of the Greater Thames Estuary.</p> <p>The site consists of an extensive mosaic of grazing marsh, saltmarsh, mudflats and shingle characteristic of the estuarine habitats of the north Kent marshes. Freshwater pools and some areas of woodland provide additional variety and complement the estuarine habitats.</p> <p>The site supports outstanding numbers of waterfowl with total counts regularly exceeding 20,000. Many species regularly occur in nationally important numbers and some species regularly use the site in internationally important numbers. The breeding bird community is also of particular interest.</p> <p>The diverse habitats within the site support a number of nationally rare and scarce invertebrate species and an assemblage of nationally scarce plants. (Natural England, 1984)</p> |

7.6 Statutory sites of international importance are considered further in Section 9.

#### Non-statutory sites

##### Local Sites

7.7 There is one Local Wildlife Sites (LWS) located within 1km of the site:

- Canal and Grazing Marsh, Higham LWS lies approximately 0.6km to the south west.

7.8 It is unlikely that the proposed development will impact the LWS either directly or indirectly due to the small scale and nature of proposals and the distance between sites. No further assessment or mitigation is proposed for Local Sites.

##### Ancient Woodland

7.9 There is one parcel of ancient woodland located within 500m;

- Unnamed woodland located approximately 400m east.

7.10 It is unlikely that the proposed development will impact the ancient woodland either directly or indirectly due to the small scale and nature of proposals and the distance between sites. No further assessment or mitigation is proposed for ancient woodland.

## HABITATS WITHIN THE SITE

### Kent Landscape Information Services

- 7.11 The 2012 Kent Habitat Survey categorised the Site as built up areas and improved grassland.

### Habitats of Principal Importance

- 7.12 There are no habitats of principal importance within or adjacent to the Site, therefore no further assessment or mitigation is recommended.

### Other habitats

#### *Buildings*

- 7.13 There are three buildings present within the Site. Table 5 below provides photographs and building descriptions. Buildings have been numbered in accordance with the previous report (Native Ecology, 2020).

*Table 6. Description of buildings within the Site .*

| BUILDING NO. & NAME | DESCRIPTION                                                                                                                                                                                                    | PHOTOGRAPH                                                                            |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| B3                  | Detached single-storey structure, with timber clad elevations and a pitched corrugated metal roof.                                                                                                             |   |
| B4                  | Detached two-storey structure, consisting of timber clad elevations with timber soffit boxes and a pitched slate roof.                                                                                         |  |
| B7                  | Detached single-storey, single-skinned structure, consisting of concrete breeze block elevations. There is no roof to this structure leaving it open to the elements.<br><br>Previously utilised as a stables. |  |

- 7.15 Table 6 below describes the habitats present within the Site in accordance with UK Habitat Classification 2.0.

*Table 7. Habitat types present within the Site, including level (UKHab), size and description (continued overleaf).*

| HABITAT TYPE  |                                 |                                                |                                     | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|---------------------------------|------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level 2 label | Level 3 label                   | Level 4 label                                  | Level 5 label / Secondary codes     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Urban (u)     | Built-up areas and gardens (u1) | Developed land; sealed surface (u1b)           | Buildings (u1b5)                    | See Table 5 for full descriptions.                                                                                                                                                                                                                                                                                                                                                                                                                               |
|               |                                 |                                                | Other developed land (u1b6)         | Located around the Site are areas of concrete and brick hardstanding.                                                                                                                                                                                                                                                                                                                                                                                            |
|               |                                 | Artificial unvegetated, unsealed surface (u1c) | Ruderal / ephemeral vegetation (81) | Majority of the Site consists of a gravelled area with vegetation growth. Species present include common nettle ( <i>Urtica dioica</i> ), dead nettle ( <i>Lamium</i> sp.), bramble ( <i>Rubus fruticosus</i> ), thistle ( <i>Cirsium</i> sp.), geranium ( <i>Pelargonium</i> sp.), bitter cress ( <i>Cardamine hirsuta</i> ), oxtongue ( <i>Picris</i> sp.), cocksfoot ( <i>Dactylis glomerata</i> ), mallow ( <i>Malva</i> sp.) and rush ( <i>Juncus</i> sp.). |
|               |                                 | -                                              | Ruderal / ephemeral vegetation (81) | A small area in the south east corner of the Site consists of a section of ruderal / ephemeral vegetation. Species present include common nettle, bramble, thistle, cleavers ( <i>Galium aparine</i> ), cocksfoot and moss ( <i>Bryophyta</i> sp.).                                                                                                                                                                                                              |

## SURROUNDING HABITATS

- 7.17 The Site is situated within the semi-rural area of the small village of Church Street. Located approximately 7km east of the centre of Gravesend. Surrounding habitats consist of arable fields and residential dwellings, drains and ponds interconnected by hedgerows and trees.

## PROTECTED AND NOTABLE SPECIES

### Bats

- 7.18 According to MAGIC map application there have been no recent EPSM licences obtained for bats within 1km of the Site.
- 7.19 Survey work undertaken in 2020 by Native Ecology, confirmed the presence of a day roost for a single common pipistrelle bat within Building B4
- 7.20 An update roost assessment was undertaken for buildings and structures within the Site. The results are detailed within Table 7 below.

*Table 8. Results of update Roost Assessment*

| BUILDING | POTENTIAL ROOST FEATURES                                                                                                                           | SUITABILITY FOR ROOSTING BATS | PROPOSALS |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------|
| B3       | Gaps in the timber cladding provide roosting opportunities for crevice dwelling bats.                                                              | Low                           | Convert   |
| B4       | Multiple gaps in the timber cladding and around the timber soffit boxes provide suitable roosting opportunities for bats. Confirmed roost in 2020. | High                          | Convert   |
| B7       | The building provides no suitability for roosting bats.                                                                                            | None                          | Convert   |

7.22 Roosting bats in buildings are considered further in Section 9.

#### *Foraging and commuting habitat*

7.23 Habitats within the Site including areas of ruderal / ephemeral vegetation provide low suitability for foraging and commuting bats. However, adjacent habitats, comprising grassland and marshland comprise high suitability.

7.24 Foraging and commuting bats are considered further in Section 9.

#### *Hazel dormice*

7.25 According to MAGIC map application there have been no recent EPSM licences obtained within 1km of the Site.

7.26 There is no habitat suitable for hazel dormice within, or in close proximity to the site. No further survey work or mitigation is required for hazel dormice.

#### *Riparian mammals*

7.27 There is no habitat suitable for otter, beaver or water vole within the Site. Waterbodies and drainage ditches lie to the west of the Site, however, these will not be directly impacted by proposals, which are restricted to areas of hardstanding and gravel. No further survey work or mitigation is required for riparian mammals.

#### *Badger*

7.28 During the survey, no signs of badger were present within the Site and no badger setts were recorded within the accessible 30m of the Site boundary. Given the location of the Site within a semi-rural area, it is possible that badger may enter the Site whilst foraging.

7.29 Badger are considered further in Section 9.

### Hedgehog

- 7.30 The habitats on Site, such as ruderal / ephemeral vegetation, provide suitable shelter opportunities for hedgehogs which have connectivity to the wider landscape. Hedgehogs may therefore be present within the Site.
- 7.31 Hedgehog are considered further in Section 9.

### Birds

- 7.32 Due to the habitats present, no Schedule 1 birds are expected to nest within the Site.
- 7.33 Features within the Site, such as buildings and ruderal / ephemeral vegetation, could provide suitable habitats for Red and Amber listed bird species, as well as common and widespread bird species.
- 7.34 Nesting birds are considered further in Section 9.

### Reptiles

- 7.35 Previous survey work undertaken by Native Ecology (Native Ecology, 2020), confirmed the presence of reptiles within the original site boundary. Within the Phase 1 site boundary a single slow worm was recorded in 2020, located adjacent to Building B4.
- 7.36 Data obtained from Krag include six recent records of slow worms and two recent records of common lizards.
- 7.37 The most recent records include:
- one adult slow worm in 2023 located approximately 0.22km north west; and
  - one juvenile common lizard in 2016 located approximately 0.22km north west.
- 7.38 Habitats within the Site, including hard standing and sparsely vegetated ruderal / ephemeral provide low suitability for reptiles.
- 7.39 Adjacent habitats consist of areas of scrub, tussocky grassland and a large waterbody. These offsite habitats provide high suitability for reptiles.
- 7.40 Reptiles are considered further in Section 9.

### Great crested newt

- 7.41 According to MAGIC map application there have been no recent EPSM licences obtained within 1km of the Site.
- 7.42 Data obtained from Krag include no records of great crested newt within 1km of the Site.
- 7.43 Habitats within the Site including hard standing and sparsely vegetated ruderal / ephemeral provide terrestrial habitats of low suitability for great crested newts.

- 7.44 Adjacent habitats consist of areas of scrub, tussocky grassland and a large waterbody. These offsite habitats provide terrestrial and aquatic habitat of high suitability for great crested newt that may be present in the locality.
- 7.45 There are no waterbodies present within the Site. According to OS maps, MAGIC map and aerial images, there are 13no. waterbodies present within 250m of the site boundary.
- WB1 is a small drainage ditch located approximately 1m west,
  - WB2 is a small drainage ditch located approximately 13m west,
  - WB3 is a large pond located approximately 18m west,
  - WB4 is a small drainage ditch located approximately 58m south,
  - WB5 is a pond located approximately 60m west,
  - WB6 is a small drainage ditch located approximately 90m northwest,
  - WB7 is a small drainage ditch located approximately 115m west,
  - WB8 is a small drainage ditch located approximately 150m south,
  - WB9 is a small drainage ditch located approximately 150m northwest,
  - WB10 is a small drainage ditch located approximately 150m north,
  - WB11 is a small drainage ditch located approximately 195m north,
  - WB12 is a small drainage ditch located approximately 235 west; and
  - WB13 is a small drainage ditch located approximately 230 north.
- 7.46 Given the presence of waterbodies within the surrounding area, the presence of great crested newt within the Site cannot be ruled out.
- 7.47 Great crested newt are considered further in Section 9.

#### Invertebrates

- 7.48 Habitats within the Site, such as the ruderal / ephemeral vegetation, provide suitable habitat to support a range of common and widespread invertebrates. Protected or rare invertebrates are unlikely to be present due to the habitat types present.
- 7.49 No further survey work or mitigation is recommended for invertebrates.

#### Flora

- 7.50 Due to the past and present management of the Site, the areas of habitat are unlikely to support protected plant species. No evidence of Schedule 9 plants was found during the Site survey.
- 7.51 No further survey work or mitigation is recommended for flora.

#### BIODIVERSITY NET GAIN

- 7.52 In accordance with the Environment Act 2021, the Site qualifies as a 'small site' and will be subject to the general biodiversity gain condition requiring a 10% biodiversity net gain after 2nd April 2024.

## 8. PHOTOGRAPHS



*Photograph 1. Area of sparsely vegetated land located within the Site.*



*Photograph 2. Area of concrete hard-standing located across majority of the Site..*

## 9. ECOLOGICAL CONSTRAINTS

- 9.1 The potential impacts of the proposed development on those Ecological Features that have not been scoped out in Section 7 are considered below.

### DESIGNATED SITES

- 9.2 The development site lies adjacent to the east of the Thames Estuary and Marshes Ramsar site and approximately 230m to the south of the Thames Estuary and Marshes SPA. Development proposals have the potential to impact qualifying features for which the nearby SPA and adjacent Ramsar have been designated, such as the disturbance of bird species that are supported by the SPA and Ramsar, through noise produced during construction.
- 9.3 As part of the planning process, a Habitat Regulations Assessment (HRA) will be required to formally assess whether proposals will impact the adjacent Ramsar site and the nearby SPA. The first stage of the HRA process, the 'screening' stage, will assess the potential for 'likely significant effects' of development proposals on the SPA and Ramsar site, such as noise produced during the construction phase.
- 9.4 In addition, given that the proposals include converting office buildings into residential housing, it is possible that indirect impacts could occur as a result of increased recreational disturbance through increased visitor pressure on the qualifying features of the designated sites.
- 9.5 According to the Impact Risk Zones for Ramsar Sites, Special Areas of Protection (SPA), SACs and SSSIs shown on Natural England's MAGIC map application, the planning application type means there is a requirement for the Local Planning Authority to consult with Natural England during the planning process regarding statutory designated sites.
- 9.6 *'For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.'*
- 9.7 *'Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements'.*
- 9.8 Further assessment is detailed within Section 10.

### PROTECTED AND NOTABLE SPECIES

#### Roosting bats

- 9.9 Building B3 was assessed overall to provide 'low' suitability for roosting bats and building B4, as a confirmed roost for a single common pipistrelle bat, was assessed as providing 'high' suitability for roosting bats.
- 9.10 Proposals include the conversion of existing buildings into residential dwellings, which could impact bat roosting features. Therefore, update survey work is recommended to determine the current presence or likely absence of roosting bats within the buildings (detailed within Section 10).

### Foraging and commuting bats

- 9.11 Proposals do not include the severance of any potential foraging or commuting corridors for bats.
- 9.12 Habitats within the Site, including hardstanding and areas of sparsely vegetated, ruderal / ephemeral vegetation are assessed overall as providing low suitability for foraging and commuting bats. However, adjacent habitats to the west have high suitability.
- 9.13 Development proposals are unlikely to impact on foraging and commuting bats and no further survey work is recommended.
- 9.14 Bats are nocturnal and rely on dark habitat corridors for foraging and commuting, therefore indirect impacts could occur through spillage of artificial lighting associated with parking and buildings within the Site post-construction.
- 9.15 Precautionary mitigation to avoid impacts through the careful design of lighting is recommended within Section 11. Enhancement measures, outlined within Section 12, have the potential to improve the value of habitats within the Site for foraging and commuting bats.

### Hedgehog

- 9.16 Development proposals are unlikely to impact on local hedgehog populations and therefore no further survey work is required. However, in the absence of suitable mitigation, individual hedgehogs may be harmed during works.
- 9.17 Precautionary mitigation to reduce the risk of killing or injuring individual hedgehog is detailed within Section 11.

### Nesting birds

- 9.18 Given the small area of suitable bird nesting habitat within the site, it is unlikely that development proposals will impact bird populations within the locality. No further survey work for nesting birds is recommended.
- 9.19 The buildings within the Site provide suitable nesting habitat for common and widespread bird species, as well as those listed as Red and Amber within the Birds of Conservation Concern such as wren (Red).
- 9.20 The buildings will be converted as part of development proposals. Therefore, mitigation measures to avoid impacts to nesting birds through the timing of works are outlined within Section 11.
- 9.21 Enhancement measures, outlined within Section 12, have the potential to improve the value of habitats within the Site for birds.

### Reptiles

- 9.22 A small population of slow worms was confirmed present within the previous site boundary in 2020, with a single slow worm recorded within the boundary for the current Phase 1 proposals.

- 9.23 The small area of sparsely vegetated, ruderal / ephemeral vegetation provides low suitability for reptiles. This vegetation will regularly be managed at a short sward length and therefore reptiles are unlikely to enter the Site.
- 9.24 Due to the small population confirmed present within the Site in 2020 and the low suitability of habitats within the Site, no further survey work for Phase 1 will be recommended. However, to avoid killing or injury to individual reptiles, mitigation measures are outlined in Section 11.

#### Great crested newt

- 9.25 Habitats to be impacted by the proposed works to the buildings, comprising hard-standing and sparsely vegetated, ruderal / ephemeral vegetation, constitute suitable, but low quality, terrestrial habitat for great crested newt, if present.
- 9.26 Proposals will not result in the severance of any connectivity across the landscape or between waterbodies and will impact areas of hard-standing and sparsely vegetated, ruderal / ephemeral vegetation only.
- 9.27 Nevertheless, due to the close proximity of the Site to the pond to the north west, which has been assessed as providing suitable aquatic habitat for great crested newts, this species may be present within the terrestrial habitat of low suitability within the Site.
- 9.28 Further survey / assessment is recommended for great crested newt (detailed within the Section 10).

## 10. FURTHER SURVEY WORK / ASSESSMENT

### DESIGNATED SITES

#### Statutory Sites of International and National Importance

##### *Habitat Regulations Assessment*

- 10.1 As part of the planning process, a Habitat Regulations Assessment (HRA) will be required to formally assess whether proposals will impact the adjacent Ramsar site and the nearby SPA. The first stage of the HRA process, the 'screening' stage, will assess the potential for 'likely significant effects' of development proposals on the SPA and Ramsar site, such as noise produced during the construction phase.
- 10.2 **It is recommended that a shadow screening assessment is undertaken prior to making a planning application to ascertain whether further surveys, such as winter bird surveys, are required to inform the HRA.**
- 10.3 In addition, consideration will need to be made by the LPA, through a Habitat Regulations Assessment, to ensure that the proposals adhere to the agreed approach within the North Kent Strategic Access Management and Monitoring Strategy (SAMMS) to mitigate for additional recreational impacts and that suitable measures are in place to secure appropriate mitigation.

### PROTECTED SPECIES

#### Roosting bats

- 10.4 Bat emergence / re-entry surveys are recommended to determine the current status of roosting bats. Bat surveys should be undertaken in accordance with Bat Conservation Trust Good Practice Guidelines (Collins, 2023).
- 10.5 As building B3 provides low suitability, the following survey effort is required to prove absence:

##### *Survey effort and timing*

- One dusk emergence survey between May and August.

- 10.6 As building B4 provides high suitability, the following survey effort is required:

##### *Survey effort and timing*

- Three dusk emergence surveys between May and September, with at least two surveys between May and August.
- Surveys to be spaced at least three weeks apart.

- 10.7 Should a roosting bat(s) be found to be present within B3, in order to provide sufficient data on which to design suitable mitigation and compensation measures, a total of three surveys will be required to be undertaken between May and September, with at least two surveys undertaken between May and August. Surveys would need to be spaced at least three weeks apart.

## Great crested newt

### *Option 1: District Level Licensing (DLL)*

- 10.8 The District Level Licensing scheme could be entered **as an alternative** to undertaking survey work (detailed below). To compensate for any potential impacts to great crested newt, a European Protected Species Mitigation (EPSM) Licence could be obtained through the use of the DLL. A 'Conservation Payment Certificate' (CPC) document would need to be obtained from Natural England and a countersigned agreement would need to be submitted to the Local Planning Authority.
- 10.9 Once planning permission is secured an EPSM Licence (through the DLL scheme) would need to be applied for and Natural England fees settled prior to the start of works onsite.

### *Option 2: Traditional Survey Approach*

#### *Presence/Likely Absence Survey*

- 10.10 A presence/likely absence survey is undertaken for any waterbodies with suitability to support great crested newt within 250m of the Site. The survey would follow Natural England's Great Crested Newt Mitigation Guidelines (2001). The survey would include:
- Water samples to be used for e-DNA may be collected between 15th April - 30th June (inclusive).

#### *Population Assessment*

- 10.11 As the proposed development will result no ponds lost or damaged and impacts to >0.01ha of suitable terrestrial habitat within 50m of the nearest waterbody, a population assessment would **not** be required.

## 11. AVOIDANCE AND MITIGATION MEASURES

### THE MITIGATION HIERARCHY

- 11.1 A process should be adopted within the design stage of the project to avoid, mitigate and compensate for potential negative ecological impacts, this process is known as the 'mitigation hierarchy'.
- 11.2 Negative ecological impacts should be avoided wherever possible, for example by making amendments to the proposed layout. Where avoidance is not possible, mitigation to reduce the impact should be considered, for example through the avoidance of sensitive seasons, such as the bird nesting season.
- 11.3 Avoidance and mitigation is most effective when considered as early as possible within a scheme, allowing for measures to be integrated into the design, an appropriate timeline to be developed and for alternatives to be considered.
- 11.4 If all measures have been considered for avoidance and mitigation, as last resort compensation measures should be proposed to address unavoidable and residual impacts.

### CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- 11.5 To avoid potential accidental impacts to the adjacent habitats to the west of the site (including designated sites), a Construction Environmental Management Plan (CEMP) should be produced. This would detail the mitigation required, such as pollution prevention protocols, to be undertaken during construction works.

### PROTECTED AND NOTABLE SPECIES

#### Foraging and commuting bats

##### *Habitat retention and enhancement*

- 11.6 It is recommended that measures are designed into a Landscape Strategy to enhance boundary habitat for foraging and commuting bats and increase connectivity within the surrounding habitat. This could include scrub creation and planting of native species hedgerow, outlined in Section 12.

##### *Careful lighting design*

- 11.7 In order to reduce a low potential, indirect impact on foraging and commuting bats to negligible, mitigation to reduce any effects of artificial lighting should be implemented, as far as possible and where applicable, in accordance with guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals (ILP, 2023) the following measures should be included within a bat sensitive lighting strategy:
- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
  - LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.

- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component .
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
- Internal luminaires should be recessed where installed in proximity to windows to reduce glare and light spill.
- Column heights should be carefully considered to minimise light spill and glare visibility.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt
- Where appropriate, external security lighting should be set on motion- sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate
- Where appropriate, use a Central Management System (CMS) with additional web-enabled devices to light on demand.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged.
- If all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

### Hedgehog

11.8 The following mitigation should be implemented for hedgehog during the construction phase:

- All holes and excavations should be covered over each night to prevent animals from being trapped or injured.
- If this is not possible, a structure/plank should be placed into the hole to enable animals to escape.
- Any removal of building materials or other debris, should be undertaken with care to prevent harm to hedgehog.
- If any hedgehogs are found during the construction phase they should be carefully relocated to an area outside the development site that offers immediate shelter.

11.9 The following mitigation should be implemented for hedgehog post-development:

- Any close board fencing to be used should be fitted with small openings within gravel boards to allow hedgehogs access throughout the site. At least one entrance hole will be fitted into each boundary.

### Nesting Birds

*Avoid impact to nesting birds*

11.10 The following mitigation should be implemented to avoid impact to nesting birds:

- Works to any buildings should be undertaken outside of the bird nesting season where ever possible.

11.11 If impacts to buildings are unavoidable between March and September, then the following mitigation should be undertaken:

- A nesting bird survey should be undertaken by a suitably experienced ecologist within at least 48 hours prior to any impacts.
- If nesting/nest-building birds are found, no works should commence/continue that are likely to damage or significantly disturb a nest until the young have fully fledged.

11.12 Works undertaken during the bird nesting season may result in significant delays to the development programme if activities need to cease due to the presence of an active nest. It is important to note that many bird species, such as blackbirds and robins are multiple brooders and may therefore nest within the Site for a number of months.

### Reptiles

11.13 The following mitigation should be implemented to avoid impact to individual reptiles:

- The margins and areas of ruderal / ephemeral vegetation within the Site should continue to be maintained to a sward height of no more than 150mm.
- A hand search around buildings and hard-standing edges should be undertaken by a suitably experienced ecologist before removal of gravel and vegetation.
- Vegetation under 150mm should be reduced to ground level sensitively, using hand tools, during periods of warm weather (at least 12°C) to allow individual reptiles to naturally disperse to retained habitats.
- Vegetation arisings should be immediately removed from the Site to avoid reptiles utilising them as areas of refuge.
- All areas of storage should be located on existing areas of hardstanding, or stored on raised pallets.

## 12. SUGGESTED ENHANCEMENT MEASURES

- 12.1 It is recommended that ecological enhancement measures are included as part of development proposals. Possible habitat enhancement measures are outlined below.

### TREE PLANTING

- 12.2 Tree planting around the boundaries of the Site would benefit nesting birds and foraging bats, amongst other species. Trees that produce fruits, such as *Prunus* and *Sorbus* species, will provide additional foraging habitat for birds within the locality.

### HEDGEROW CREATION

- 12.3 Native species-rich hedgerows could be created along Site boundaries and around boundaries of new buildings. Species could include hazel, hawthorn, spindle, holly, yew, privet, field rose, dog rose and guelder rose.
- 12.4 Flowering species, such hawthorn, privet and rose would provide opportunities for nectar feeding invertebrates, such as bumblebees, hover flies and butterflies. Creation of these habitat feature would also benefit bats by providing additional foraging habitat and birds through additional nesting habitat.

### NATIVE AND NECTAR RICH PLANTING PLAN

- 12.5 It is recommended that any planting plans around new buildings include native, flower rich species, including those that flower in the late and early seasons to enhance the biodiversity value of the site.
- 12.6 The inclusion of climbing plants would add sheltering opportunities for invertebrates and birds. They can also produce nectar rich flowers for butterflies, bees and hover flies and fruit for birds and small mammals.
- 12.7 The inclusion of herbs, such as lavender and sage, would provide nectar for an array of invertebrate species, including bees, butterflies and moths. Providing a range of herb plants would ensure flowering throughout the seasons. The inclusion of plants that produce scent at night would attract night flying invertebrates and as such would also provide foraging opportunities for bats.

### BAT BOXES

- 12.8 Development provides an opportunity to enhance the site for bats via provision of roosting opportunities.
- 12.9 Bat boxes, such as a 2FE Schwegler wall-mounted bat shelter, or similar, could be installed on converted buildings within the Site. Bat boxes should be primarily located on the south and west facing aspects located at least 3m above the ground, but can also be installed on different elevations to provide a variety of different environmental roost conditions.

## BIRD BOXES

- 12.10** Bird boxes, including for house sparrow and starlings, could be erected onto converted buildings. Boxes should be located 2-4m in height and arranged so that loose colonies of house sparrows are encouraged. Bird boxes should be located close to eaves and on the north or east elevations to avoid direct sunlight.
- 12.11** In addition, a pole mounted barn owl box could be included within the proposals, located along the western boundary, adjacent to marshland habitat.

## LOG PILES

- 12.12** Log piles could be created around the boundaries of the Site. These habitat features would provide hibernating and sheltering opportunities for amphibians and small mammals, as well as habitat for saproxylic invertebrates, such as stag beetles.

### 13. REFERENCES

- CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute for Ecology and Environmental Management, Winchester.
- CIEEM (2017a). Guidelines for Ecological Report Writing. Chartered Institute for Ecology and Environmental Management, Winchester.
- Collins, J. (ed.) (2023) Bat surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.
- Institute of Lighting Professionals & Bat Conservation Trust (2023). Bats and artificial lighting in the UK. Bats and the built environment series. Guidance Note 08/23.
- JNCC (2000). Ramsar citation - Thames Estuary and Marshes. Website: <https://jncc.gov.uk/jncc-assets/RIS/UK11069.pdf> (accessed: 21/03/2024).
- JNCC (2008). Information Sheet on Ramsar Wetlands. <https://jncc.gov.uk/jncc-assets/RIS/UK11040.pdf> (accessed: 21/03/2024).
- JNCC (2015). Natura 2000 - Standard Data Form. <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012031.pdf> (accessed: 21/03/2024).
- Multi-agency Geographic Information for the Countryside (MAGIC) Interactive Map. Department for Environment, Food and Rural Affairs. <http://magic.defra.gov.uk> (accessed: 21/03/2024)
- Native Ecology (2020). Ecological Impact Assessment (EclA) ref (0540\_R01\_EclA), dated 23rd October 2020.
- Natural England (1984). SSSI citation. Website: <https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1003874.pdf> (accessed 25/03/2024).
- UK Biodiversity Action Plan; Priority Habitat Descriptions (2008). BRIG (ed. Ant Maddock).
- UK Habitat Classification Working Group (2018). UK Habitats Classification - Habitat Definitions V2.0 at <http://ecountability.co.uk/ukhabitatworkinggroup-ukhab>.
- UK Habitat Classification Working Group (2018). UK Habitats Classification User Manual at <http://ecountability.co.uk/ukhabitatworkinggroup-ukhab>.

## **14. APPENDIX 1: SUMMARY OF PLANNING POLICY AND LEGISLATION**

### **BIODIVERSITY NET GAIN**

- 14.1** Schedule 14 of the Environment Act 2021 makes provision for biodiversity gain to be a condition of planning permission in England. The Act amends the Town and Country Planning Act 1990 so that all planning permissions (except a small number of exemptions) will be subject to a pre-commencement planning condition requiring a Biodiversity Gain Plan to be approved by the Local Planning Authority (LPA). The biodiversity gain plan must demonstrate a net gain of at least 10% in the biodiversity value of the development site.
- 14.2** The Environment Act 2021 sets out the following key components of mandatory biodiversity gain:
- Minimum 10% gain required calculated using the Biodiversity Metric
  - Delivered on-site, off-site or via a new statutory biodiversity credits scheme
  - On-site and off-site habitat secured for at least 30 years via planning obligations or conservation covenants
  - National register for net gain delivery sites

### **CONSERVATION OF HABITATS AND SPECIES (AMENDMENT) (EU EXIT) REGULATIONS 2019**

- 14.3** Species afforded protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 are also known as European Protected Species. European Protected Species include all species of bats, beaver, otter, hazel dormice, great crested newt.
- 14.4** European Protected Species relate to those listed within the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and are afforded the highest level of protection. These species are also protected under the Wildlife and Countryside Act 1981. Taken together this level of protection makes it an offence to:
- Deliberately capture, injure or kill any wild animal of a European protected species,
  - Deliberately disturb wild animals of any such species
  - Deliberately take or destroy the eggs of such an animal
  - Damage or destroy a breeding site or resting place of such an animal
- 14.5** Disturbance of animals includes in particular any disturbance which is likely:
- To impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
  - In the case of animals of a hibernating or migratory species, impair their ability to hibernate or migrate
  - To affect significantly the local distribution or abundance of the species to which they belong

**14.6** The legislation requires that any derogation be dealt with by licencing through an appropriate licensing body (Natural England in England). In determining whether a licence can be granted the licensing body must apply the requirements of Regulation 53, and in particular, the three tests:

1. Regulation 55(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.

2. Regulation 55(9) states: The relevant licensing body must not grant a licence under this regulation unless it is satisfied—

(a) that there is no satisfactory alternative; and

(b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

## PLANTS

**14.7** A number of plant species are protected under Schedule 8 of the Wildlife and Countryside Act 1981. This Schedule lists plant species that are protected under Section 13, which protects from picking and sale of plants or parts of plants listed in Schedule 8.

## BIRDS

**14.8** All nesting birds are protected under the Wildlife and Countryside Act 1981. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds;
- Take, damage or destroy the nest of wild birds while in use or being built;
- Take or destroy the eggs of wild birds;
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

### Birds of Conservation Concern

**14.9** After reviewing the status of all bird species in the UK, the leading non-governmental bird conservation organisations agreed priorities for bird conservation. This led to the publication of a list of Birds of Conservation Concern. Bird species are either listed as red, amber or green, depending on their status and conservation objectives. Birds listed as red require urgent, effective conservation action.

## BADGERS

**14.10** Badgers are protected under the Protection of Badgers Act 1992. Under this legislation it is an offence to:

- Wilfully kill, injure or take a badger (or attempt to do so).
- Cruelly ill-treat a badger.
- Dig for a badger.

- Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it.
- Cause a dog to enter a badger sett.
- Disturb a badger when it is occupying a sett.

## **COMMON REPTILES**

**14.11** All common and widespread reptiles, which include viviparous lizard, slow worm, grass snake and adder are protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Intentionally or recklessly kill or injure reptiles
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell any reptile.

## **INVERTEBRATES**

**14.12** A small number of invertebrates are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, relating to the designation of SACs, including white-clawed crayfish and Desmoulin's whorl snail.

**14.13** A number of invertebrate species also protected under the Wildlife and Countryside Act, such as the heath fritillary and fairy shrimp. Species listed under Schedule 5 are protected from one, some or all of the following:

- Intentional killing, injuring, taking
- Possession or control (live or dead animal, part or derivative)
- Damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection
- Disturbance of animal occupying such a structure or place
- Offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative)
- Advertising for buying or selling live or dead animal, part or derivative

## **STATUTORY PROTECTED SITES**

**14.14** Special Protection Areas and Special Areas of Conservation are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

**14.15** Sites of special scientific interest (SSSIs) are protected under the Wildlife and Countryside Act 1981. Natural England is responsible for notifying SSSIs, ensuring they are managed appropriately and assessing and monitoring their condition.

- 14.16 National Nature reserves are created to protect important wildlife habitats, while also providing a resource for scientific research and recreation. Declared under the National Parks and Access to the Countryside and the Wildlife and Countryside Act 1981.

## NON-STATUTORY PROTECTED SITES

### Ancient Woodland

- 14.17 Land with continuous woodland cover since at least 1600AD. Ancient woods are recognised in UK planning policy, but do not have statutory protection.

## NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

- 14.18 Following consultation with Natural England, the Secretary of State identified species and habitats considered to be of principal importance for the conservation of biological diversity in England. These species and habitats are listed under Section 41 of the Act. The list is to be kept under review and revisions are made as necessary as part of the progress reports on the Biodiversity Strategy for England.
- 14.19 Following the Biological Diversity in Japan, 2012, a new initiative in England, 'Biodiversity 2020', replaced the former UK Biodiversity Action Plan Species aiming to reinforce the protection of Section 41 habitats and species.

## THE NATIONAL PLANNING POLICY FRAMEWORK

- 14.20 The National Planning Policy Framework was revised in December 2023 and sets out the Government's planning policies for England and how these are expected to be applied. Within this document, Chapter 15 is titled Conserving and Enhancing the Natural Environment.
- 14.21 Of particular relevance within this chapter are the following statements:

*Planning policies and 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.*

*To protect and enhance biodiversity and geodiversity, plans should:*

- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

*When determining planning applications, local planning authorities should apply the following principles:*

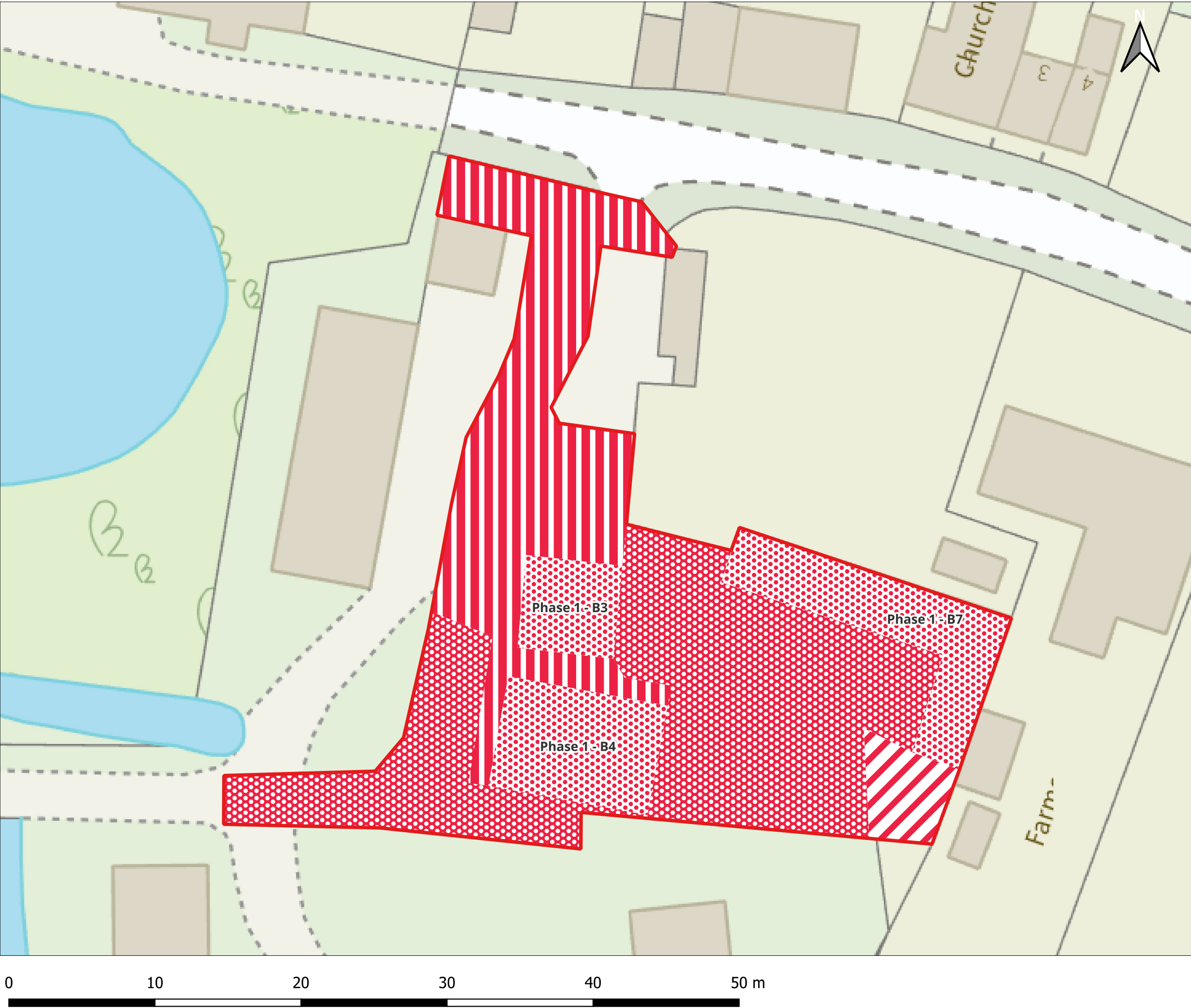
*a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the Site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

## 15. APPENDIX 2: SUITABILITY ASSESSMENT OF ROOSTING HABITAT FOR BATS

*Table 9. Assessing potential suitability of roosting habitat (structures and trees) for bats and survey effort required. Adapted from Bat Surveys for Professional Ecologists, Good Practice Guidelines 4th Edition (Collins, 2023).*

| SUITABILITY                                             | DESCRIPTION OF ROOSTING HABITAT                                                                                                                                                                                                                                                                                                                                                                | SURVEY EFFORT AND TIMING                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| None                                                    | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices / suitable shelter at all ground / underground levels).                                                                                                                                                                                                        | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Negligible                                              | Negligible habitat features on site likely to be used by roosting bats.                                                                                                                                                                                                                                                                                                                        | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Low<br>(Buildings / structures)<br><br>PRF-I<br>(trees) | A structure or tree with one or more PRF-I roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).      | <p><b>Buildings/structures:</b> One survey visit. One dusk emergence survey (or dawn re-entry survey if appropriate).</p> <p>Timing: May to August.</p> <p><b>Trees:</b> PRF-I - No further surveys required. Compensation for loss of roosting opportunity recommended.</p>                                                                                                                                                                                                    |
| Moderate<br>(Structures only)                           | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed). | <p><b>Buildings/structures:</b> Two separate dusk emergence surveys (or dawn re-entry surveys if appropriate).</p> <p>Surveys should be spaced a minimum of three weeks apart.</p> <p>Timing: May to September with at least one survey undertaken between May - August.</p>                                                                                                                                                                                                    |
| High<br>(structures)<br><br>PRF-M<br>(trees)            | A structure or tree with one or more PRF-M roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.                                                                                                                            | <p><b>Buildings/structures:</b> Three separate dusk emergence survey visits (or dawn re-entry surveys if appropriate).</p> <p><b>Trees</b> - Three inspection surveys using ladder, climbing or MEWP, or if features are too extensive to survey thoroughly, these could be emergence surveys supported by NVAs.</p> <p>Surveys should be spaced a minimum of three weeks apart.</p> <p>Timing: May to September with at least two surveys undertaken between May - August.</p> |



**Legend**

-  Site boundary
-  Developed land; sealed surface (other) (u1b)
-  Developed land; sealed surface (buildings) (u1b5)
-  Sparsely vegetated urban land (u1f)
-  Built-up areas and gardens (Ruderal/ephemeral) (u1)

**Note:**

Habitats mapped based on UK Habitat Classification following Preliminary Ecological Appraisal site visit undertaken on 04/03/2024.

|                                                                                                                                                                  |            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|  <b>native ecology</b><br><small>PROMOTING BIODIVERSITY INTEGRATION</small> |            |
| Habitat Plan - Phase 1                                                                                                                                           |            |
| Giles Farm<br>Higham<br>Kent                                                                                                                                     |            |
| Drawing ref:                                                                                                                                                     | 1512_DR03  |
| Revision:                                                                                                                                                        | 1          |
| Date:                                                                                                                                                            | 16/05/2024 |
| Scale:                                                                                                                                                           | 1:250      |
| Paper size:                                                                                                                                                      | A3         |



Legend

-  Site boundary
-  250m site boundary buffer
-  Waterbody



Waterbody location plan - Phase 1

|                              |            |
|------------------------------|------------|
| Giles Farm<br>Higham<br>Kent |            |
| Drawing ref:                 | 1512_DR01  |
| Revision:                    | -          |
| Date:                        | 26/03/2024 |
| Scale:                       | 1:3000     |
| Paper size:                  | A3         |