

United Environmental Services Ltd

1 Booths Park,
Chelford Road,
Knutsford,
Cheshire
WA16 8QZ

www.ues.org.uk

enquiries@ues.org.uk

01565 757788



PRELIMINARY ECOLOGICAL APPRAISAL

At

Woodland North of East Court Farm

Church Lane
Gravesend
Kent
DA12 2NL

NGR: TQ 68571 73075

Prepared for: Xanthe Davies, Glampitect Ltd
Written by: Ysobella Cox, UES Graduate Ecologist
Approved by: Mark Halliwell, UES Senior Ecologist

A handwritten signature in black ink, appearing to read 'M Halliwell', is positioned below the 'Approved by:' line.

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EXECUTIVE SUMMARY

United Environmental Services Ltd (UES) was commissioned by Glampitect Ltd to carry out a baseline ecological survey at Woodland North of East Court Farm, Kent. A desk study and preliminary ecological appraisal (PEA) survey were undertaken on 20th October 2023, including searches using the Multi Agency Geographic Information Centre (MAGIC). An updated walkover survey was undertaken 22nd May 2025 due to delays with the planning application.

The PEA provides an assessment of potential ecological impacts associated with the development of Woodland North of East Court Farm, Kent. The proposed development includes the construction of seven glamping pods with associated access roads, car parking and landscaping.

The proposed development site has an area of approximately 0.65ha and is dominated by dense scrub with areas of bare ground where vegetation removal along an access track has occurred. There are several earth bunds located between the bare ground and dense scrub within the northern section of the site. The southern section of the site contains areas of improved grassland, introduced shrub and hardstanding with a small number of temporary buildings. There are also two ponds located within close proximity to the site.

The results of the survey combined with the results of the desk study have highlighted the requirement for further work in relation to the following habitats and species:

- **Amphibians** – a great crested newt (GCN) *Triturus cristatus* impact assessment should be carried out for all waterbodies within 250m of the site to determine their suitability to support GCN. eDNA analysis should also be undertaken of Ponds 1 and 2 to confirm the presence or absence of GCN.
- **Badger** – Reasonable avoidance measures (RAMs) to be implemented during the construction phase of the development.
- **Bats** – any external lighting installed as part of the development should be designed to be wildlife friendly and avoid overspill onto areas of higher quality bat foraging and commuting habitat.
- **Breeding birds** – site clearance, tree felling, arboricultural works and vegetation clearance are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If not possible and works need to take place during this period, a targeted nest survey is to be undertaken immediately prior to the works by a suitably qualified ecologist or an ecological clerk of works appointed to oversee the works.
- **Reptiles** – RAMs to be implemented during the construction phase of the development.
- **Trees** – to be retained where possible, or replaced as part of a detailed landscaping scheme. Generic issues relating to root protection areas.

Mitigation measures, as detailed in section 4, should be adhered to, which may in some cases negate the need for further survey work.



The development also presents an opportunity to improve the habitats on site for wildlife, such as bats and birds. The inclusion of nest boxes and bat boxes will provide suitable nesting and roosting features in the long term.

This report should be read with appendices 1 to 7, which include results of the desk study, GIS phase 1 habitat mapping, photographs of site and relevant statutory guidance.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and scope of study area

This report is written by Ysobella Cox BSc MBIol and UES Graduate Ecologist. Surveyors include:

- Mark Halliwell MBIol, UES Senior Ecologist. Mark holds a level 4 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC), which certifies him as competent to undertake phase 1 habitat surveys. Mark is licensed by Natural England to disturb, take and handle great crested newts under licence number 2024-12479-CL09-GCN (level 2). Mark is licensed by Natural England to disturb, take and handle all species of bats under licence number 2023-11661-CL18-BAT (level 2).
- Noah Fulton BSc, UES Graduate Ecologist

The report provides an assessment of the potential ecological impacts associated with the proposed development at Woodland North of East Court Farm, Kent.

The zone of influence considered within the scope of the survey includes all land within the red line boundary. Where relevant, other ecological resources, receptors and important habitats which are spatially separate from the site are considered.

1.2 Survey objectives

UES was commissioned in October 2023 to conduct a PEA of the proposed development site, and subsequently again in May 2025 to conduct an updated walkover survey. This was completed in order to:

- Establish baseline conditions and determine the importance of ecological features present or potentially present within the survey area
- Identify key ecological constraints to the project
- Make recommendations for design options to avoid significant effects on important ecological resources at an early stage of development planning
- Identify potential requirement for further surveys for nationally or internationally protected species which may be present on site
- Identify potential requirement for mitigation or compensation, including measures that may be required based on further surveys

1.3 Proposed development

The proposed development includes the construction of seven glamping pods with associated access roads, car parking and landscaping.

1.4 Structure of the report



This report is a baseline appraisal that forms the basis for further ecological surveys and Environmental Impact Assessments (EIA) if required. In the majority of cases the preliminary ecological assessment will not provide all the ecological data required by the Local Planning Authority to determine an application, especially in the event that protected habitat or species issues are present or likely.

This report should be read with appendices 1 to 7, which include results of the desk study, GIS phase 1 habitat mapping, photographs of site and relevant statutory guidance.

2 METHODOLOGY

This PEA comprises a desk study and a field survey. The desk study is conducted in order to collate ecological information on species and / or habitats of interest that may be present. The field survey is conducted in order to assess the habitats and their importance, both on site and in the context of their wider surroundings.

2.1 Desk study

The following resources were used to inform the desk study:

- National – Using the UK government’s MAGIC website, statutorily protected sites were scoped to a distance of 10km from the application site.
- Local – A search for protected species or otherwise notable species and local designated sites was undertaken within a 2km radius of the proposed development site by Kent and Medway Biological Records Centre.

2.2 Field survey

An ecological walkover survey was carried out on 20th October 2023 by Mark Halliwell and Noah Fulton. A subsequent updated walkover survey was undertaken on 22nd May 2025 by Mark Halliwell. The purpose of the survey was to identify, record and map dominant habitat types within the development area and highlight any further species surveys that may be required based on the quality of those habitats. When conducting the surveys particular focus was concentrated on the following species and habitat features:

- | | |
|------------------|-------------------------|
| • Amphibians | • Hedgerows |
| • Reptiles | • Plant communities |
| • Badger | • Invasive species |
| • Bats | • Otter |
| • Hazel dormouse | • Water vole |
| • Birds | • White-clawed crayfish |
| • Trees | |

The habitats were assessed by using the phase 1 habitat survey technique, which is a system for environmental audit widely used within the environmental consultancy field. The survey was undertaken in accordance with the methodology in the ‘Handbook for phase 1 habitat survey - A technique for environmental audit’ (JNCC, 2010) as recommended by Natural England, and in the “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

The survey area encompasses all of the land within the development footprint and the land to a distance of 30m outside it where accessible. In line with recognised guidelines, ponds were also scoped to a distance of 500m (250m radius from the survey area).

The phase 1 habitat survey methodology was extended to record any signs of habitats suitable to support protected / invasive species and any incidental observations of other noteworthy species.

2.3 GCN impact assessment

The two ponds located within close proximity to the site were assessed for their potential to support GCNs using the HSI. The HSI is a tool used to provide a numerical indication of the quality of a waterbody in terms of GCN breeding and associated habitat requirements on a scale of 0-1 (0 indicating unsuitable habitat, 1 representing optimal habitat).

HSI scores incorporate ten Suitability Indices (SIs), all of which are factors thought to affect GCNs, namely:

SI 1: Site location	SI 6: Waterfowl presence
SI 2: Size of pond	SI 7: Fish presence
SI 3: Pond permanence	SI 8: Number of ponds within 1km
SI 4: Water quality	SI 9: Terrestrial habitat
SI 5: Perimeter shading	SI 10: Macrophyte cover

In some cases, a net may be used to assess certain SIs, such as water quality. Once a measurement or category has been given for each SI this can then be converted to a figure between 0 and 1 for use in the HSI calculation. This figure is either translated from an assigned category or measurement or read from a graph in the case of a percentage or number.

The HSI is then calculated from the following formula:

$$\text{HSI} = (\text{SI1} \times \text{SI2} \times \text{SI3} \times \text{SI4} \times \text{SI5} \times \text{SI6} \times \text{SI7} \times \text{SI8} \times \text{SI9} \times \text{SI10})^{1/10}$$

This will give a final HSI result between 0 and 1, providing a measure of habitat suitability for GCN.

The information gathered from the survey was used to provide a likelihood of GCNs and other amphibians being present in the area, in both aquatic and terrestrial habitats.

The two ponds are noted on the phase 1 habitat plan (Appendix 2).

2.4 Survey limitations

There are no limitations associated with the survey data presented here.

3 RESULTS

3.1 Desk study

A desk study was conducted for the proposed development site and surrounding area. Statutorily protected sites were scoped to a distance of 10km. Further results of the desk study can be found at Appendix 1 – Desk study.

3.1.1 Protected sites

There are four statutorily protected sites within 2km of the proposed development site:

- Thames Estuary & Marshes, Ramsar Site

Thames Estuary & Marshes Ramsar site is located approximately 179m to the north of the proposed development site. A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.

*The site supports more than 20 British Red Data Book invertebrates and populations of the GB Red Book endangered least lettuce (*Lactuca saligna*), as well as the vulnerable slender hare's-ear (*Bupleurum tenuissimum*), divided sedge (*Carex divisa*), sea barley (*Hordeum marinum*), Borrer's saltmarsh-grass (*Puccinellia fasciculata*), and dwarf eelgrass (*Zostera noltei*).*

*The site supports assemblages of international importance, species with peak counts in winter: 45,118 waterfowl (5 year peak mean 1998/99-2002/2003). In addition, the site supports species / populations occurring at levels of international importance including Black-tailed godwit *Limosa limosa islandica* in spring / autumn, and Dunlin *Calidris alpina alpina*, and Red knot *Calidris canutus islandica*, in winter.*

- South Thames Estuary & Marshes, SSSI¹

South Thames Estuary & Marshes SSSI is located approximately 179m to the north of the proposed development site. 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. 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. 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. The diverse habitats within the site support a number of nationally rare and scarce invertebrate species and an assemblage of nationally scarce plants.

¹ SSSI – Site of Special Scientific Interest

- Thames Estuary & Marshes, SPA²

Thames Estuary & Marshes SPA is located approximately 1.47km north of the proposed development site. The Thames Estuary and Marshes Special Protection Area is a wetland of European importance comprising a mosaic of intertidal habitats, saltmarsh, coastal grazing marshes, saline lagoons and chalk pits. The site provides wintering and breeding habitats for important assemblages of wetland bird species, particularly wildfowl and waders as well as supporting migratory birds on passage. The site forms part of the wider Thames Estuary together with other classified SPAs in both Essex and Kent.

*It is of European importance because the site qualified under article 4.1 of the directive (79/409/EEC) as it is used regularly by 1% of more of the GB populations of the following species listed on Annex I, in any season: Avocet *Recurvirostra avosetta*, and hen harrier *Circus cyaneus*. The site also qualifies under article 4.2 of the directive as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed on Annex I), in any season: Ringed plover *Charadrius hiaticula*, grey plover *Pluvialis squatarola*, dunlin *Calidris alpina alpina*, knot *Calidris canutus islandica*, black-tailed godwit *Limosa limosa islandica*, and redshank *Tringa totanus totanus*. The site also qualified under article 4.2 of the directive as it is used regularly by over 20,000 waterfowl in any season: population of 75,019 during wintering season between 1993/94 – 1997/98.*

- Shorne and Ashenbank Woods, SSSI

Shorne and Ashenbank Woods is located approximately 1.92km south of the proposed development site. They form a complex of ancient and plantation woodland, and include a variety of stand-types associated with Tertiary gravels, clays and sands. The site supports an important and diverse invertebrate fauna, especially its Coleoptera (beetles), Hemiptera (true bugs), and Odonata (dragonflies).

*The woodland varies from pure sweet chestnut *Castanea sativa* coppice, in places heavily invaded by sycamore *Acer pseudoplatanus*, to a more mixed broadleaved community, consisting of mature oak *Quercus* spp., sweet chestnut *Castanea sativa*, and hornbeam *Carpinus betulus*. Although holly *Ilex aquifolium*, and yew *Taxus baccata* are frequent in the understorey, dense aggregations of rhododendron *Rhododendron ponticum* sometimes suppress the development of a shrub and field layer. Elsewhere bramble *Rubus fruticosus*, bluebell *Hyacinthoides non-scriptus*, dog's mercury *Mercurialis perennis*, and bracken *Pteridium aquilinum* dominate the ground flora, together with typical indicator species of ancient woodland such as wood spurge *Euphorbia amygdaloides*, wood sedge *Carex sylvatica*, and wood anemone *Anemone nemorosa*. The locally-scarce caper spurge *Euphorbia lathyrus* also occurs, often in abundance in recently cut compartments.*

*At Randall Heath an open area of former heathland is now dominated by bracken with occasional ancient oak and sweet chestnut pollards. Within Shorne Country Park an old series of clay-workings has been landscaped to provide wildlife habitats including a network of shallow ponds, which are developing an increasingly interesting flora and fauna. These include the plants blinks *Montia fontana* and wood small-reed *Calamagrostis epigejos*, both rare in Kent, and several nationally scarce insects including the ruddy darter dragonfly *Sympetrum sanguineum*, and the satin lutestring moth *Tetheela fluctuosa*. The site has been well-recorded for its insect fauna in the past, with both Coleoptera (beetles)*

² SPA - Special Protection Area

and Hemiptera (true bugs) being well-represented. Rare species include the beetles *Mordella holomelaena* and *Peltodytes caesus*. The woodland breeding bird community includes hawfinch *Coccothraustes coccothraustes*, marsh tit *Poecile palustris*, and all three British woodpeckers.

There are also four non-statutorily protected sites within 2km of the proposed development site:

- Canal and Grazing Marsh, Higham, Local Wildlife Site

Canal and Grazing Marsh Local Wildlife Site is located approximately 700m to the north of the site.

- Shorne Marshes, RSPB Reserve

Shorn Marshes RSPB Reserve is located approximately 767m to the north of the site.

- Shorne Pasture, Local Wildlife Site

Shorne Pasture Local Wildlife Site is located approximately 1.54km to the southeast of the site.

- Court Wood etc., Shorne, Local Wildlife Site

Court Wood etc. Local Wildlife Site is located approximately 1.71km to the southeast of the site.

The proposed development site lies within a SSSI Impact Risk Zone (IRZ) within which Natural England request that they are consulted on all planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. It also requests that 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.

There are twenty-five statutorily protected sites within 2 – 10km of site:

- | | |
|--|---|
| • Baty's Marsh LNR ³ | • Hangman's Wood & Deneholes SSSI |
| • Chattenden Woods and Lodge Hill SSSI | • High Halstow NNR ⁴ |
| • Cobham Woods SSSI | • Houlder and Monarch Hill Pits, Upper Halling SSSI |
| • Dalham Farm SSSI | • Linford Wood LNR |
| • Darenth Wood SSSI | • Lion Pit SSSI |
| • Globe Pit SSSI | • Medway Estuary & Marshes Ramsar |
| • Grays Thurrock Chalk Pit SSSI | • Medway Estuary & Marshes SPA |
| • Great Crabbles Wood SSSI | • Medway Estuary and Marshes SSSI |
| • Grove House Wood LNR | |
| • Halling to Trottiscliffe Escarpment SSSI | |

³ LNR – Local Nature Reserve

⁴ NNR – National Nature Reserve

- Mucking Flats and Marshes SSSI
- North Downs Woodlands SAC⁵
- Northward Hill SSSI
- Rectory Meadow LNR
- Rede Common LNR
- Swanscombe Peninsula SSSI
- Tower Hill to Cockham Wood SSSI
- Wouldham to Detling Escarpment SSSI

3.1.2 Protected species

The following records of protected or otherwise notable species were highlighted by the environmental records search:

- Amphibians: numerous records of GCNs were returned from within 2km of the proposed development site, the closest of which is located approximately 404m to the north of the proposed development site in 1982. Within the last 25 years, the closest record is located approximately 1.73km northeast of the site in 2013. Records of common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris*, and palmate newt *Lissotriton helveticus*, were also returned from within 2km of the proposed development site.
- Badgers: records of badger *Meles meles* were returned from within 2km of the proposed development site, however, no records were returned from within 400m.
- Bats: records of brown-long eared bat *Plecotus auritus*, Nathusius pipistrelle *Pipistrellus nathusii*, pipistrelle *Pipistrellus sp.*, *Myotis sp.* bats, daubenton's *Myotis daubentonii*, natterer's *Myotis nattereri*, leisler's bat *Nyctalus leisleri*, noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, whiskered bat *Myotis mystacinus*, and Kuhl's pipistrelle *Pipistrellus kuhlii* were returned from within 2km of the proposed development site. The closest record within the last 25 years details a dead individual approximately 483m south of the site. A *Pipistrellus sp.* maternity roost was recorded approximately 1.68km southeast of the site in 1983.
- Birds: various species, including several NERC section 41, Wildlife and Countryside Act 1981 Schedule 1, Birds of Conservation Concern amber and red list species.
- Hazel dormouse: no records of hazel dormouse *Muscardinus avellanarius* were returned from within 2km of the proposed development site.
- Hedgehog: six records of hedgehog *Erinaceus europaeus* were returned from within 2km of the proposed development site, the closest of which is located approximately 415m east of the site in 1998.
- Otter: no records of otter *Lutra lutra* were returned from within 2km of the proposed development site.
- Reptiles: records of slow-worm *Anguis fragilis*, grass snake *Natrix Helvetica*, and common lizard *Zootoca vivipara*, were returned from within 2km of the proposed development site. The closest record of slow-worm is approximately 724m west of the site in 2022, grass snake is approximately 411m east in 1984 and common lizard is

⁵ SAC – Special Area of Conservation

approximately 1.19km northwest in 2012. Within the last 25 years, the closest grass snake record is approximately 824m northwest of the site in 2022.

- Water vole: numerous records of water vole *Arvicola amphibius* were returned from within 2km of the proposed development site, the closest of which is approximately 415m to the east of the site in 1991. Within the last 25 years, the closest record is approximately 564m northwest of the site in 2017.
- White clawed-crayfish: no records of white-clawed crayfish *Austropotamobius pallipes* were returned from within 2km of the proposed development site.

3.2 Baseline conditions – Habitats

The results of the PEA are also shown on the accompanying map at Appendix 2 – Phase 1 habitat plan. Habitats are colour-coded in accordance with the phase 1 standard. A full botanical species list for each habitat is provided at Appendix 5.

The local area predominantly consists of arable fields with pockets of woodland. The following principle habitat types were characterised on or within the immediate vicinity of the site:

- A2.1 Dense scrub
- C3.1 Tall ruderal
- B4 Improved grassland
- G1 Standing water
- J1.4 Introduced shrub
- J3.6 Building
- J4 Bare ground
- J5 Hardstanding

3.2.1 A2.1 Dense scrub

The majority of the northern section of the site is comprised of dense scrub which extends along the western aspect of the bare ground and into the central section of the site, forming a boundary to the pasture field (see Appendix 4 – Photographs, Photographs 1 and 2). The dense scrub within the northern section of the site is located at the base of a bund. Hawthorn *Crataegus monogyna* is abundant within the dense scrub, and other species present include wild plum *Prunus domestica*, elder *Sambucus nigra*, occasional self-seeded sycamore *Acer pseudoplatanus* saplings and semi-mature trees, cherry laurel *Prunus laurocerasus*, common ivy *Hedera helix*, and stinging nettle *Urtica dioica*.

3.2.2 B4 Improved grassland

There is a pasture field located directly adjacent to the western boundary of the site, a small section of which is located within the proposed development site boundary (Photograph 3). This pasture extends to surround the driveway that enters the site from the west off Church Lane.

The southern section of the site also comprises improved grassland (Photograph 4). The improved grassland has a short sward and is intensively managed for amenity purposes. It contains annual meadow grass *Poa annua*, perennial rye grass *Lolium perenne*, rough meadow grass *Poa trivialis*, bristly oxtongue *Helminthotheca echioides*, stinging nettle, chickweed *Stellaria media*, and white clover *Trifolium repens*. This improved grassland extends between the dense scrub along the eastern edge of the site whereby scrub has been cleared prior to the survey taking place, but where injurious weeds have not yet formed a dominant sward, as is the case at the end of the track.

3.2.3 C3.1 Tall ruderal

An area of tall ruderal has developed at the end of a track whereby disturbance and high nutrient status has led to a flush of competitive species such as stinging nettle, burdock, spear thistle, hemlock and other similar species.

3.2.4 G1 Standing water

Although there are no ponds within the proposed development site, there are two ponds within close proximity to the site which were accessed as part of this survey.

Pond 1 is located approximately 30m to the northwest of the site, between a horse grazed field and the road that extends along the northern boundary of the site (Photograph 5). The pond was accessible from the highway that is adjacent to the pond. The southern margin of the pond – along the field edge – is shaded by scrub which is mostly comprised of grey willow *Salix cinerea*, with blackthorn *Prunus spinosa*, and hawthorn. The northern roadside margin of the pond is covered with bramble scrub *Rubus fruticosus* agg. There is emergent great reedmace *Typha latifolia*, but no other macrophytes were noted during the walkover survey.

Pond 2 is located approximately 80m to the east of the site. It is a multi-lobed, woodland pond that separates and merges as the water level rises and falls (Photograph 6). Aquatic vegetation within the pond is solely comprised of common duckweed *Lemna minor*, however, marginal vegetation includes pendulous sedge *Carex pendula*, stinging nettle, cleavers *Galium aparine*, gypsywort *Lycopus europaeus*, and emergent willow *Salix* sp. The pond is entirely shaded by hawthorn and willow scrub.

3.2.5 J1.4 Introduced shrub

There is an area of offsite introduced shrub which is located directly adjacent to the proposed development site. It is dominated by planted cherry laurel *Prunus laurocerasus*, with small amounts of elder and hawthorn.

3.2.6 J3.6 Building

The southern section of the site contains three temporary buildings, including static caravans and wooden structures (Photographs 8 and 9).

3.2.7 J4 Bare ground

The area that connects the northern and southern sections of the proposed development site formerly comprised bare ground / spoil. Evidence of clearance works was identified onsite during the walkover survey, including the removal of areas of dense scrub and the creation of numerous earth bunds (Photographs 10 and 11). This clearance works appears to follow an access track that can be seen on historical aerial imagery. However, this area has now succeeded into grassland as described in section 3.2.2 above.

An additional area of bare ground is now present on site due to changes in the redline boundary. This area comprises a car parking area that is presumably subject to regular disturbance and damaging activities by vehicles, combined with an underlying membrane, both of which work to prevent succession and keep the area as bare ground.

A rabbit warren was identified along the northwestern edge of the bare ground habitat (Photograph 12).

3.2.8 J5 Hardstanding

The southern section of the site contains a hardstanding driveway / access road. In addition, there is an area of hardstanding within the southern section of the site which contains buildings and storage.

3.3 Baseline conditions – Protected species or resources

As part of the PEA, specific observations of wildlife were also recorded. Wildlife observations focused on protected species, invasive species or species of conservation concern. Habitats with potential to support protected species were noted with a view to follow up surveys if required.

3.3.1 Amphibians

Great crested newts have been recorded on numerous occasions in the local area. The closest record is approximately 404m to the north of the proposed development site in 1982, but within the last 25 years, the closest record is located approximately 1.75km northeast of the site in 2013.

The terrestrial habitats within the development footprint, including dense scrub and grassland, may provide commuting and foraging opportunities for GCN.

There are five ponds located within 250m of the proposed development site, which may provide suitable habitat for GCN. Two of the ponds are located within close proximity to the site, within 80m, and were accessible during this walkover survey. As such, a GCN impact assessment was undertaken of these two ponds during the walkover survey.

Pond 1 – TQ 68506 73115

Pond 1 is located approximately 30m to the northwest of the site and measures approximately 220m². The pond appears to never dry and is surrounded by a range of habitats including grassland and scrub which comprises bramble, grey willow, blackthorn and hawthorn, which

provide a 60% cover of shade. Aquatic vegetation covers approximately 10% of the pond and is comprises great reedmace.

The pond achieved a HSI score of 0.68 which indicates the pond is of 'average' suitability to support breeding GCNs.

Pond 2 – TQ 68652 73014

Pond 2 is located approximately 80m to the east of the site and measures approximately 270m². The pond is multi-lobed and is likely to merge and separate as the water levels fluctuate throughout the season. It is possible that the pond dries periodically. The pond is surrounded by scrub which entirely covers the margins of the pond. Aquatic vegetation is limited to common duckweed, however, marginal vegetation includes pendulous sedge, stinging nettle, cleavers, gypsywort and emergent willow. The pond supports a low invertebrate community. No waterfowl or fish are present in the pond.

The pond achieved a HSI score of 0.59 which indicates the pond is of 'below average' suitability to support breeding GCNs.

3.3.2 Reptiles

Records of slow-worm, grass snake, and common lizard, were returned from within 2km of the proposed development site. The closest record comprises a grass snake record approximately 400m from site, although this record is approximately 40 years old. The next nearest record comprises a slow worm record located approximately 700m from site in 2022.

The dense scrub habitat borders arable land in some instances and provides broadly suitable habitat for slow-worm *Anguis fragilis* and common lizard *Zootoca vivipara*. The field margins, where the sward has grown slightly longer, could also be used by commuting and foraging common reptile species. In addition, the earth bunds may provide suitable habitat for basking, particularly as the clearing of the access track has opened the earth bunds to natural light.

3.3.3 Badger

Records of badger were returned from within 2km of the proposed development site, however, no records were returned from within 400m.

The habitats onsite, including dense scrub and grassland, may provide commuting and foraging opportunities for badger. Despite a thorough search of the development boundary and the nearby scrub habitat, no evidence of badger activity was identified during the walkover survey. However, the habitats onsite remain broadly suitable for badger.

3.3.4 Bats

There are a small number of static caravans and wooden buildings within the southern section of the site. The buildings are of negligible suitability to support roosting bats based on a broadly unsuitable construction type, and a lack of potential roosting features. In addition, there are a number of immature trees within the proposed development site which were all assessed from ground-level and were found to be unsuitable for roosting bats. The dense scrub and grassland habitats may provide commuting and foraging opportunities for bats.

3.3.5 Hazel dormouse

The habitats on site are relatively unsuitable for dormice *Muscardinus avellanarius*. There is no woodland or hedgerows within the proposed development site. In addition, no records of hazel dormice were returned from within 2km of the proposed development site. Therefore, it is considered unlikely that hazel dormice will be present onsite.

3.3.6 Birds

Although a targeted bird survey was not conducted during the site visit, the following bird species were recorded whilst on site: dunnock *Prunella modularis*, magpie *Pica pica*, blackbird *Turdus merula*, robin *Erithacus rubecula*, wood pigeon *Columba palumbus*, wren *Troglodytes troglodytes*, long-tailed tit *Aegithalos caudatus*, song thrush *Turdus philomelos*, jay *Garrulus glandarius*, and great tit *Parus major*.

Of these species mentioned above, the dunnock and song thrush are listed under section 41 of NERC act 2006 and are listed on the most recent birds of conservation concern “amber list”. The woodpigeon and wren are included in the “amber list”.

The site is entirely unsuitable to support birds that are a qualifying feature of the Thames Estuary & Marshes Ramsar site, and South Thames Estuary & Marshes SSSI; such as wading birds and waterfowl. However, areas of dense scrub, introduced shrub and trees provide suitable nesting opportunities for breeding birds in the summer.

3.3.7 Trees

Trees on site may be protected by a Tree Preservation Order (TPO), for which a check has not been undertaken.

3.3.8 Hedgerows

There are no hedgerows within the proposed development site.

3.3.9 Plant communities

No plant communities or individual species were recorded on site which are afforded statutory protection in their own right.

3.3.10 Invasive species

No invasive species were identified during the walkover survey.

3.3.11 Otter, water vole and white-clawed crayfish



There are no watercourses within the proposed development site. Therefore, otter, water vole and white-clawed crayfish are not considered to be present onsite.

3.3.12 Hedgehog

Records of hedgehog were returned from within 2km of the proposed development site. The areas of dense scrub and grassland on site may provide foraging and commuting opportunities for hedgehogs.

4 EVALUATION AND RECOMMENDATIONS

This section provides a brief assessment of the likely impacts associated with the proposed development on the receptors identified during the walkover survey and desk study. It also includes any mitigation and compensation measures which may be required for the proposed development to proceed.

4.1 Habitats

4.1.1 Designated sites

The sites identified during the desk study were cross-referenced with the survey area relevant to this report. The closest statutorily protected site is Thames Estuary & Marshes Ramsar site, and South Thames Estuary & Marshes SSSI which are located approximately 179m to the north of the proposed development site.

Given the distances from site and the scale of development, it is considered unlikely that the proposed development will have any direct impact on this designated site, however, indirect impacts cannot be ruled out due to the potential for increased recreational activities.

4.1.2 Trees

There are a number of semi-mature and early mature trees on the site comprising self-seeded sycamore amongst the dense scrub.

Construction impacts

Site clearance and setting out may involve the direct loss of trees on site as an ecological resource or may result in damage to any trees which are to be retained. Construction activities too close to the RPAs of retained trees could cause permanent damage.

Mitigation

Trees, in particular those forming a linear feature across the site, should be retained where possible. RPAs should be established and implemented around the trees which are to be retained. Where necessary, these areas should be adequately protected by appropriately designed protective barriers and ground protection throughout the entire development process.

Compensation

If any trees are to be removed, they should be replaced accordingly as part of a detailed landscaping scheme, with only native species to be planted.

Operational impacts

No operational impacts are envisaged.

4.2 Species

4.2.1 Amphibians

The terrestrial habitats on site are broadly suitable for foraging and commuting amphibians. There are two mapped ponds (Ponds 1 and 2) within close proximity of the site that were accessed as part of this survey, and a further three ponds were not accessed. Numerous GCN records were returned from the records search, although the nearest record from the last 25 years is more than 1.7km from the site boundary.

Construction impacts

Potential impacts include direct harm, injury and / or death to individuals.

Mitigation

A GCN impact assessment should be carried out for all waterbodies within 250m of the site to determine their suitability to support GCN. This impact assessment should occur between mid-April to June inclusive and include eDNA analysis to determine presence or absence of GCN.

Operational impacts

To be assessed following the GCN impact assessment and eDNA analysis.

4.2.2 Reptiles

The dense scrub, field margins and bunds are broadly suitable for foraging, sheltering, commuting and basking common reptile species. Within the last 25 years, the nearest reptile records include slow-worm, grass snake and common lizard records are all situated more than 700m from the site boundary.

Construction impacts

If reptiles are present during the construction activities, they could be directly harmed. The development could also result in a loss of suitable foraging habitat and the severance of commuting corridors across the site.

Mitigation

Based on the development proposals provided to UES at the time of writing, the works are relatively non-invasive and will primarily be limited to grassland pasture, hardstanding or recently-cleared access tracks that lead into the dense scrub. The vast majority of this dense scrub will be retained and will therefore have the capacity to absorb any reptiles displaced by the construction activities. Nevertheless, the following reasonable avoidance measures should be implemented on site during the construction phase of the development as a precautionary measure:

- Any dense scrub that is to be cleared to facilitate the development should be done so in a two-stage fashion. The scrub should be cut to a height of approximately 10cm and left for a period of 24 hours at least. The remaining woody growth and roots can then be removed after 24 hours. This will encourage reptiles into the nearby scrub and will give the displaced reptiles time to move on their own accord.

- Similarly, any areas of grassland within the proposed working area are to be kept at their current short sward height or reduced to a sward height of 10cm and left for at least 24 hours prior to the start of development works. This is to give any reptiles present time to move off site of their own accord. The mown / cleared area will then be maintained with a short sward until the works on site have been completed.
- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45-degree angle to allow trapped wildlife to escape. Any open excavations should be checked for trapped wildlife in the morning prior to start of works on site.
- Where possible, materials will be stored on pallets off the ground in order to reduce the risk of reptiles sheltering underneath them.
- UES will remain on-call throughout the development and if any reptiles are encountered, work on site is to stop immediately and ecological advice is to be sought.
UES can be contacted directly on 01565 757788.

Operational impacts

No operational impacts are envisaged.

4.2.3 Badger

The habitats onsite and directly adjacent to the site are broadly suitable for badger. Although no evidence of badger activity was identified during the walkover survey.

Construction impacts

Construction activities without mitigation could result in direct harm to commuting and foraging badgers that may be present in the nearby area.

Mitigation

The following RAMs should be implemented during the construction phase of the development:

- No trenches or excavations will be left open overnight. They will be backfilled or covered with board, or alternatively fitted with a means of escape for any badger (or other animal) which may become trapped within, such as a plank or slope leading out of the bottom of the excavation at an angle of 45°.
- Excavations will be checked before they are backfilled to ensure that no animals have become trapped.
- Any pipes will be stored with caps on to prevent entry by badgers and other animals, and materials such as barbed wire will be stored so that animals cannot become entangled in them.



- Any chemicals or harmful materials will be stored so that they cannot be accessed by badgers or other animals.
- UES will remain on-call throughout the development and if any badgers or evidence of badger setts are encountered, work on site is to stop immediately and ecological advice is to be sought. **UES can be contacted directly on 01565 757788.**

Operational impacts

No further impacts are envisaged.

4.2.4 Bats

The dense scrub habitat may provide commuting and foraging opportunities for bats. However, the trees onsite are either immature and have not yet had time to develop PRFs, or were assessed from ground-level and found to contain no PRFs.

Construction impacts

Inappropriate landscaping could also result in the severing of commuting corridors used by bats as well as the loss of foraging habitats.

Mitigation

Dense scrub at the site boundary should be retained where possible or replaced as part of the landscaping scheme to retain connectivity across the site.

Operational impacts

Any external lighting installed as part of the development should be designed to be wildlife friendly and avoid overspill onto areas of higher quality bat foraging and commuting habitat.

4.2.5 Birds

There are a number of habitats, such as dense scrub, introduced shrub and trees which could support breeding birds.

Construction impacts

Tree felling, arboricultural works and vegetation removal could result in the direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season.

Mitigation

Site clearance, tree felling, arboricultural works and vegetation removal (including enabling works) are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works.



Compensation and enhancement

If extensive areas of vegetation are to be removed, consideration should be given to providing replacement habitat for foraging and nesting birds by incorporating tree, shrub or scrub planting as part of the landscaping proposals.

Landscaping can also be used to promote biodiversity through the appropriate design of habitats and creating habitat mosaics, which promote natural linkages and hence the dispersal of target species. Principles and landscaping ideas beneficial to wildlife and relevant to this site include:

- Planting and management of hedgerows
- Planting of berry and nut bearing shrub species to encourage winter birds
- Planting and management of shrubs which develop a mosaic of structures to support breeding birds
- Use of nectar bearing flowers to encourage invertebrates (such as bees, flies, beetles and butterflies)

Species are to be native, of local provenance or to have a proven benefit to biodiversity. Further information can be found at Appendix 5 – Landscape design for birds.

Compensation for the loss of nesting habitat and the enhancing of the nesting habitat on site can also be provided through the provision of bird nest boxes. At the time of writing this report no detailed plans are available, but bird boxes that could be used on site include:

- Schwegler 1B nest box (affixed to trees)
- Schwegler 1SP sparrow terrace (affixed to building below the eaves)
- Schwegler 2H robin nest box (affixed to trees)
- Schwegler 3S starling nest box (affixed to trees or buildings)
- Schwegler 1MR Avianex box (affixed to trees or buildings)
- Manthorpe swift nest brick (incorporated into the external walls of buildings)

The bird boxes should be sited at a minimum height of three metres. Unless there are trees which shade the box during the day, the boxes should be oriented between north and east, thus avoiding strong sunlight and the wettest winds.

Operational impacts

Inappropriate management of the habitats on site could degrade them and render them unsuitable for wildlife.

Mitigation

It is important to implement good horticultural practice in any landscaping scheme, including the use of peat-free composts, mulches and soil conditioners. The use of pesticides (herbicides, insecticides, fungicides and slug pellets) should be discouraged to prevent fatal effects on the food chain. Any pesticides used should be non-residual.

Excessive removal or pruning of trees and hedgerows should be avoided to maximise the growth and plant matter available to wildlife. Pruning should be left until late winter to leave seeds and berries for wintering wildlife and to ensure no impact on breeding and nesting birds.



5 CONCLUSION

The proposed development site has an area of approximately 0.653ha and is dominated by dense scrub with areas of bare ground where vegetation removal has occurred. There are several earth bunds located between the bare ground and dense scrub within the northern section of the site. The southern section of the site contains areas of improved grassland, introduced shrub and hardstanding with a small number of buildings. There are also two ponds located within close proximity to the site.

The preliminary ecological appraisal has highlighted potential issues with the following ecological receptors on or adjacent to site: amphibians, badger, birds, bats, reptiles, and trees. Provided these issues are addressed in accordance with the recommendations detailed in this report, the development may proceed without adversely impacting the aforementioned ecological receptors.

The development also presents an opportunity to enhance the habitats available to wildlife on site. The provisioning of bat and bird nest boxes on site will provide improved roosting and nesting opportunities into the long-term future of the site.



6 REFERENCES

CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal* (Second Edition).

DEFRA (2019). *MAG/C* [online]. Available at: <http://magic.defra.gov.uk/>.

JNCC (2010). *Handbook for Phase 1 habitat survey: A technique for environmental audit*.

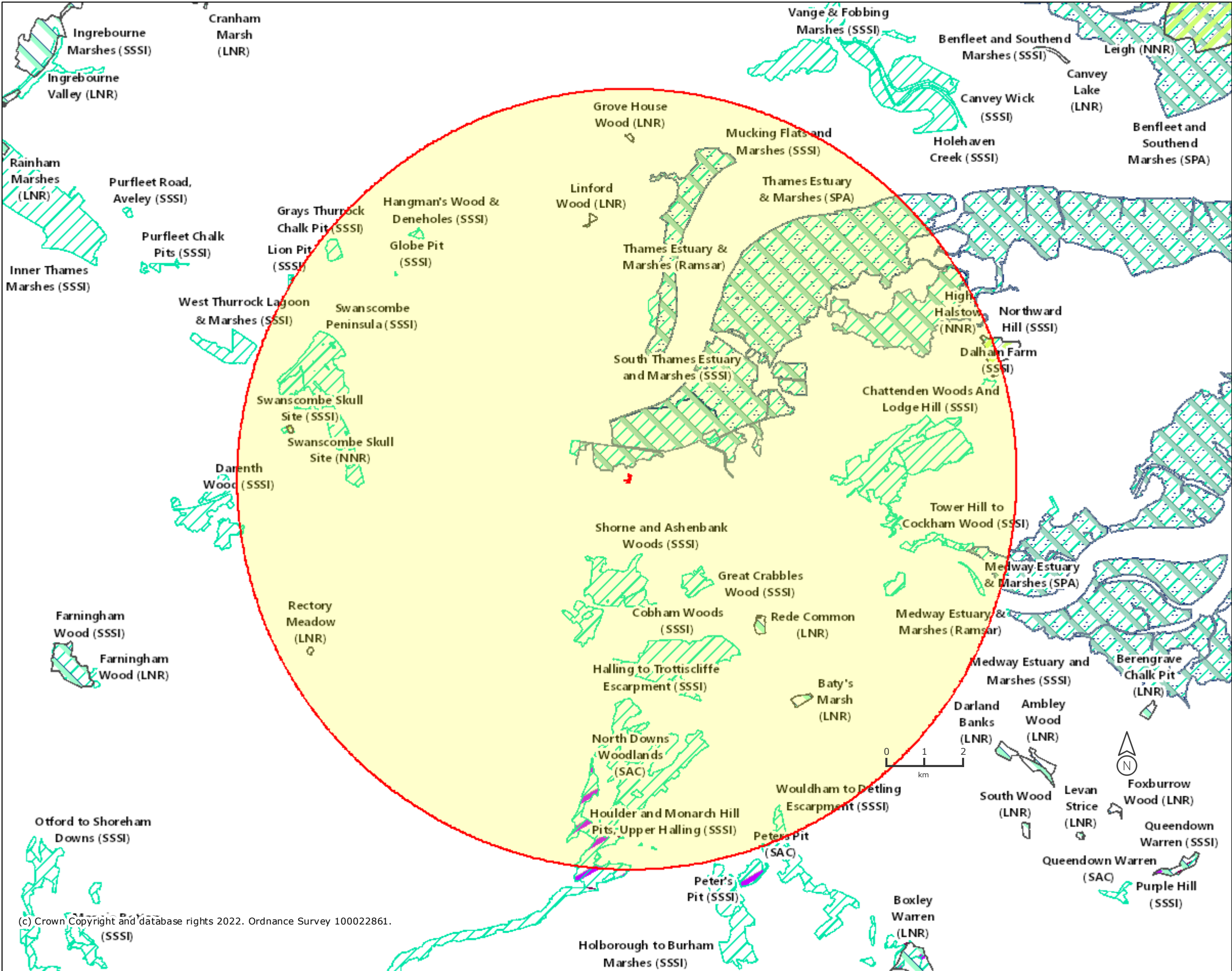
MHCLG (2021). National Planning Policy Framework (NPPF).



APPENDICES

Appendix 1 – Desk study

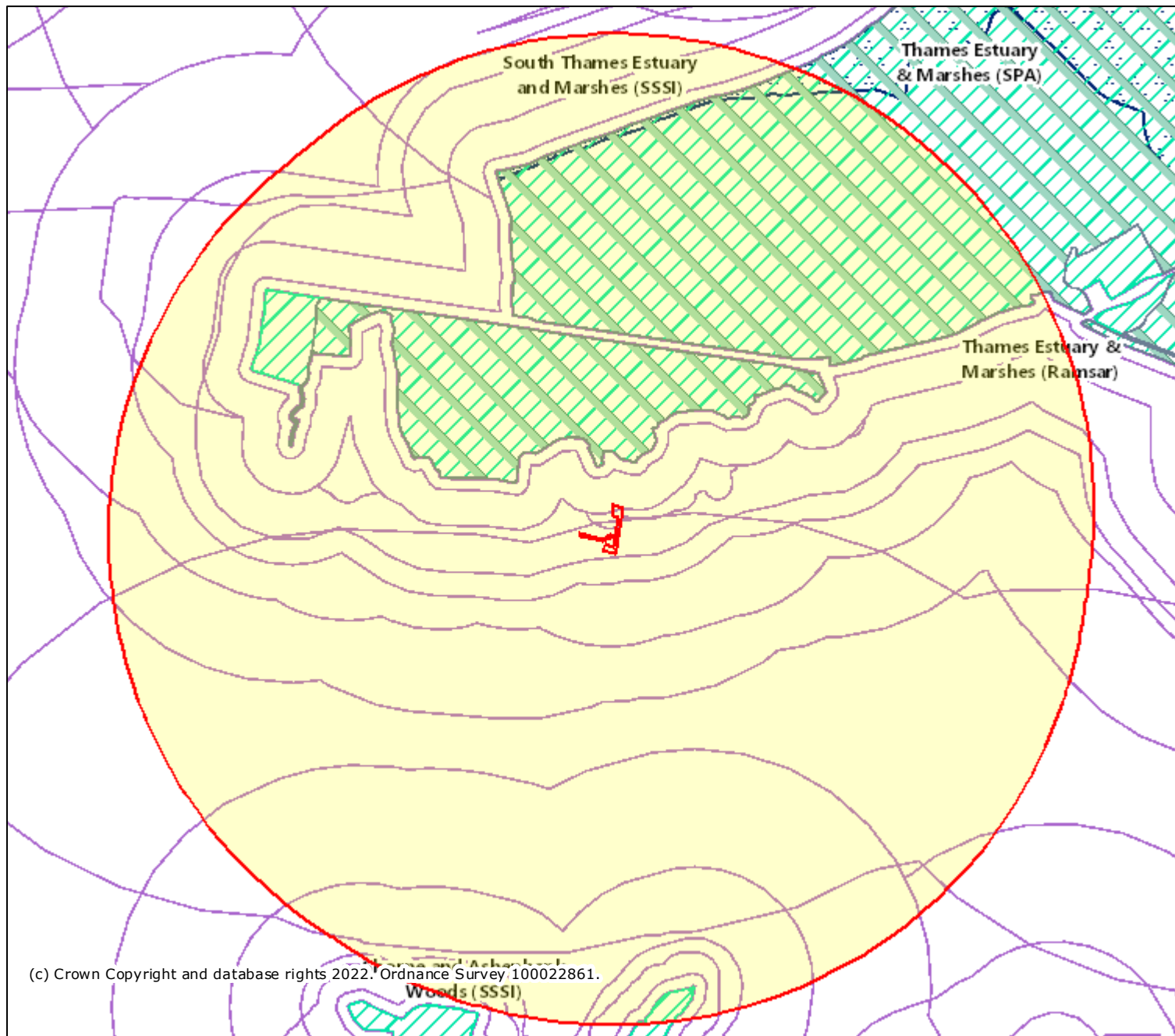
Statutorily Designated Sites (10km Buffer)



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

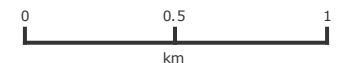
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Map produced by MAGIC on 21 November, 2023.
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Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

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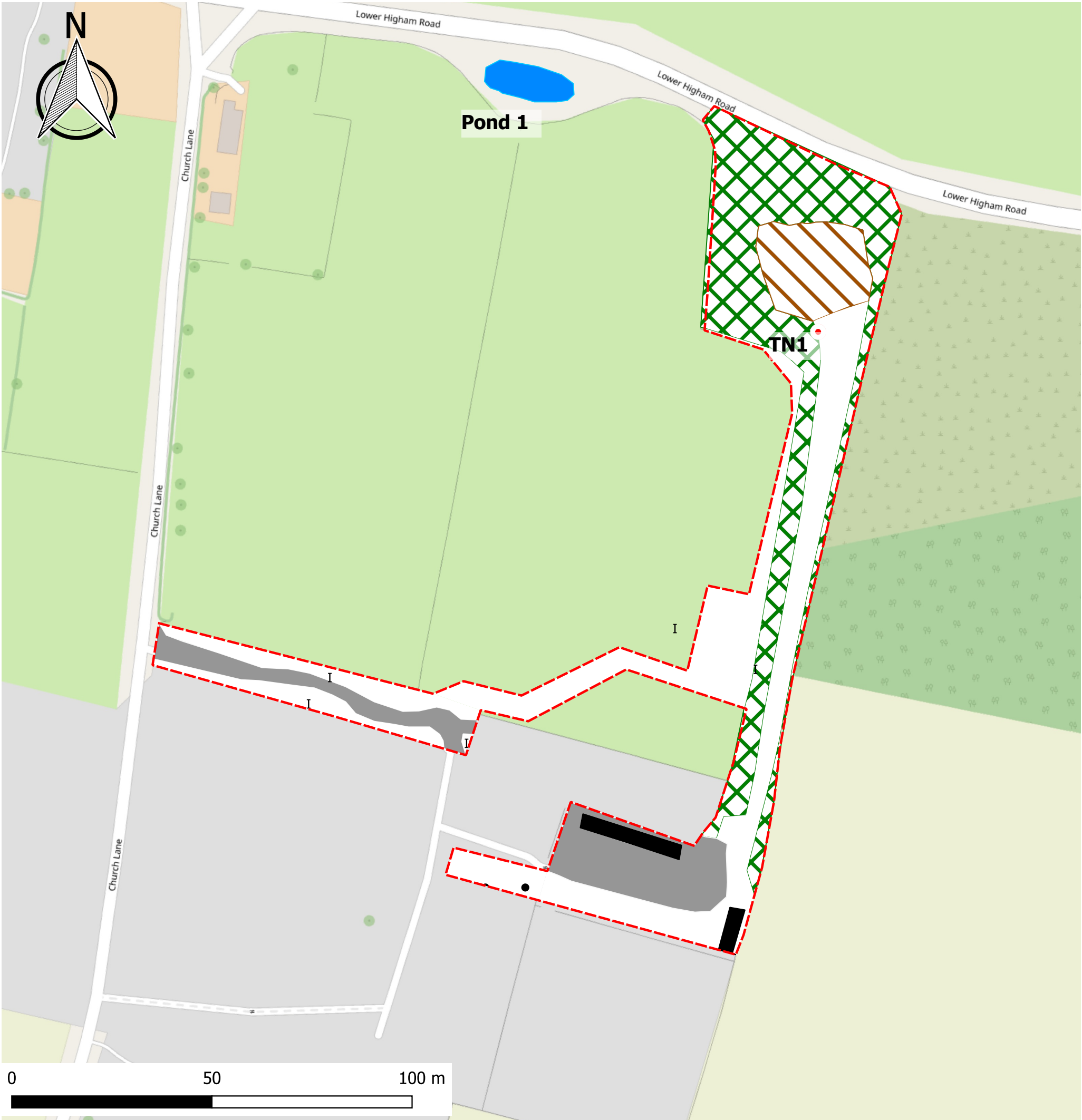


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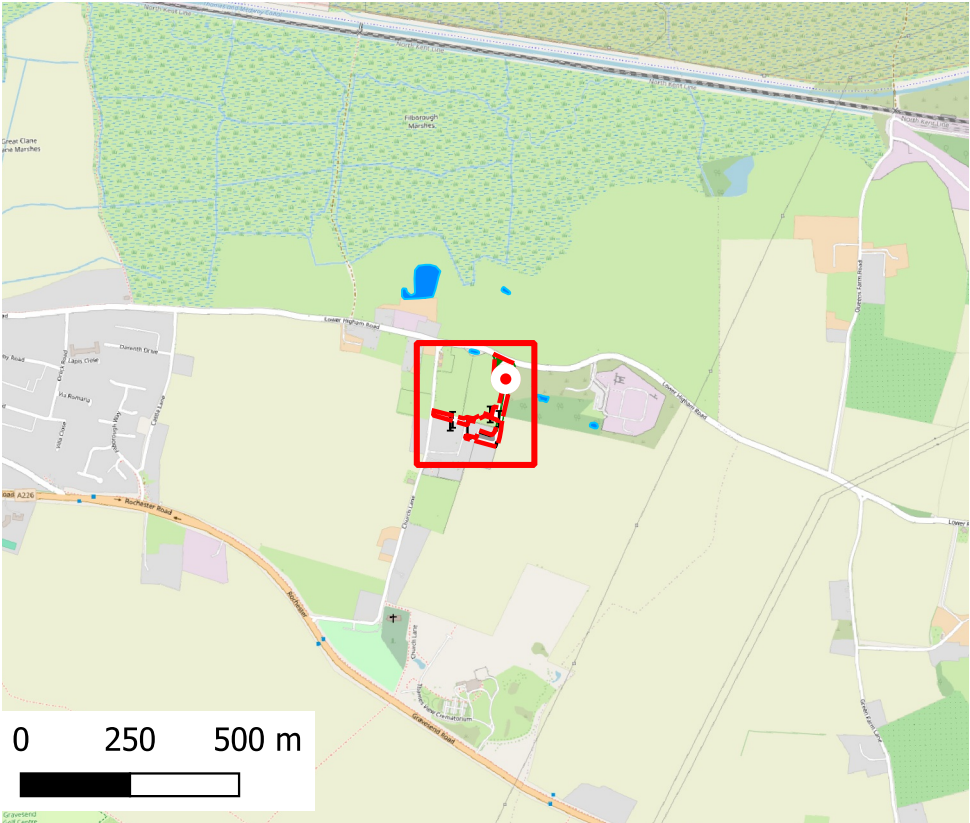
Appendix 2 – Phase 1 habitat plan

Target note 1 – Rabbit warren



Preliminary Ecological Appraisal

Site: Woodland North of East
Court Farm, Kent
NGR: TQ 68571 73075
Author: Mark Halliwell
Date: 22.05.2025



Key

- A2.1 - Dense scrub
- B4 - Improved grassland
- C3.1 - Tall ruderal
- G1 - Standing water
- J1.4 - Introduced shrub
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Hardstanding
- Survey boundary

Map data © 2023 Google, Imagery © 2023 Google

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Appendix 3 – Aerial photographs



**Woodland North of East Court
Farm, Gravesend**

Close aerial photograph

 Development boundary





**Woodland North of East Court
Farm, Gravesend**

Wide aerial photograph



Site location



Appendix 4 – Photographs



Photograph 1. Dense scrub within the proposed development site.



Photograph 2. Dense scrub along the edge of the bare ground.



Photograph 3. Pasture field located adjacent to the dense scrub.



Photograph 4. Improved grassland within the southern section of the site.



Photograph 5. Pond 1 located to the northwest of the site.



Photograph 6. Pond 2 located within the woodland to the east of the site.



Photograph 7. Ephemeral / short perennial encroaching the bare ground.



Photograph 8. Building within the southern section of the site.



Photograph 9. Buildings and storage within the southern section of the site.



Photograph 10. Bare ground within the proposed development site.



Photograph 11. Earth bunds within the proposed development site.



Photograph 12. A rabbit warren identified within the bare ground.



Appendix 5 – Botanical species list

Scientific name	Common name
<i>Acer pseudoplatanus</i>	Sycamore
<i>Carex pendula</i>	Pendulous sedge
<i>Cirsium arvense</i>	Creeping thistle
<i>Crataegus monogyna</i>	Hawthorn
<i>Dactylis glomerata</i>	Cock's foot
<i>Galium aparine</i>	Cleavers
<i>Hedera helix</i>	Common ivy
<i>Helminthotheca echioides</i>	Bristly ox-tongue
<i>Holcus lanatus</i>	Yorkshire fog
<i>Lemna minor</i>	Common duckweed
<i>Lolium perenne</i>	Perennial rye grass
<i>Lycopus europaeus</i>	Gypsywort
<i>Myosotis sp.</i>	Forget-me-not sp.
<i>Poa annua</i>	Annual meadow grass
<i>Poa trivialis</i>	Rough meadow-grass
<i>Prunella vulgaris</i>	Selfheal
<i>Prunus americana</i>	Wild plum
<i>Prunus laurocerasus</i>	Cherry laurel
<i>Ranunculus repens</i>	Creeping buttercup
<i>Salix caprea</i>	Goat willow
<i>Sambucus nigra</i>	Elder
<i>Stellaria media</i>	Common chickweed
<i>Taraxacum officinale</i>	Dandelion
<i>Trifolium repens</i>	White clover



Appendix 6 – Landscape design for birds

SPECIES	F	SIZE				LOCATION			SOIL	BENEFITS TO WILDLIFE
		T	S	M	L	H	W	Su/Sh	MOISTURE	
TREES										
Alder*	D			Y				Su	M	Seed food for birds
Beech*	D			Y	Y	Y		Su	D	Seed food for birds
Birch*	D		Y	Y	Y			Su	D	Seed food for birds
Bird cherry *	D			Y	Y			Su	D	Food for birds, flowers attract insects
Crab apple*	D		Y	Y	Y			Su	D	Food for birds, flowers attract insects
English oak*	D				Y			Su	D	Food for birds, insects and mammals, nesting sites
European larch*	D				Y			Su	M	Seed food for birds
Holly*	E		Y	Y	Y	Y		Su	D	Fruits eaten by birds, food plant of holly blue butterfly
Juniper*	E							Su	D	Shelter and nest sites, fruits eaten by thrushes
Lime*	D				Y	Y		Su	D	Seed food for birds
Rowan*	D			Y	Y			Su	D	Fruits eaten by birds
Scot's pine*	E				Y			Su	D	Seed food for birds
Swedish whitebeam	D		Y	Y	Y			Su	D	Food for birds, flowers attract insects
Wild cherry*	D			Y	Y			Su	D	Food for birds, flowers attract insects
Yew*	E		Y	Y	Y	Y		Su	D	Food for birds, nesting sites
SHRUBS										
Barberry	B	Y	Y	Y	Y	Y		Su	D	Good shelter and nest cover for birds, berries may provide food
Blackthorn*	D			Y	Y	Y		Su	M	Attracts insects, food for birds, nesting sites
Buckthorn*	D			Y	Y	Y		Su/Sh	D	Food plant of brimstone butterfly, fruits eaten by birds
Butterfly bush	E	Y	Y	Y	Y	Y		Su	D	Attracts insects
Californian lilac	E			Y	Y	Y	Y	Su	D	Flowers attractive to various insects
Dogwood*	D			Y	Y	Y		Su	D	Food for birds, winter stem colour
Elder*	D		Y	Y	Y	Y		Su	D	Food for birds
Escallonia	E			Y	Y	Y		Su	M	Flowers attractive to various insects, tolerant of salt - good in coastal areas
Field maple*	D		Y	Y	Y	Y		Su	D	Good source of insect food for birds
Firethorn	E	Y	Y	Y	Y	Y	Y	Su	D	Berries popular with many bird species
Flowering current	D		Y	Y	Y			Su	D	Early flowers attractive to insects
Forsythia	D		Y	Y	Y	Y	Y	Su	D	Early flowers attractive to insects
Garria	E	Y	Y	Y	Y		Y	Su	D	Winter catkins, early cover for nesting birds
Goat willow*	D	Y	Y	Y	Y			Su	D	Catkins attractive to bees, good source of insect food for birds
Gorse*	E			Y	Y	Y		Su	D	Early flowers attractive to insects, good protection for birds
Rhytismatales	E			Y	Y	Y		Su	D	Good cover, tolerant of salt - good in coastal areas
Guelder-rose*	D			Y	Y	Y		Su	D	Food for birds & insects
Hawthorn*	D		Y	Y	Y	Y		Su	D	Flowers attractive to insects, fruits eaten by birds, good shelter and nesting site
Hazel*	D	Y		Y	Y	Y		Su	D	Food for birds, insects and mammals, nesting sites
Laurel-leaved vibumum	E		Y	Y	Y			Su	D	Early flowers good for insects, good cover for birds

Lavender	E	Y	Y	Y	Y	Su	D	Flowers attract many insects, seeds popular with finches		
Lilac	D		Y	Y	Y	Su	D	Flowers attractive to insects		
Oregon grape	E		Y	Y	Y	Su/Sh	M	Early flowers good for insects		
Pheasant berry	E			Y	Y	Su	D	Berries popular with many bird species		
Privet*	E			Y	Y	Y	Su	D	Flowers attract butterflies, produces berries	
Rose	D	Y	Y	Y	Y	Y	Su	D	Fruits of some varieties attractive to birds	
Rosemary	E	Y	Y	Y	Y	Y	Su	D	Flower attract many insects	
Shad bush	D		Y	Y			Su	M	Flowers attract insects, early forming berries good for thrushes	
Snowberry	D			Y	Y	Y	Su/Sh	D	Flowers attractive to bees, fruits attractive to birds, dense stems provide cover	
Spindle*	D		Y	Y	Y		Su	D	Berries eaten by birds, but poisonous to mammals	
Tamarix	D			Y	Y	Y	Su	D	Flowers attractive to various insects, tolerant of salt - good in coastal areas	
CLIMBERS & RAMBLERS										
Bramble*	D		Y	Y	Y	Y	Y	Su/Sh	D	Food for birds, insects and mammals, nesting sites
Clematis	D	Y	Y	Y	Y			Su	D	Nesting sites
Honeysuckle*	D	Y	Y	Y	Y	Y	Y	Su/Sh	D	Attractive to insects, good nesting site, food for birds
Ivy*	E	Y	Y	Y	Y	Y	Y	Su/Sh	D	Attractive to insects, good nesting site, food for birds
Rose	D	Y	Y	Y	Y	Y	Y	Su	D	Fruits of some varieties attractive to birds
Winter jasmin	E	Y	Y	Y	Y	Y	Y	Su	D	Early flowers attractive to insects
Wisteria	D	Y	Y	Y	Y		Y	Su	D	Attractive to insects, good nesting site

KEY			
*	Native (NB: some varieties are cultivars or non-native)	Location	H = may be used as a hedge plant
F	D = Deciduous		W = may be used as a wall shrub
Foliage type	E = Evergreen		Su = Sunny borders
	B = Both		Sh = Shade tolerant
Size	T = Terraces & balconies		Su/Sh = Grows in partial shade
Suitable for garden sizes	S = Small garden (<= 6m x 4m)	Soil mositure	D = Well drained
	M = Medium gardens (<= 12m x 6m)		M = Moist
	L = Large gardens (> 12m x 6m)		W = Wet soil



Appendix 7 – Planning and statutory context

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of legislative protection in relation to the following species and habitats:

Amphibians	Trees
Great crested newts	Hedgerows
Other amphibians	Invasive plant species
Reptiles	Otters
Badgers	Water voles
Hazel dormouse	White-clawed crayfish
Bats	Planning policy
Birds	

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Amendment (EU exit) Regulations 2019. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 41 of the NERC Act (see bats section for further details).

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural England team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by Natural England is required for the legal implementation of a mitigation scheme.

A Natural England mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the

proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack toad, common toad and pool frog are also listed under Section 41 of the NERC Act (see bats section for further details).

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Reptiles

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure any of the species listed above
- Sell, offer, advertise or transport for sale a live or dead animal of the species listed above

If a proposed development is likely to have an impact on these reptiles the local statutory nature conservation organisation must be consulted.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Read together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture any sand lizards or smooth snakes
- Deliberately, intentionally or recklessly disturb sand lizards or smooth snakes in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of such an animal
- Damage or destroy breeding sites or resting places of such animals
- Intentionally or recklessly disturb sheltering sand lizards or smooth snakes, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead sand lizards or smooth snakes, any part of such an animal or anything derived from such an animal

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

All reptile species are also listed under Section 41 of the NERC Act (see bats section for further details).

Badgers

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Hazel dormouse

Hazel dormice *Muscardinus avellanarius* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture dormice
- Deliberately, intentionally or recklessly disturb dormice in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of dormice
- Intentionally or recklessly disturb sheltering dormice, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead dormouse, any part of a dormouse or anything derived from a dormouse

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Dormice are also listed under Section 41 of the NERC Act (see bats section for further details).

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the "Habitats Regulations"). The Wildlife and Countryside Act is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat

- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] ... uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by Natural England.

A Natural England mitigation licence application requires a Mitigation Method Statement and, in many cases, a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

The Natural Environment and Rural Communities (NERC) Act 2006 lists the following bat species as species of principle importance under Section 41:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano Pipistrelle *Pipistrellus pygmaeus*
- Brown Long-eared bat *Plecotus auritus*
- Greater Horseshoe *Rhinolophus ferrumequinum*
- Lesser Horseshoe *Rhinolophus hipposideros*

Section 40 requires every public body in the exercising of its functions 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (all biodiversity and not just section 41 species and habitats); therefore making these bats a material consideration in the planning process and requiring a detailed ecological bat survey before planning permission can be granted.

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The NERC Act offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity,

localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Trees

Trees may be protected on an individual or group level through a Tree Preservation Order (TPO). In order to carry out works to trees with a TPO, prior written consent must be obtained from the Local Planning Authority. Trees may also be protected through a condition of planning consent or designated conservation areas.

Hedgerows

The Hedgerow Regulations are made under Section 97 of the Environment Act 1995 and came into operation on 1st of June 1997. They aim to protect important hedgerows in the countryside by controlling their removal through a system of notification to the Local Planning Authority.

A hedgerow can only be considered for classification as “important” if it, or the hedgerow of which the section belongs to is over 20m in length (or which meets a hedgerow at either end) and has existed for 30 years or more.

Invasive plant species

A number of invasive, non-native plant species are listed under Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended). The most commonly encountered listed species in ecological surveys are Japanese knotweed *Fallopia japonica*, Montbretia *Crocasmia x crocosmiiflora* and variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*. Section 14(2) of this Act makes it an offence to *plant or otherwise cause to grow in the wild* any plant listed on Schedule 9 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

A number of invasive, non-native plants species are listed under Schedule 2 (Part II) of the Invasive Alien Species (Enforcement and Permitting) Order 2019. The most commonly encountered listed species in ecological surveys are Himalayan balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*. Section 3 of this Act make it an offence to *plant or otherwise causes to grow in the wild* any plant which is listed on Schedule 2 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

Soil or plant material contaminated with non-native and invasive plants can cause ecological damage and may be classified as controlled waste. It is an offence to keep, treat or dispose of waste that could harm the environment or human health. If there is any doubt, contact the local authority or Environment Agency.

Otters

European otter *Lutra lutra* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture otters
- Deliberately, intentionally or recklessly disturb otters in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of otters
- Intentionally or recklessly disturb sheltering otters, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead otter, any part of an otter or anything derived from otter

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Otters are also listed under Section 41 of the NERC Act (see bats section for further details).

Water voles

Water voles *Arvicola amphibius* are protected by the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water vole
- Possess or control live or dead water vole or any part of a water vole
- Intentionally or recklessly damage destroy or obstruct access to any structure or place which a water vole uses for shelter or protection, or disturb water vole using such a place
- Sell, offer, advertise or transport live or dead water voles for sale

Licences are available from Natural England to allow activities that would otherwise be an offence, including:

- Scientific or educational purposes
- For the purposes of ringing or marking
- Conserving wild animals or introducing them into particular areas
- Preserving public health or public safety
- Preventing the spread of disease
- Preventing serious damage to any form of property or to fisheries

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Water voles are also listed under Section 41 of the NERC Act (see bats section for further details).

White-clawed crayfish

White-clawed crayfish *Austropotomobius pallipes* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure white-clawed crayfish
- Sell, offer, advertise or transport for sale a live or dead white-clawed crayfish

If a proposed development is likely to have an impact on white-clawed crayfish then the local statutory nature conservation organisation must be consulted.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Their inclusion on the EC Habitats Directive allows areas to be designated as Special Areas of Conservation (SAC) for the presence of white-clawed crayfish. Such a designation brings legal protection under the Conservation of Habitats Regulations 2017, this includes how the site is managed and what development can occur on and in proximity to these sites.

White-clawed crayfish are also listed under Section 41 of the NERC Act (see bats section for further details).

Planning policy

The National Planning Policy Framework 2021 (NPPF) provides guidance on the interpretation of the law in relation to the natural environment and development.

National Planning Guidance is issued in the form of the National Planning Policy Framework 2021 (NPPF). The most relevant section is 15: Conserving and enhancing the natural environment.

Key relevant principles stated in 15: Conserving and enhancing the natural environment are;

- 174.** Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 179.** To protect and enhance biodiversity and geodiversity, plans should:
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶¹; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶²; and
 - b) 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
- 180.** 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 reasons⁶³ 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.