



THREE SHIRES LTD
ECOLOGY, FENCING, ARBORICULTURE, INVASIVE WEEDS

Piper Hole Farm
Eastwell Road
Scalford
Leicestershire
LE14 4SS



**Field
Maple
House,
Desford**
Draw My
Plans / Phil
Vesty

Preliminary Ecological Appraisal

January 2024



Confor
Promoting forestry and wood



Supplier
Qualification
Scheme



**BUILDER'S
PROFILE**



Phone: 01664 444 604
enquiries@threeshires.com

www.threeshires.com

Registered in England & Wales Company No. 4803506
Registered address: Linden Cottage, Kings Gardens, Gonerby Hill Foot, Grantham. NG31 8TY

threeshiresltd
 threeshireslimited

Report for

Draw My Plans UK
Phil Vesty

Main Contributors

Declan Roberts BSc (Hons) QCIEEM
Consultant Ecologist

Michael McCoy MSc (Hons) QCIEEM
Assistant Ecologist

Checked and Approved by

Nigel Shelton BSc (Hons) MSc MCIEEM MIFM
Director – Ecology

Checked and Issued by

Zoe Lewis BA (Hons)
Practice Manager - Ecology

Three Shires Ltd

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1 Introduction

1.1 Background

In January 2024, Three Shires Ltd was commissioned by Draw My Plans UK, Architectural Services, on behalf of Phil Vesty, to undertake a Preliminary Ecological Appraisal (PEA) of an area of land which is being considered for a small housing development.

This report covers an area of land that connects to a private property just east of Lindridge Lane, Desford (approximate National Grid Reference (NGR) SK 476038), hereafter referred to as 'the Site'.

1.2 Aims and Objectives of this Report

The aim of this report is to provide a baseline assessment of the habitats found on the Site and to highlight any protected/notable species that may be affected by the proposals and provide recommendations to avoid or mitigate potential effects as well as highlight opportunities for enhancement.

The potential effects of the proposals are considered the type and scale of effects arising from the proposals and the viability of pathways between the Site and any on or off-site receptor. Recommendations are made for avoidance or mitigation measures as appropriate. Where necessary or possible, measures for compensation for unavoidable losses are made, as are opportunities for ecological enhancement. This report follows best practice guidance^{1&2}.

The objectives are to:

- Identify any designated sites for nature conservation and priority habitats on, adjacent to or near the Site;
- Identify and record the habitats present on site, and where applicable, their ecological condition;
- Identify any the presence or potential presence of protected and/or notable plant or animal species on or near the Site;
- Identify the presence of any invasive plant species on or adjacent to the Site;
- Provide a map with habitats recorded using the UKHAB convention with target notes of ecological features as identified above;
- Undertake a preliminary assessment of the potential impacts on any ecological receptors identified on, adjacent or near to the Site; and
- Recommend further surveys, avoidance or mitigation measures, compensation requirements and any enhancement measures possible - as appropriate.

1.3 Site Location and Context

The Site is approximately 0.42ha in size and lies on the northern edge of the small village of Desford, in western Leicestershire, with the city of Leicester 11km to the east. The Site is accessed via Lindridge Lane with a private track leading from the road onto the Site (**Figure 1**).

¹ Guidelines for Preliminary Ecological Appraisal 2017 - CIEEM (cieem.net)

² British Standard (2013) BS 42020:2013 Biodiversity - Code of Practice For Planning and Development

The Site is bordered by private dwellings with large gardens directly to the north, south and west with lines of trees just beyond the Site boundary fencing, along the north and eastern perimeter of the Site. Bordering the eastern boundary of the Site past the line of trees are grassland fields while further north, past the residential property and along Lindridge Lane is an avian wildlife park known as Tropical Birdland (**Figure 2**).

The wider context of the Site and its surroundings features the small village of Desford to the south. Moving away from the Site in northerly, easterly and westerly direction, the landscape becomes much more agricultural in use.

Figure 1: Site Location

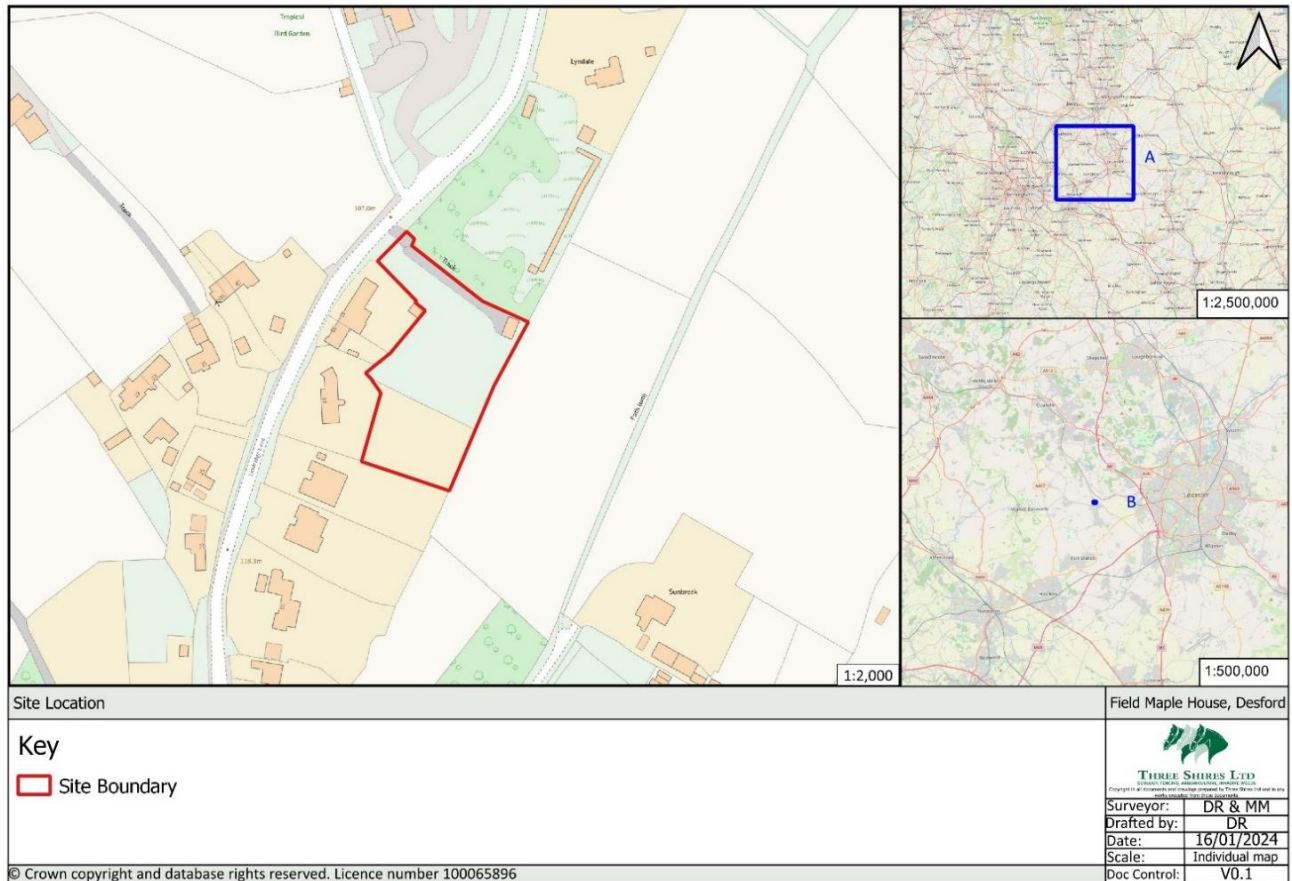


Figure 2: Site Landscape Context



1.4 Site Description

The Site is comprised of a large grassland field separated into two sections by a wooden fence. The northern section of grassland appears to be a paddock formerly used for horse grazing with a disused stable block in the northeast corner of the Site. The southern section of grassland forms a private garden that is connected to a residential property. There are individual trees across the Site with the majority of these featuring within the confines of the private garden.

1.5 Project Overview

The proposals include the construction of five new residential buildings each with their own private garage and garden (see **Figure 3 below**). (**Appendix A** for an A3 version).

The Site access point is to be reconfigured from the current stone track that joins on to Lindridge Lane into a new road that connects to each of the proposed residential buildings.

Figure 3: Proposed Development Plan



2 Relevant Legislation and Policy

The proposed development must comply with national nature conservation legislation, and with national, regional, and local biodiversity policies.

2.1 Legislation

The main pieces of legislation regarding the protection of species and habitats in the UK are the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Other legislation is in force which gives protection to certain species, such as the Protection of Badgers Act 1992, specific activities, such as the Wild Mammals (Protection) Act 1996 and specific habitats, such as the Hedgerow Regulations 1997 (as amended).

Invasive non-native species are regulated via a combination of the Invasive Alien Species (Permitting and Enforcement) Order 2019 and Section 14/Schedule 9 of the 1981 Act.

Under the Natural Environment and Rural Communities (NERC) Act 2006, all public bodies are required to have due regard to the conservation of biodiversity when carrying out their function. Under this Act, habitats and species that are of principal importance for the conservation of biodiversity in England are identified and published under the provisions of Section 41 (S41).

These are referred to as S41 or Habitats of Principal Importance (HPI) or Species of Principal Importance (SPI) within this document.

The Environment Act 2021 contains provisions that will ensure achievement of Biodiversity Net Gain (BNG) will be a mandatory requirement for developments in England seeking planning permission under the Town & Country Planning Act (1990). These provisions are expected to be fully activated by January 2024, with many local authorities already adopting the requirements.

This means Local Authorities across England will have a duty to ensure that any plans or projects provide biodiversity net gain, as opposed to the current national planning policy position of 'no net loss'.

BNG and also National Planning Policy require development proposals to demonstrate how the mitigation hierarchy (avoid – mitigate – compensate – enhance) has been applied.

2.2 National Planning Policy

The National Planning Policy Framework 2023 (NPPF)³ sets out the Government's planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). The revised NPPF was published in September 2023.

The NPPF states that "planning policies and decisions should...identify and pursue opportunities for securing measurable net gains for biodiversity", with Section 11 requiring Local Authorities in England to take measures to:

- Conserve and enhance biodiversity;
- Protect the habitats of these species from further decline; and
- Protect the species from the adverse effect of development.

The 2021 update to the NPPF includes a requirement for biodiversity improvements and net gains to be integrated into development design from the outset. It strengthens the wording on irreplaceable habitats,

³ Ministry of Housing, Communities & Local Government, National Planning Policy Framework (NPPF), 2023

and where the public benefit would outweigh the loss or deterioration of irreplaceable habitats will be required to provide detailed justification for the loss of irreplaceable habitats by demonstrating an overriding public need.

2.3 Local Planning Policies

The Local Plan for the Hinckley and Bosworth area is currently being updated for the period of 2020 – 2041 with a draft Local Plan having been created for the period of 2020 – 2039. This plan is currently still in the consultation stages. Although this is not yet an adopted Local Plan, the information within the document provides significant weight for this assessment.

NAT07 Protecting Biodiversity

Internationally and Nationally Designated Sites

International and Nationally Designated Sites will be safeguarded. Development which is likely to have any adverse impact on the notified features of a nationally designated site will not normally be permitted. In exceptional circumstances, a proposal may be found acceptable where it can be demonstrated that:

- a) A suitable alternative site with a lesser impact than that proposed is not available;*
- b) The on-site benefits of the proposal clearly outweigh the impacts on the notified features of the site and where applicable, the overall SSSI or habitat network;*
- c) All appropriate mitigation measures have been addressed through the development management process; and*
- d) Development likely to result in a significant effect on internationally designated sites will be subject to assessment under the Habitats Regulations and will not be permitted unless adverse effects can be fully avoided, mitigated and/or compensated.*

Development proposals should not have an adverse impact on the River Mease Special Area of Conservation (SAC). Where a significant effect on the SAC is identified an 'Appropriate Assessment' will be required.

Irreplaceable Habitats

Proposals which are likely to result in the loss or deterioration of an irreplaceable habitat (such as ancient woodland, ancient or veteran trees, old species-rich grassland, including that marked by ridge and furrow, and species-rich hedgerows Page 180 of 249 Locally Important Sites that meet Hedgerow Regulations ecological criteria) would only be acceptable where:

- e) The need and benefits of the development in that location clearly outweigh the loss;*
- f) It has been adequately demonstrated that the irreplaceable habitat cannot be retained with the proposed scheme; and*
- g) Appropriate compensation measures are provided on site wherever possible and off site where this not is feasible.*

Locally Important Sites

Development proposals affecting locally important sites should always seek to contribute to their favourable management in the long term.

Where a proposal is likely to result in harm to locally important sites (including habitats or species of principal importance for biodiversity, and sites that meet the Leicester, Leicestershire, and Rutland criteria for

designation as a Local Wildlife Site), developers will be required to accord with the following sequential approach:

- h) Firstly, seek an alternative site with a lesser impact than that proposed;
- i) Secondly, and if the first is not possible, demonstrate mitigation measures can be taken on site;
- j) Thirdly, and as a last resort, seek appropriate compensation measures, on site wherever possible and off site where this is not feasible.

NAT08 Enhancing Biodiversity and Habitat Connectivity

Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long-term future management and how the scheme is pollinator friendly.

All development should provide a measurable 10% net gain in biodiversity on site in the first instance, through biodiversity enhancement off-site, or through off setting where appropriate. All proposals should be supported by evidence to demonstrate a biodiversity net gain using the recognised biodiversity accounting metric and provide details of the long-term maintenance and management of the net gain.

Major developments in particular must include measures to deliver biodiversity gains through opportunities to:

- a) Restore and enhance existing features on site;
- b) Create additional habitats and ecological networks; and
- c) The linking of existing habitats to create links between ecological networks and where possible, with adjoining features.

Biodiversity net gain should be additional to any habitat creation required to mitigate or compensate for impacts on protected local/national BAP priority species. Net Gain can be delivered where there are no losses through development.

Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the Plan.

The retention and enhancement of linear features which enables strong connectivity of biodiversity as part of an integrated habitat network will be supported; this includes networks of hedgerows and ditches; enhanced habitats along the River Sence and Ashby Canal; roadside verges; and (cumulatively) private gardens, disused railway lines or other linear landscape features.

On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of the hierarchy of international, national and locally designated sites identified in Policy NAT07 is secured.

If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

3 Methodology

3.1 Zone of Influence

The Zone of Influence (Zoi) was defined considering the likely effects arising from the proposals, both during construction and in operation.

It is considered that the following impacts may result from the construction of low numbers of housing units:

- Temporary and permanent habitat loss;
- Injury or mortality of protected and notable species;
- Habitat degradation (e.g. dust pollution);
- Disturbance to protected and notable species resulting from works – machinery noise, vibration, light, increased human activity.

The distances from the site for these potential impacts are shown in **Table 1**.

Table 1: Zone of Influence used for this Assessment

Ecological Receptors	Zone of Influence
Special Areas of Conservation with bat species as features of interest	Within 10km of the Site boundary
Statutory protected sites	Within 2km of the Site boundary or where any site Impact Risk Zone (IRZ) covers the development site
Non statutory protected sites	Within 1km of the Site boundary
Habitats of Principal Importance and Ancient Woodland boundaries	Within 50m of the Site boundary
Waterbodies	Within 500m of the site boundary
Protected species evidence	Within the site boundary plus 50m
Habitats	Within the site boundary plus 50m, where visible

3.2 Desk Study

The following sources were used to provide data for the desk study:

- Multi-Agency Geographic Information for the Countryside (MAGIC)⁴ – to ascertain whether there are any statutory sites designated for nature conservation and recently granted (since 2009) European Protected Species (EPS) licences within 2km of the site; and
- Aerial photography – in order to aid preliminary ecological and overall assessment of the site;

⁴ magic.defra.gov.uk

- Hinckley and Bosworth Council Local Plan 2020-2039.

A search of local biological records was not undertaken for this report, due to the relative small scale of the proposals, site, location and the variable nature of records being considered unlikely to yield significantly more information than the other desk study elements and field survey.

3.3 Habitat Survey

A field survey was undertaken on 4 January 2024 by two suitably experienced ecologists from Three Shires Limited.

This was conducted by broadly following the extended JNCC Phase 1 Habitat Survey methodology but using the 'UKHab V2.01' classification system to identify and record habitats and evidence of the presence of any species.

The survey also included:

- A preliminary search for evidence of protected or important species and species groups, and for habitats and features likely to host them if direct evidence is absent;
- The identification of other constraints (e.g., invasive non-native plant species) and any further opportunities for ecological enhancement; and
- Preliminary Roost Assessment (PRA) of significant trees and buildings that may provide bat roost potential.

3.4 Protected and Notable Species

3.4.1 Badger

Field signs for badger (*Meles meles*) within or adjacent to the Site (within 30m of the boundary, access permitted) were recorded in accordance with the standard methodology outline (Harris et al 1989⁵) which includes surveying for active sett entrances, as well as spoil, bedding, latrines, hairs, prints, foraging signs and pathways.

3.4.2 Bats

An assessment of the buildings and trees was carried out to check for the suitability that they may provide for roosting bats.

The external surfaces of any buildings were given a visual examination using binoculars to check for loose or lifted roof tiles, soffit boards, fascias, guttering or cracked brickwork. Internal inspections were not carried out on the stable block at the northeast corner of the Site during the survey as access was not permitted.

An assessment of the trees and their suitability for roosting bats was carried out from the ground using binoculars and torches (where necessary). These were assessed for features such as woodpecker holes, fissures, cracks, cavities, loose bark and knot/rot holes that could be suitable for bats.

Where features were identified, observations of evidence of bat use or activity, such as droppings, urine stains, odour, feeding remains, scratch marks, grease stains, wear marks were recorded. Trees and buildings were categorised in accordance with best practice guidelines as negligible, low, moderate or high suitability based on the number and type of roosting features and the surrounding landscape character.

⁵ Harris S, Cresswell P & Jefferies D 1989. Surveying Badgers. Mammal Society Occasional Publication N° 9, The Mammal Society, London

3.4.3 Birds

An assessment of the on-site habitats to support bird species was carried out, looking at key features that would support breeding birds during the breeding bird season (March – August Inclusive) and the wider foraging potential across the Site.

3.4.4 Great Crested Newts and Other Amphibians

Any on-site waterbodies found and those within the immediate vicinity of the Site boundary were visually surveyed for their potential to provide suitable habitat for great crested newt (*Triturus cristatus*) (GCN). Should any ponds be recorded on the Site, these would be given a Habitat Suitability Index⁶ (I) score. This allowed a numerical value to be given to each pond based on its suitability based on variety of factors. These scores range from < 0.5 being poor to > 0.8 being excellent.

3.4.5 Invasive Non-Native Species (INNS)

The Site was assessed for the presence of any INNS that are listed on Schedule 9 of the Wildlife and Countryside Act 1981 or Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Regulations 2019.

3.4.6 Other Notable Species

The Site was also assessed for suitability for other protected species such as reptiles, invertebrates and European hedgehog (*Erinaceus europaeus*).

3.5 Survey Constraints and Limitations

Ecological surveys are limited by factors which affect the field evidence visible or presence of plants and animals on the Site such as, the time of year, migration patterns, behaviour and weather preceding the survey.

Due to surveys being limited to a single day a complete list of plants and animals cannot be compiled. The absence of evidence of any species on-site should not be taken as conclusive proof that the species is not present, or that it will not be present in the future.

Heavy rainfall prior to the survey being undertaken may have led to field signs being washed away that otherwise would have been recorded e.g. prints and faeces.

Due to the timing of the survey (January), the ground flora identification is unreliable due to many species not being visible (being in their vegetative state) or not flowering.

However, due to the habitats present on site and nature/management of these it is considered that the survey provides an accurate and representative record of the habitats present and potential for protected species.

⁶ <https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file>

4 Results

4.1 Statutory Nature Conservation Sites

There were no Special Areas of Conservation (SAC) with bats listed as features of interest within 10km.

There is one statutory designated site within a 2km radius of the Site; this being Botcheston Bog Site of Special Scientific Interest (SSSI), which is located 1.05km to the northeast (**Figure 4**).

Figure 4: Statutory Designated Sites within a 2km radius of the Site



The Site falls within the IRZ's for Botcheston Bog SSSI. The activities listed which require the LPA to consult with Natural England (NE) are:

- Infrastructure – Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water. Airports, helipads and other aviation proposals.
- Minerals, Oil & Gas – Planning applications for quarries, including: new proposals, Review of Minerals Permissions, extensions, variations to conditions. Oil and gas exploration and extraction.
- Air Pollution – Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units of floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores 250 tonnes).
- Combustion – General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

- Waste – Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
- Composting – Any composting proposal with more than 75,000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
- Water Supply – Large infrastructure such as warehousing/industry where total net additional gross internal floorspace following development 1,000m² or more.

The proposals do not fall into any of the listed categories and along with distance, scale and pathways it is considered that the proposals will not affect the SSSI and will not be considered further in this report.

4.2 Non-Statutory Sites

No non-statutory sites were noted within 1km as a local records search was not undertaken at this time.

4.3 Offsite Priority Habitats

There are no priority habitats recorded on MAGIC within 50m of the Site.

An area of priority deciduous woodland is recorded on MAGIC, approximately 140m northwest of the Site. This area of priority woodland is very unlikely to be affected by the proposed development due to connectivity to this woodland being limited by artificial barriers (Lindridge Lane). There are also no other connecting features including lines of trees/hedgerows or public footpaths that link the Site to this priority woodland.

4.4 Offsite Waterbodies and Watercourses

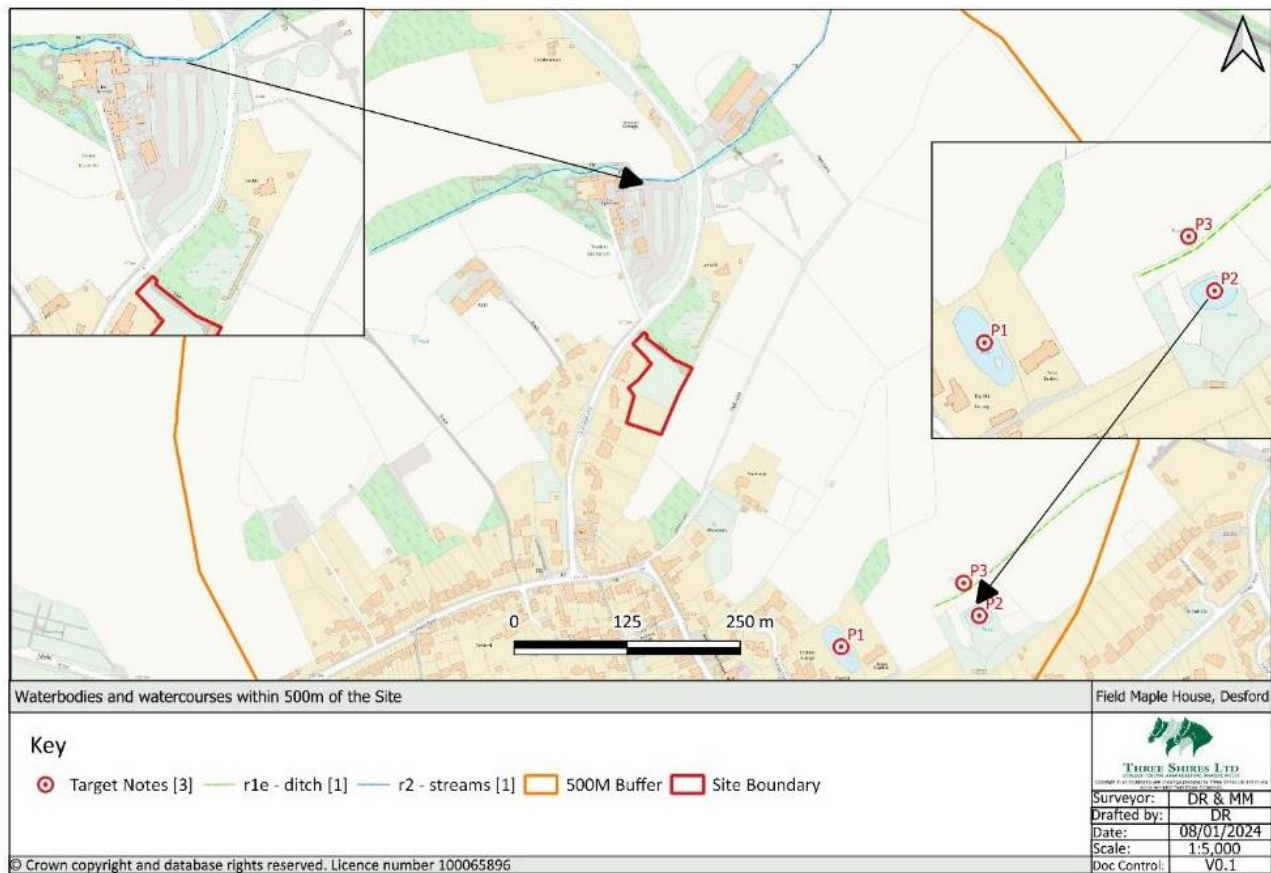
There are three waterbodies within a 500m radius of the Site, all of which are located south east of the Site boundary. These waterbodies are all within close proximity of each other, with the closest being **P1** at 0.3km south east of the Site (**Figure 5**).

A small stream is located just north of the Site at approximately 0.17km. This stream flows in a west/east direction and bisects the Tropical Birdland site. This stream is hydrologically connected to the Rothley Brook 0.7km north east of the Site. A wet ditch is located to the south east of the Site at approximately 0.36km and bisects **P2** and **P3**.

The proposed development is unlikely to affect any of the above habitats due to limited connectivity. The stream to the north of the Site features an artificial barrier in the form of Lindridge Lane and the Tropical Birdland site with no connecting features present. The three ponds and wet ditch to the south east of the Site also lack connecting features with no ditches that connect these areas. There are also residential properties that sit between the Site and these waterbodies and wet ditch.

None of the ponds (**P1-P3**), small stream north of the Site and the wet ditch to the south east were able to be surveyed due to access.

Figure 5: Waterbodies and Watercourses within 500m of the Site



4.5 On-Site Habitats

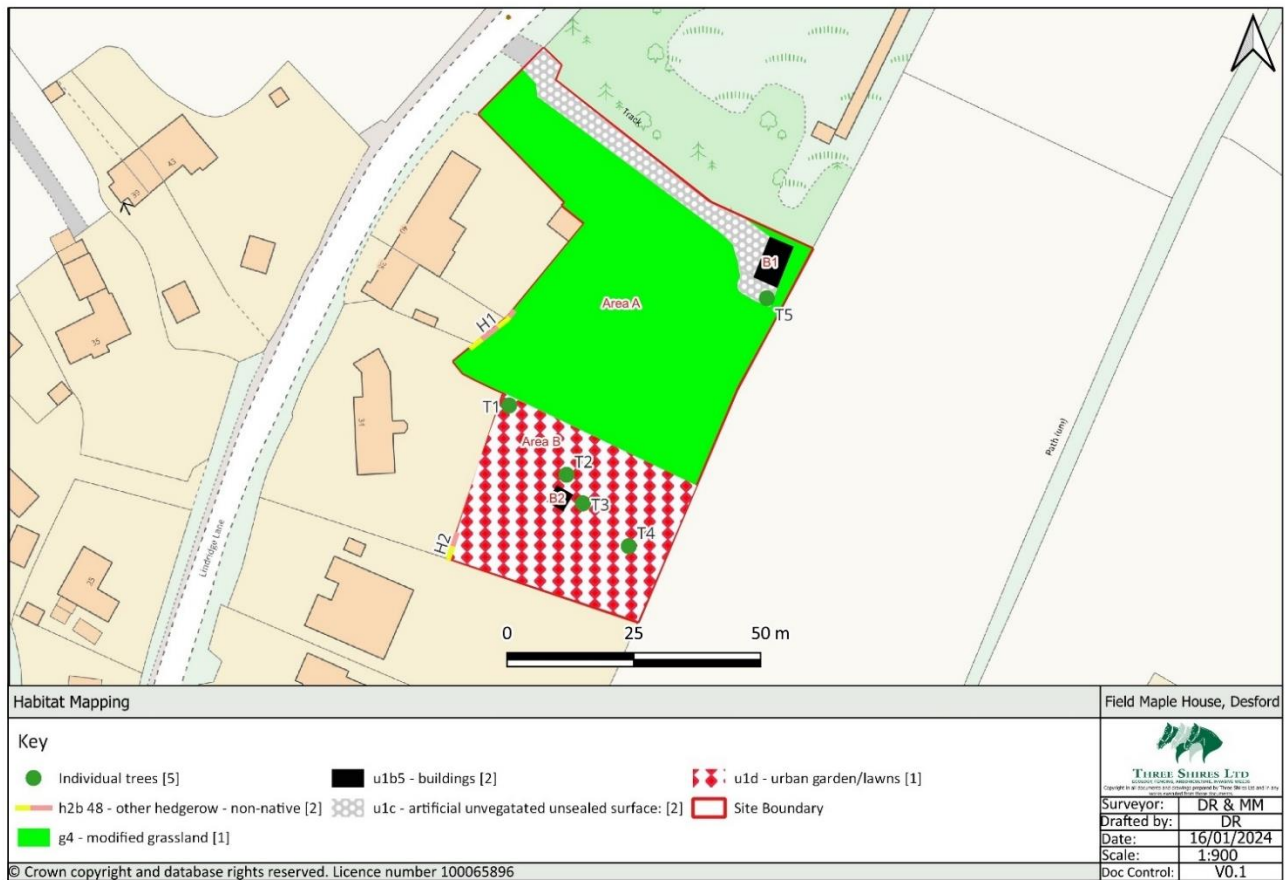
4.5.1 Habitat Overview

A description and record of condition of each habitat is detailed below, along with their UKHab code, with each habitat mapped in **Figure 6. (Appendix B for an A3 version).**

The Site is largely dominated by grassland. The northern section of the Site (referred to as **Area A**) consists mostly of mown grassland with a stone track that runs along the northern boundary, connecting the Site entrance at Lindridge Lane to a disused stable block to the northwest. A single mature tree is located next to the stable block. Bordering the western boundary within the northern section of grassland is a short length of hedgerow; this acts as a continuation of the fence line around the Site perimeter.

The southern section (referred to as **Area B**) is located at the rear of a residential property that is separated from Area A by a wooden fence. This area is dominated by a large area of garden with four mature trees scattered throughout the area and a historic pond that appears to have been filled. Another short section of hedgerow is found towards the southwest of Area B. A small garden room is located at the centre, situated between two mature trees.

Figure 6: Habitat Mapping



4.5.2 Modified Grassland (g4)

Area A was comprised of modified grassland, approximately 0.25ha in area (**Photograph 1 & 2**). The dominant species recorded was perennial rye grass (*Lolium perenne*). Creeping buttercup (*Ranunculus repens*) (**Photograph 3**) abundantly occurred throughout Area A with a moss sp. (*Bryophyta spp*) and cow parsley (*Anthriscus sylvestris*) (**Photograph 4**) frequently occurring around the boundary of Area A. The sward was not of a varied height, indicating that a regular mowing regime was in place.

Other species included common daisy (*Bellis perennis*), common dandelion (*Taraxacum officinale*) and wood avens (*Geum urbanum*) which occasionally occurred along the fence line of Area A.



Photograph 1: Modified grassland within Area A



Photograph 3: Creeping buttercup within modified grassland of Area A.

Photograph 2: Modified grassland in centre of Area A



Photograph 4: Cow parsley along fence line of Area A.

4.5.3 Tall Forbs (16)

In the northwest corner of Area A, there is a small section of tall forbs (**Photograph 5**) along the fence line that borders Lindridge Lane, approximately 11m long and 3m wide (33m²) in area. Common nettle (*Urtica dioica*) and cranesbill sp. (*Geranium spp*) (**Photograph 6**) were the dominant species found with abundant creeping buttercup and willow herb (*Epilobium/Chamaenerion sp.*) (**Photograph 7**), and wood avens (**Photograph 8**) frequently occurred.



Photograph 5: Tall forbs located towards the north west corner of Area A.



Photograph 6: Cranesbill sp. within area of tall forbs.



Photograph 7: Willowherb within area of tall forbs.



Photograph 8: Wood avens within area of tall forbs.

Based on species present throughout the survey, the modified grassland has been classified as poor quality (**Table 2** below).

Table 2: Area A Condition Assessment

Habitat mapping reference	Area A							
Condition Sheet used	Grassland Habitat type (low distinctiveness)							
Condition Assessment criteria (Essential for pass in bold)	A	B	C	D	E	F	G	
Pass/Fail/Score	Fail	Fail	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/7
Essential criteria passed?	No	-	-	-	-	-	-	
Habitat Condition	Poor							

4.5.4 Urban garden/lawns u1d (827)

Area B of the Site was comprised of a large urban garden, approximately 0.14ha in size (**Photograph 9 & 10**). The dominant species within the garden was perennial rye grass with creeping buttercup found in abundant quantities within the sward. Patches of unidentified moss frequently occurred but were localised to the southern boundary of the garden, along the fence line. The sward was not of a varied height, indicating that there was a regular mowing regime in place.

Towards the south-west corner of Area B was a small sandy area of bare ground of approximately 28m² that MAGIC revealed to be a former pond (**Photograph 11**). Google Earth Pro imagery revealed this pond

appeared to have been filled within the year of 2022. The perimeter of this pond featured an individual Franchet's cotoneaster (*Cotoneaster franchetii*) (**Photograph 12**) and butterfly bush (*Buddleja davidii*) (**Photograph 13**).

The garden featured a small wooden garden room (**B2**) towards its centre. Towards the south east corner of the garden, were two small vegetable plots (**Photograph 14**) with a heavily vegetated log pile (**Photograph 15**) found adjacent to the fence line. A small bonfire (**Photograph 16**) along the eastern boundary of the garden, adjacent to the perimeter fence was also recorded.

No condition assessment is available for this area due it being classed as urban gardens/lawn.



Photograph 9: Area B looking in a westerly direction.



Photograph 10: Area B looking in a northerly direction.



Photograph 11: Historic pond at south west corner of Area B.



Photograph 12: Franchet's cotoneaster towards south west corner of Area B.



Photograph 13: Butterfly bush towards south west corner of Area B.



Photograph 14: Vegetable plots



Photograph 15: Heavily vegetated log pile adjacent to eastern boundary of Area B.



Photograph 16: Bonfire adjacent to eastern boundary of Area B.

4.5.5 Individual Trees

Five individual trees were present on the site, with their details being set out within **Table 3** with their respective condition assessments being presented in **Table 4**.

With T1-T4 being located in Area B, they share the same understorey as the wider garden area, consisting mainly of perennial rye grass and creeping buttercup.

T5 was surrounded by rubble piles and bare earth with occasional ruderal species including creeping buttercup and rosebay willow herb. All five trees were classified as being in good condition (**Table 4**).

There were also two younger apple (*Malus sp.*) trees; however, due to their size, they were not classified as individual trees.

Table 3: Individual Trees Description

Tree Reference	Species	Age	Height (m)	Diameter (m)	
T1	Field maple (<i>Acer campestre</i>)	Mature	12m	0.75m	
T2	Crab apple (<i>Malus sylvestris</i>)	Mature	12m	0.75m	
T3	Ash (<i>Fraxinus excelsior</i>)	Mature	12m	0.75m	

Tree Reference	Species	Age	Height (m)	Diameter (m)	
T4	Field maple (<i>Acer campestre</i>)	Mature	12m	0.75m	
T5	Norway spruce (<i>Picea abies</i>)	Mature	12m	0.75m	

Table 4: Individual Trees Condition Assessment

	Individual Tree Reference					
	T1	T2	T3	T4	T5	
Criteria A (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Criteria B (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Criteria C (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Criteria D (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Criteria E (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Criteria F (Pass/Fail/Score)	Pass	Pass	Pass	Pass	Pass	Criteria met = 5/5
Condition	Good	Good	Good	Good	Good	

4.6 Species

4.6.1 Badger

No badger setts (active/inactive), prints, latrines or foraging evidence was recorded on the Site during the survey nor were any signs recorded within a 50m radius of the Site boundary.

Despite no records of badger being present on the Site, the habitat present does provide good potential foraging habitat for badger.

4.6.2 Bats

MAGIC records show there has been a single granted European Protected Species (EPS) application for bats within 2km of the Site. This is located 0.92km northeast of the Site and has been granted for destruction of a brown long-eared (*Plecotus auritus*) roost.

The on-site habitats did provide suitable foraging potential for bats. The garden area that contained a single mature crab apple tree and two much younger apple trees. As these trees produce fruit, they will attract insects which in turn attracts bat species to use these insects as a food resource. The line of trees to the east of the Site that is situated behind the fence that forms the Site boundary would also provide a potential flight line for bats allowing them to access this potential foraging habitat.

The Site featured five mature trees and two structures which were all inspected for their suitability for bats, from ground level. Internal inspections could not be undertaken on the built structures due to access constraints, although the roof structure of each building could be viewed through windows.

Table 5 below provides a summary of the findings of the roost suitability assessment for each tree found on the Site.

Table 5: Summary of PRF's Identified on Individual Trees

Tree Reference	Photographs of Features	Description of PRA results	Potential to support Roosting bats
T1	 Photograph 31: Callus roll	Mature field maple (<i>Acer campestre</i>) located at the northwest corner of Grassland B. This tree featured some split bark and callus rolls (Photograph 31 & 32) along the main trunk of the tree. Due to the height of these two features, a full inspection could not be carried out, so the size of any potential cavity is unknown. Two rot holes (Photograph 33 & 34) were recorded from limb tear outs further up the tree but due to their upward facing trajectory they were likely to allow wind, rain and debris into any potential cavity making them unlikely to provide a possible roost feature.	Low

Tree Reference	Photographs of Features	Description of PRA results	Potential to support Roosting bats
	 Photograph 32: Higher magnification of callus roll  Photograph 33. Rot hole formed from broken limb 		

Tree Reference	Photographs of Features	Description of PRA results	Potential to support Roosting bats
	Photograph 34: Second rot hole		
T2	 Photograph 35: Full view of T2 (left)  Photograph 36: Limb tear-out	Mature apple (<i>Malus sylvestris</i>) tree located towards the centre of the southern section of the Site (Photograph 35). This tree featured one limb tear out that was located on one of the two stems that came from the main trunk of the tree (Photograph 36). This tear out was again facing in an upward trajectory causing it to be subjected to wind, rain, and aggregation of debris meaning it is unlikely to be utilised by bats.	Negligible
T3	 Photograph 37: Full view of T3 in the foreground	Mature ash (<i>Fraxinus excelsior</i>) tree, located four metres to the southeast of T2 (Photograph 37). This tree featured two small limb tear outs but with each feature not appearing to lead any further from where the original tear out took place (Photograph 38).	Negligible

Tree Reference	Photographs of Features	Description of PRA results	Potential to support Roosting bats
	 Photograph 38: Small limb tear out		
T4	 Photograph 39: Full view of T4  Photograph 40: Brown rot at the base of the trunk	Semi-mature field maple (<i>Acer campestre</i>) found towards the eastern boundary of the southern section of the Site (Photograph 39). This was a younger field maple, and smaller in size compared to T1. The main roost feature of this tree was the ivy cladding that stretched from near the base of the main trunk towards the top of the tree. There is potential for this ivy to be hiding other roost features, although based on the age of the tree and the overall small diameter of the trunk and its limbs, this is unlikely. The base of the trunk formed an opening from brown rot although this did not produce any cavity (Photograph 40). No other features were present.	Negligible

Tree Reference	Photographs of Features	Description of PRA results	Potential to support Roosting bats
T5	 Photograph 41: Full view of T5.	Mature Norway spruce (<i>Picea abies</i>), which was located at the north east corner of Area A of the Site (Photograph 41). A ground level inspection of this tree revealed no limb tear outs, knot/rot holes, woodpecker holes or openings in pieces of bark that would allow a bat to utilise it as a roost.	Negligible

4.6.3 Buildings

B1 was a disused, rendered brick stable block with a pitched roof and was located at the northeast corner of Area A. The structure was approximately 42m² with a height of 3m (**Photograph 42 – 45**).

There were two stable doors at the front of the structure which were both padlocked shut. Each stable door featured a glass window either side of the door, neither of which were opened, and both remained undamaged. The bargeboards and soffit boards were wooden and remained in good condition with only small gaps in the soffit boards on the north and east facing walls where common ivy was found to be growing. The rear of the B1 featured no windows or other potential openings/gaps into the structure.

Although no internal inspection was carried out due to access, the interior of the building could be partially viewed through the windows. This revealed that there was no roof space present in B1 but this was not able to determine if there was any void present between the lining of the roof and the roof tiles.

The overall structural condition of B1 was good.



Photograph 42: Full view of B1.



Photograph 43: Side view of B1.



Photograph 44: No gaps between wood boards and main structure.



Photograph 45: Rear view of B1 with ivy-clad walls.

B2 was a small, wooden garden room with a pitched roof and was found towards the centre of Area B (**Photograph 46 – 47**), situated between T2 and T3. B2 had an area of approximately 6m² with a height of 2m.

The external structure of the building consisted of single thickness, wooden boarding that did not provide any voids/openings for bats to utilise as a roost feature. The front of B2 featured a double wooden door with glass windows. Either side of the double door, there were glass windows that did not open. On the north and south facing walls of B2 were glass windows, both of which were open during the survey. The roof lining was placed directly onto the pitched roof which revealed no void/opening between the roof lining and the roof itself.

Although an internal inspection of the structure was not carried out, the interior could be viewed through the windows which revealed no roof space within the pitched roof.



Photograph 46: Front view of B2.



Photograph 47: Rear and side (north) view.



Photograph 48: Rear and side (south) view.

Table 6: Summary of PRF's on buildings

Habitat mapping individual building reference	Summary of PRA results	Evidence of bats during the building assessment?	Potential of building to support bats?
B1	B1 revealed only one potential roost feature on the exterior of the building. This was located on the south west corner of the structure, where the guttering meets the bottom of the bargeboard and roof tiles. There was a small gap underneath the roof tiles, but this feature was not able to be fully surveyed to see if it led to a void/opening underneath the roof tiles. The likelihood of this feature being used may be reduced by it being obscured by the guttering in front of the hole. There is also a security light located towards the centre of the B1 that is attached to the guttering. Although this security light is not directly overlooking the potential void under the roof tiles, it would be highly likely to deter bats from using it as a potential feature. This feature may provide roosting for a small number of opportunistic bats should the gap beneath the roof tiles lead to a void/opening.	No evidence	Low potential
B2	No roost features were found on the exterior of B2. Although access could not be gained into B2, the interior was able to be sufficiently viewed through windows which did not reveal any potential roost features.	No evidence	Negligible

4.6.4 Birds

Due to the survey having taken place outside of the main nesting bird season (March – August inclusive), no active nests were recorded.

The on-site habitats did provide nesting potential in the form of the mature trees (T1-T5) and hedges. There was evidence of such nests with an old woodpigeon nest being located towards the top of the T2 (**Photograph 48**).



Photograph 49: Old woodpigeon nest in T2.

Species recorded during the survey included blue tit (*Cyanistes caeruleus*), great tit (*Parus major*), robin (*Erithacus rubecula*), woodpigeon, carrion crow, and jackdaw. Common garden bird species that may also be present on the Site would include house sparrow (*Passer domesticus*), chaffinch (*Fringilla coelebs*), blackbird (*Turdus merula*), dunnock (*Prunella modularis*) and collared dove (*Streptopelia decaocto*).

4.6.5 Great Crested Newt and Other Amphibians

MAGIC returned no records of GCN licences or pond surveys within a 1km radius of the Site. The closest record of a GCN licence/pond survey came from a granted European Protected Species Application, 2.5km northwest from the Site and permitted the destruction of terrestrial habitat. This licence is currently active with a start date of 06/03/2015 and an end date of 31/10/2025.

No ponds were present within the boundary of the Site with closest waterbody being 0.3km to the southeast. Connectivity between the Site and the three waterbodies to the south east is limited to lines of trees with residential properties and large open fields limiting the potential dispersal of GCN from these waterbodies to the Site.

Although the site is within an amber risk zone⁷ and provides some potential hibernacula in the form of log piles in the northeast of Area B and rubble piles next to B1, the lack of any waterbodies for breeding purposes and lack of terrestrial habitat for foraging means GCN are unlikely to be present on the Site.

4.6.6 Reptiles

No evidence of reptiles was recorded during the survey. The mosaic of habitats on the Site does not lend itself to one that would support reptile species. As such, reptiles are considered unlikely to be affected by works, so will not be considered further within this report.

4.6.7 Invertebrates

No evidence of protected/priority invertebrates was recorded during the survey. The mosaic of habitats on the Site does not lend itself to one that would support protected/priority invertebrate species. As such, these are considered unlikely to be affected by works, so will not be considered further within this report.

⁷ <https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::gcn-risk-zones-leicestershire-rutland-rushcliffe-and-south-kesteven/about>

4.6.8 Hedgehog

No evidence of hedgehog was recorded during the survey. However, the rural setting of the Site provides good potential foraging habitat for hedgehog. The line of trees that lies just beyond the eastern boundary of the Site also acts as a potential commuting feature for hedgehog, allowing them access to and from the Site and to use it as a potential foraging area.

4.6.9 Invasive Non-Native Species

No Invasive Non-Native Species (INNS) were identified on Site during the survey. Therefore, INNS will not be considered further.

5 Conclusions

Due to the distance between Botcheston Bog SSSI and the Site and lack of connectivity the small-scale construction of five private dwellings is unlikely to negatively impact this designated site. The level of dust, noise, and light pollution from a development this size is unlikely to have a negative impact upon the SSSI.

Based on pre-development plans, it is assumed that all habitats within the survey area are likely to be lost.

Although the habitats that are being lost across the Site are generally of low ecological value and/or condition, the quantity of these habitats that are being lost or changed will result in a high proportion of losses. This report should be used to influence site design as it develops and where possible the mitigation hierarchy of avoidance and mitigation regarding all habitats and species found on the Site should be applied.

Due to the small scale of the Site, it may be necessary to look at off-site compensation measures to assist within delivering a positive BNG score for the Site.

The stables (B1) and mature field maple (T1) have been classed as having low potential for bat roosts and recommendations for further necessary surveys are made.

Although there was no evidence of badger at the time of the survey, absence of evidence does not mean that badger may not be present in the future. Recommendations made are discussed in the following section.

Due to the lack of waterbodies and suitable terrestrial habitat for GCN, their presence on Site is considered to be unlikely. However, care should be taken during the construction phase of the Site to minimise the risk towards GCN should one be encountered. Recommendations made are discussed in the following section.

While all habitats are being removed, they are of low-quality and thus considered to have a very low impact to local biodiversity. There is also a very low likelihood of protected species occurring on site, with the exception of passerine nesting birds, in the breeding season (March to August) and the potential for roosting bats within the disused stable block (B1) and mature field maple (T1).

6 Recommendations

The stable (B1) and mature field maple tree (T1) have been recorded in this preliminary assessment as having low roost potential for bats. It is recommended that further investigation of these features is undertaken, by way of internal access to the stable and endoscopy of the feature of the roof, and also aerial access and endoscope inspection of the tree feature. This check will confirm the likely use of these features for bats and the roost potential updated accordingly.

Should the building and tree retain low, or be considered to have moderate or high roosting potential, emergence surveys will be required.

However, if the Site design can retain tree T1, then surveys may not be required.

Where possible mature trees on site should be retained through Site design, where this is reasonably possible.

Although it is considered unlikely that badger occur on, or are using, the Site, a check for this species should be undertaken before commencing any Site investigation or construction occurs.

Any removal of vegetation (hedges/shrubs/trees) should be undertaken outside the bird nesting season (March to August incl). If this is not possible then the area for clearance should be checked for the presence of nesting birds before works commence. This check should ideally be within 24 hours of the start of works, but no more than 48 hours.

GCN are not thought to be present on the Site. Despite this, care should be exercised during construction works, especially regarding the removal of rubble and log piles. Should GCN be discovered during works, all works should cease immediately, and a licenced ecologist should be contacted for best practice advice.

The habitats on the edges of the site, as well as the adjacent large mature garden habitats have value for hedgehog. Gardens provide an important foraging opportunity for hedgehog. As such it is recommended that during design 'hedgehog highways' and gaps in garden fences allowing connectivity between gardens is included.

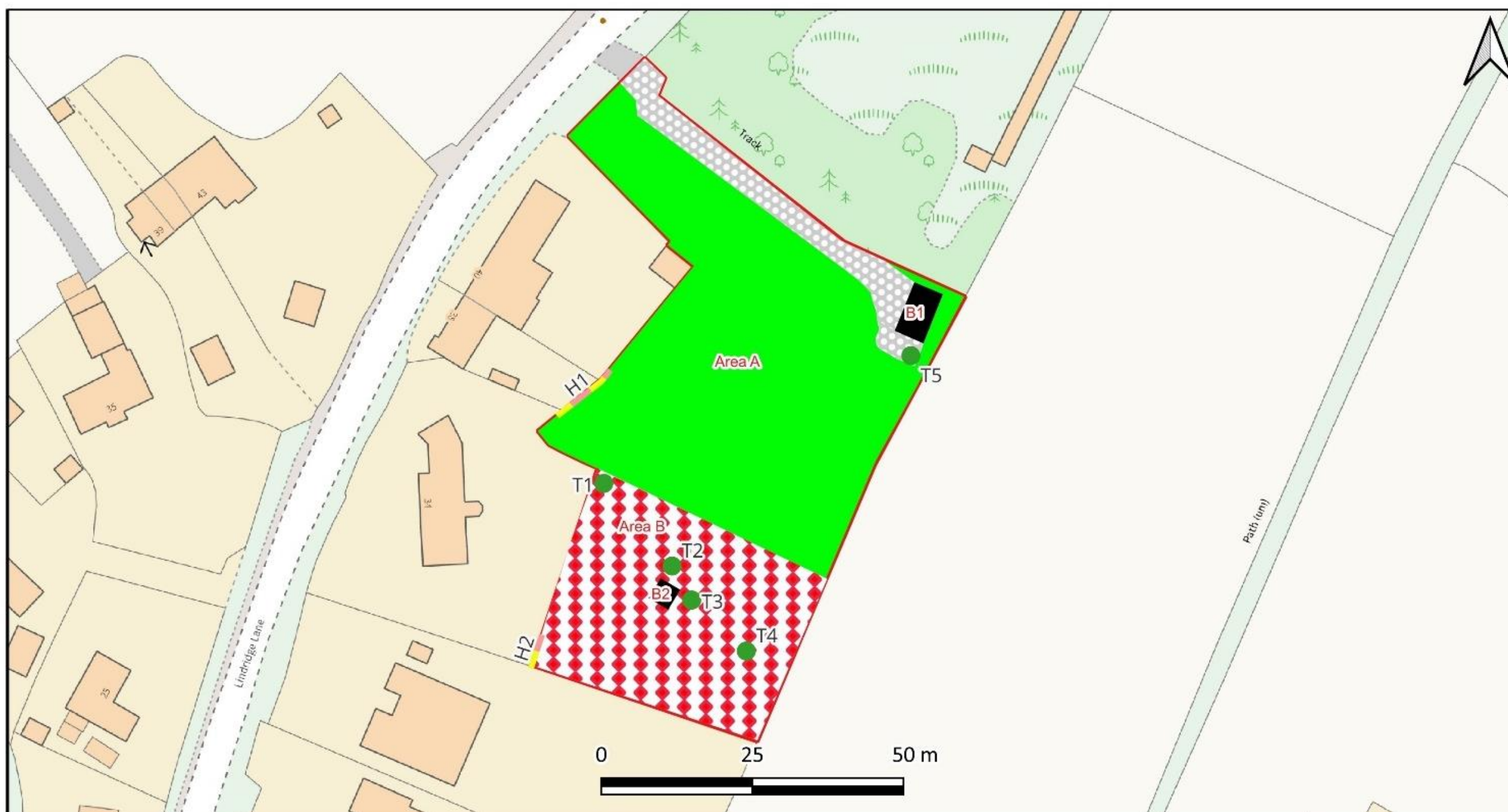
New planting, where possible, could include native wildflower species mix along the grass verges of the new road. This can be further supplemented with native shrub species including hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and holly (*Ilex aquifolium*). Tree species including crab apple and rowan (*Sorbus aucuparia*) can also be added to the native shrub to create a much more biodiverse species mix.

Appendix A: Proposed Development Plan



Proposed Development Plan	Field Maple House, Desford										
Key Site Boundary	 THREE SHIRES LTD ECOLOGY, FENCING, ARBORICULTURE, INVASIVE WEEDS Copyright in all documents and drawings prepared by Three Shires Ltd and in any marks appearing thereon are the property of Three Shires Ltd. <table> <tr> <td>Surveyor:</td><td>DR & MM</td></tr> <tr> <td>Drafted by:</td><td>DR</td></tr> <tr> <td>Date:</td><td>16/01/2024</td></tr> <tr> <td>Scale:</td><td>1:850</td></tr> <tr> <td>Doc Control:</td><td>V0.1</td></tr> </table>	Surveyor:	DR & MM	Drafted by:	DR	Date:	16/01/2024	Scale:	1:850	Doc Control:	V0.1
Surveyor:	DR & MM										
Drafted by:	DR										
Date:	16/01/2024										
Scale:	1:850										
Doc Control:	V0.1										

Appendix B: Habitat Mapping



Habitat Mapping		Field Maple House, Desford
Key  Individual trees [5]  h2b 48 - other hedgerow - non-native [2]  g4 - modified grassland [1]		 u1b5 - buildings [2]  u1c - artificial unvegetated unsealed surface: [2]  u1d - urban garden/lawns [1]
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