



DARWIN ECOLOGY
integrating nature conservation

Unit 6, The Wincombe Centre,
Wincombe Business Park, Shaftesbury,
SP7 9QJ

Email: info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

Ecological Impact Assessment

Langfords Car Spares
Semley
SP7 9AQ

October 2024

1.	EXECUTIVE SUMMARY	4
2.	INTRODUCTION AND BACKGROUND	6
3.	LEGISLATION & POLICY	8
	General Wildlife Legislation	8
	National Planning Policy	9
	Local Planning Policy	11
	Wiltshire Biodiversity Action Plan	12
4.	METHODOLOGY	13
	Desk Study	13
	Habitat Walkover Survey	13
	Great Crested Newt Habitat Suitability Index Assessment	14
	Limitations	15
5.	SURVEY RESULTS	17
	Desk Study	17
	Habitat Walkover Survey	17
	Bats	22
	Great Crested Newt and Common Amphibians	22
	Reptiles	23
	Dormouse	23
	Other Terrestrial Mammals	23
	Breeding Birds	24
	Invertebrates	24
6.	IMPACT ASSESSMENT	25
	Designated Sites and Priority Habitats	25
	Habitats	25
	Bats	27
	Great Crested Newt and Common Amphibians	28
	Reptiles	29
	Dormouse	30
	Other Terrestrial Mammals	30
	Breeding Birds	31
	Invertebrates	31
7.	ENHANCEMENT RECOMMENDATIONS	32
	Bats	32
	Wildlife Beneficial Landscaping Scheme	32
8.	REFERENCES	33

QUALITY CONTROL		
The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.		
Prepared by	Jonathan Bayliss BSc - Ecologist	14.10.2024
Approved by	Olatz Gartzia BSc MSc ACIEEM - Principal Ecologist	15.10.2024
Updated by	Nathan Biggs - Ecologist	29.01.2026
This report remains valid for 12 months from date of issue. Survey data are valid for 12-18 months from the date the survey was undertaken.		

Copyright Darwin Ecology Ltd.

This report is intended for the commissioning party only and should not be copied or reproduced in any way without prior written permission from Darwin Ecology Ltd.

This report has been prepared for the sole use of the client. Any third party referring to this report or relying on the information contained herein, does so entirely at their own risk.

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on site at a later date.

The views and opinions contained within the document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

1. EXECUTIVE SUMMARY

- 1.1. Darwin Ecology Ltd was commissioned by Langfords Car Spares to undertake an Ecological Impact Assessment (EclA) of proposals for the buildings and habitats at Langford Car Spares, Semley SP7 9AQ. The assessment was required to support a planning application for the installation of self storage units on the northern portion of a site currently used for vehicle and metal recycling. It was informed by a desk study and a habitat walkover survey.
- 1.2. During the habitat walkover survey, habitats recorded on site included sparsely vegetated urban land and bramble scrub. These habitats provide low suitability for nesting birds, badgers, hedgehogs, foraging and commuting bats, reptiles and amphibians.
- 1.3. Stored cars on site provide some very low potential to be used as refugia/hibernacula, by reptiles, amphibians and as nesting/roosting places by mammals, birds, invertebrates and bats. Further surveys are not recommended for bats.
- 1.4. The proposals will remove or destroy much of the existing sparsely vegetated urban habitat on site and any remaining stored cars. Due to the nature of the species present it is thought that the existing plants will quickly re-establish themselves within the site around the newly created edges within the compound.
- 1.5. Any impacts to protected species are likely to be limited as the sparsely vegetated urban habitat due to be impacted only provides limited opportunities. No further surveys are recommended.
- 1.6. The wider area has suitable habitat likely to support bats, birds, terrestrial mammals, reptiles and amphibians. It is therefore possible that these species could pass through or be using the site occasionally. Mitigation measures have been recommended to avoid harm to these species during the construction phase should they access the site.
- 1.7. As a precaution, the removal of any stored vehicles should be carried out during the Great Crested Newt breeding season months between 1st April and 30th June when any GCN which may be present will have returned to nearby ponds. A suitably qualified ecologist should supervise these works to ensure that no individuals of these species are harmed.
- 1.8. An eDNA analysis of the pond is required to determine if a population of GCN is present to fully inform the mitigation for the proposed works. If the result of the survey establishes presence of GCN within the pond, the CEMP will be suitably updated as required.
- 1.9. The site clearance should be carried out under a clearly produced Construction Environmental Method statement (CEMP) for the site to include:
 - Any ground vegetation within the application boundary should be maintained to a short sward length before the works begins to prevent the habitat becoming suitable for reptiles and amphibians.

- Should the vegetation grow longer than 30cm then any vegetation clearance should be done by hand and only during the reptile key active season (March-September, inclusive). Weather should be 9 degrees or higher, and dry with no strong winds. This will allow active reptiles and amphibians to move to more suitable habitat nearby, if they are present within the working area.
 - In order to prevent creating suitable refuges for reptiles during construction, all stored materials should be raised off the ground on pallets or skids. Aggregates, such as gravel or sand, must be delivered in bulk bags and stored on pallets.
 - All contractors on site will attend a tool box talk given by a suitably qualified ecologist, including information on GCN and other amphibians which may be present within the site and immediate area.
 - A laminated summary of the identification of UK amphibian species will be provided for the Site Office with contact numbers of a qualified ecologist to contact if any are found.
 - All works which may impact amphibians will be undertaken during the day.
 - Any excavations or trenches on site must be covered whilst works are paused (such as overnight), or a ramp should be provided in order to prevent animals from becoming trapped.
 - Suitable woodland habitat adjacent to the site will be fenced from the works in order to prevent damage from machine and storage of materials etc.
 - In the event a GCN is discovered on site during the construction phase then all works must stop and a licensed GCN ecologist contacted.
- 1.10. Recommendations for enhancements have also been made which include the installation of Schwegler 2FN bat box (or similar) to one of the existing trees adjacent to the site, hedgehog holes to be created in fences and the installation of insect houses on the finished units.

2. INTRODUCTION AND BACKGROUND

Background

- 2.1. Darwin Ecology Ltd was commissioned by Langfords Car Spares to undertake an Ecological Impact Assessment (EclA) of proposals for the buildings and habitats at Langford Car Spares, Semley SP7 9AQ. The assessment was required to support a planning application for installation of self storage units. It was informed by a desk study, habitat walkover survey.
- 2.2. The proposed drawings on which this assessment is based are provided within the **Appendix**.
- 2.3. The habitat walkover survey followed the Chartered Institute for Ecological and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (2017). Habitats on site were broadly mapped to a minimum of 25m² in accordance with current guidance from *UK Habitat Classification Version 2.0 UKHab Ltd (2023)*.
- 2.4. The subsequent EclA follows the CIEEM Guidelines for EclA in the UK and Ireland (2018).

Site Overview

- 2.5. The proposals show the development of a northern portion of a site currently used for vehicle/ metal recycling. Rows of cars are currently stored on top of a stone scalping surface throughout the site, the rows are divided by access tracks. The site is enclosed by a strip of woodland to the south east which connects directly to adjoining deciduous woodland and arable fields. A 2m high chain link fence forms the eastern boundary, this, together with the western and northern section of the site give way to further areas of the recycling yard (see **Figure 1**).
- 2.6. The wider landscape comprises arable fields and parcels of deciduous woodland (see **Figure 2**).

Scope of Assessment

- 2.7. The process of EclA aims to identify, quantify and evaluate the potential effects of development-related or other proposed actions on habitats, species and ecosystems.
- 2.8. Potential effects on the following ecologically sensitive receptors have been considered during the EclA of Langfords Car spares:
 - Statutory and non-statutory designated sites; and
 - On-site habitats of intrinsic importance (such as buildings or discrete habitat features).



Figure 1: Site location within the local landscape. Copyright Google Earth (Oct 2024)



Figure 2 : Site location within the local landscape. Copyright Google Earth (Oct 2024)

3. LEGISLATION & POLICY

General Wildlife Legislation

- 3.1. Wildlife in the United Kingdom (UK) is protected through European and national legislation, supported by national and local policy and guidance. Development can contribute to conservation and enhancement goals outlined by these various legislation and policy by retaining and protecting the most valuable ecological features within a site and incorporating enhancements to provide biodiversity net gain.
- 3.2. This section provides a brief summary of the principle legalisation and policy that triggers the requirement for preliminary and further ecological assessments in the UK. The presence of protected species within a site are a material consideration during the planning process. Preliminary and any necessary further ecological assessments provide an ecological baseline for a site and evaluation of the potential impact of proposals.
- 3.3. It is the responsibility of those involved with development works to ensure that the relevant legislation is complied with at every stage of a project. Such legislation applies even in the absence of related planning conditions or projects outside the scope of the usual planning process (i.e. permitted development projects or projects requiring Listed Building Consent only).

Bat Legislation

- 3.1. In England and Wales, all bat species and their roosts are legally protected under the European *Habitats Directive (1992)*; the *Conservation of Habitats and Species Regulations (2017)*; the *Wildlife and Countryside Act (1981) (as amended)*; the *Countryside and Rights of Way Act, 2000*; and the *Natural Environment and Rural Communities Act (NERC, 2006)*.
- 3.2. *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, brown long-eared *Plecotus auritus*, soprano pipistrelle *Pipistrellus pygmaeus*, and noctule *Nyctalus noctula* bats are all species of principal importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.
- 3.3. You will be committing a criminal offence if you:
 - Deliberately capture, injure or kill a bat;
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; or
 - Intentionally or recklessly obstruct access to a bat roost.

- 3.4. The government's statutory conservation advisory organisation, Natural England, is responsible for administering European Protected Species (EPS) licences that permit activities that would otherwise lead to an offence.
- 3.5. A licence can be obtained if the following three tests have been met:
- Regulation 53(9)(a) - there is "no satisfactory alternative" to the derogation, and;
 - Regulation 53(9)(b) - the derogation "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range" and;
 - Regulation 53(2)(e) - the derogation is for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

National Planning Policy

- 3.6. The *National Planning Policy Framework (2023)* aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.
- 3.7. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 180 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);
 - 180 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;
 - 180 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;
 - 181) Plans should: distinguish between the hierarchy of international, national and local designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement

of natural capital at a catchment or landscape scale across local authority boundaries;

182) Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB) which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and Broads. The scale and extent of development within all these designated areas should be limited, while development within their settings should be sensitively located and designed to avoid or minimise adverse impacts on the designated area.

3.8. Specific policies regarding habitats and biodiversity comprise:

185) 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 biodiversity, wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation 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.

186) 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 of Sites of Special Scientific Interest (SSSIs), 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 feature of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs;

c) Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development 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.

187) The following should be given the same protection as habitats sites:

a) Potential Special Protection Areas (SPAs) and possible Special Areas of Conservation (SACs);

b) Listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential SPAs, possible SACs, and listed or proposed Ramsar sites.

Local Planning Policy

- 3.9. The local planning policy for the site is the Wiltshire Core Strategy (2015). In particular, Core Policy 50 (Biodiversity and Geodiversity) provides guidelines for protection and enhancement of the natural environment and refers to the planning guidance for Special Areas of Conservation (SACs) in Wiltshire, designated for the presence of nationally important bat species.
- 3.10. Wiltshire County Council (WCC), Natural England (NE) and local experts and researchers have jointly prepared the Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire (2015). It is aimed at applicants, agents, consultants and planners involved producing and assessing development proposals in the landscapes surrounding Wiltshire's most sensitive bat roosting sites, which are protected by European wildlife legislation and applies to all types of developments that are subject to planning control.
- 3.11. The guidance gives details on how to mitigate any potential impacts on Wiltshire Bat SACs and to ensure that any potential issues are identified as early in the planning process as possible to prevent unnecessary delays to development projects. The guidance also outlines the ecological documents and plans, which should be submitted in support of planning applications, so as to ensure that the council has all the information required to undertake a reliable Habitats Regulations Assessment (HRA) should one be required.

- 3.12. In addition to policies relating to bat SACs, the Wiltshire Core Strategy (2015) includes Core Policy 51 (Landscape), which provides guidance for protecting, conserving and where possible, enhancing landscape character, including locally distinctive patterns and species composition of natural features (such as trees, hedgerows, woodland, field boundaries, watercourses and waterbodies). Core Policy 69 (Protection of the River Avon SAC) provides guidelines for the incorporation of measures during construction and operations to avoid and prevent pollution and to minimise disturbance effects.

Wiltshire Biodiversity Action Plan

- 3.13. The Wiltshire Biodiversity Action Plan was published in 2002 and reviewed in 2008 by the Wiltshire Wildlife Trust and over 40 delivery partners who make up the Wiltshire Biodiversity Action Plan Partnership. It includes habitat action plans for 11 of the most significant of the UK Priority Habitats in Wiltshire, which include woodland, wood-pasture, parkland and ancient trees, hedgerows, calcareous grassland, neutral grassland, traditional orchards, farmland habitats, built environment, standing open water and rivers, streams and associated habitats. In addition, a bat species action plan has also been included, covering all bat species found in Wiltshire, while other priority species have been included under the appropriate habitat action plans.
- 3.14. The Wiltshire Biodiversity Action Plan species list includes species that have national priority and also species having local importance in Wiltshire including county notables. A total of 260 species have been included on the Wiltshire Biodiversity Action Plan species list.
- 3.15. The Wiltshire Biodiversity Action Plan aims to achieve the following:
- Enable prioritisation and define actions for priority habitats and species in Wiltshire;
 - Create a plan of action that can be delivered through a partnership of statutory, private and third sector organisations;
 - Provide a baseline of current knowledge and a tool to help monitor key habitats and species; and
 - To link objectives, targets and actions to report nationally and enable conservation work carried out in Wiltshire to contribute to national targets and reporting.
- 3.16. In 2012, a landscape scale framework for conservation in Wiltshire was developed, identifying 11 Landscape Biodiversity Areas across Wiltshire and Swindon, made up of a number of priority habitats, designated sites and other areas of conservation significance. This aims to encourage landscape scale planning for species and habitat conservation across Wiltshire.

4. METHODOLOGY

Desk Study

- 4.1. A desk study was undertaken for designated sites protected species and habitat records within 2km of the site:
- The MagicMap website was reviewed, to obtain information on any designated sites of nature conservation interest within 2km of the site and details of any EPS licences issued within 1km;
 - The Wiltshire Planning Portal was searched for past and pending planning applications that may have associated ecological documents detailing results of bat surveys; and
 - Google Maps and Ordnance Survey (OS) Leisure Maps was utilised to view aerial photographs and maps to assess the ecological context of the site within the wider landscape.
- 4.2. Natural England has developed a tool to help assess the potential risks to SSSIs by proposed developments. These are known as 'Impact Risk Zones' (IRZs) and they define the area around a SSSI that could be sensitive to development, considering the particular sensitivities of the feature for which the site is designated.
- 4.3. The IRZs help inform whether a development proposal may affect a SSSI and if so, whether it is necessary for the Local Planning Authority (LPA) to seek pre-application advice from Natural England. Information on the IRZs was determined from the MAGIC website to determine if the LPA is required to seek consultation for the current development.

Habitat Walkover Survey

- 4.4. Ecologist Jonathan Bayliss BSc (Hon) conducted a walkover survey at Langfords Car Spares on 21st June 2024
- 4.5. The walkover survey assessed habitats present within the application red line boundary for their potential to support protected species, including:
- Bats;
 - Great crested newts *Triturus cristatus* and common amphibians;
 - Reptiles;
 - Dormice *Muscardinus avellanarius*;
 - Other terrestrial mammals, including hedgehog *Erinaceus europaeus* and badger *Meles meles*;
 - Breeding birds; and
 - Invertebrates.

- 4.6. As there is no running water within the site, it is considered highly unlikely that white clawed crayfish *Austropotamobius pallipes*, Otter *Lutra lutra* and water vole *Arvicola amphibious*; would be using the site and they are therefore not considered further in this report.
- 4.7. The site was also searched for non-native, invasive plant species, with particular care to search for the most commonly occurring and problematic species, such as Japanese knotweed *Fallopia japonica*, Indian balsam *Impatiens grandiflora* and giant hogweed *Heracleum mantegazzianum*.

Great Crested Newt Habitat Suitability Index Assessment

- 4.8. An HSI assessment was carried out for all ponds within 500 m of the site. One pond was located in a back garden approximately 35 m north of the site was surveyed. A single pond at grid reference ST87232644 was also identified within 250m of the proposed development site using 1:10,000 Ordnance Survey mapping and aerial imagery. The site visit showed no signs of this mapped pond on the ground and the area is presently part of broadleaf woodland. It is not considered further in this assessment.
- 4.9. The above pond was subject to HSI assessment undertaken by Jonathan Bayliss on 21st June 2024.
- 4.10. The HSI score gives an indication of the likelihood of presence of great crested newts within a water body. Generally, ponds with a higher score are more likely to support great crested newts than those with a lower score and there is a positive correlation between HSI scores and ponds in which great crested newts are recorded.
- 4.11. Ten separate attributes are assessed for each pond to calculate the suitability of the ponds to support this species:
1. Geographic location;
 2. Pond area;
 3. Desiccation rate;
 4. Water quality;
 5. Shade;
 6. Number of fowl;
 7. Number of fish;
 8. Number of linked ponds;
 9. Terrestrial habitat; and
 10. Macrophyte cover.
- 4.12. A total score of between 0 and 1 is calculated and pond suitability is then determined according to the scale shown in **Table 1**.

Table 1: HSI scoring

HSI Score	Pond Suitability
< 0.5	Poor
0.5 - 0.59	Below average
0.6 - 0.69	Average
0.7 - 0.79	Good
> 0.8	Excellent

- 4.13. The Risk Assessment Tool contained within the Natural England Great Crested Newt Method Statement for EPS licence application template was used to determine if an offence was likely under the Habitats and Species regulations 2017, if GCN are present in the above pond.

Limitations

- 4.14. Ecological surveys are limited by factors that affect the presence of plants and animals such as the time of the year, weather, migration patterns. The surveys were undertaken between May and September and therefore represents a valid sample of ecological evidence present on that date/season.
- 4.15. The desk study does not include data from the local environmental records centre (LERC). However, following CIEEM guidelines (2017) it is possible to conduct a robust assessment without the need of LERC data, for example for small-scale projects or on sites such as;
- A field in active arable cultivation where there is no impact on any hedges, trees or water bodies;
 - A small area of cultivated garden/amenity grassland, as above; or
 - A small urban site comprising mostly asphalt or compacted hardstanding.
- 4.16. The site is a small one comprising mostly compacted hardstanding and therefore the lack of LERC data is not considered a limitation to the ecological assessment of the site.
- 4.17. All species of UK bat rely on different habitats and weather conditions depending on the season and may appear on a given site after activity surveys have been conducted. On this basis, bats may potentially be present but remain undetected by surveys carried out.
- 4.18. No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological importance has been made.

5. SURVEY RESULTS

Desk Study

- 5.1. The site lies within Cranbourne Chase and West Wiltshire Downs AONB. There is one further statutory designated site within 2km of the site. Gutch Common SSSI lies 1.8km to the south east. The site comprises a 37ha mosaic of wet and dry acidic woodlands unusual in the county.
- 5.2. A search of planning applications using the Wiltshire planning portal did not identify any applications within the area with records of protected species or habitats in the last 2 years.
- 5.3. There are forty eight areas of priority deciduous woodland within 2 km of the site. The nearest area joins with the northern boundary of the site. Further priority habitats within 2km of the site comprise five parcels of lowland meadows and three parcels of traditional orchards.
- 5.4. There are twenty three areas of ancient woodland within 2km of the application site, the nearest being Coppit Dennis, 130m to the east.
- 5.5. The site falls within the Impact Risk Zone for the Gutch Common SSSI, however, the proposals do not correspond with any of the categories of development that would represent an impact to the SSSI.

Habitat Walkover Survey

- 5.6. Overall, the majority of the site is bare ground made up of stone chippings on which rows of cars, separated by tracks have been stored. The substrate is dry and nutrient poor, providing opportunities for pioneer species of plants. Other habitats within the red line boundary are described below. This section is to be read in conjunction with **Figure 3**. **Table 2** below outlines the summary of habitats identified on site, as well as their applicable secondary codes.

Table 2: Habitat applicable codes

Primary Habitat	UK Hab Primary Code	Applicable Secondary Code(s) used	Secondary Code(s) description
<i>Sparsely vegetated urban land</i>	<i>u1f</i>	<i>500, 506, 511</i>	<i>Dry , Nutrient poor, Compacted substrate</i>
<i>Bramble scrub</i>	<i>h3d</i>	-	-
<i>Modified grassland</i>	<i>g4</i>	-	-

u1f Sparsely vegetated urban secondary codes 500, 506, 511

- 5.7. This habitat is prevalent where vegetation has grown on the thin (typically 20-50 cm wide) strips of fallow areas between the regular used trackways and the stored cars. The habitat comprises a sparse covering of annual and perennial herbaceous native plants together with some grasses, over a bare substrate of stone chippings (probably limestone). No one species of plant appears to be dominant. The species present represent a pioneering community of plants in the early stages of ecological succession on a nutrient poor substrate. A wide ranging list of species was recorded with no more than 7- 8 species occurring per square metre. Total vegetation coverage did not generally exceed 30 % with bare ground comprising 70 -90 % of the habitat. A species list is presented below in **Table 3**.

Species, Common and Latin names	Species, Common and Latin names
Milk Thistle <i>Sylibum marianum</i>	Yorkshire fog <i>Holcus lanatus</i>
Herb Robert <i>Geranium robertianum</i>	Oxeye daisy <i>Leucanthemum vulgare</i>
Perennial Rye Grass <i>Lolium perenne</i>	Spear Thistle <i>Cirsium vulgare</i>
Barrel Medic <i>Medicago truncatula</i>	Feverfew <i>Tanacetum parthenium</i>
Broome. Spp	Hoary Willowherb <i>Epilobium parviflorum</i>
Cleavers <i>Galium aparine</i>	Smooth cats ear <i>Hypochaeris glabra</i>
Hedge Woundwort <i>Stachys sylvatica</i>	Common Ragwort <i>Senecio jacobaea</i>
Broadleaved Willowherb <i>Epilobium montanum</i>	Prickly wild lettuce <i>Lactuca serriola</i>
Rough meadow grass <i>Poa Trivialis</i>	Horsetail's <i>Equisetum arvense</i> ;
Broad Plantain <i>Plantago major</i>	Cut leaf Cranes Bill <i>Geranium dissectum</i>
Water Figwort <i>Scrophularia auriculata</i>	White clover <i>Trifolium repens</i>
Bristly Oxtongue <i>Helminthotheca echioides</i>	Broad leaf dock <i>Rumex obtusifolius</i>
Rough Hawkbit <i>Leontodon hispidus</i>	Chamomile. sp <i>Chamaemelum.sp</i>
Bramble <i>Rubus fruticosus</i>	Teasle <i>Dipsacus fullonum</i>
Forget me not <i>Myosotis arvensis</i>	Hogweed <i>Heracleum sphondylium</i>

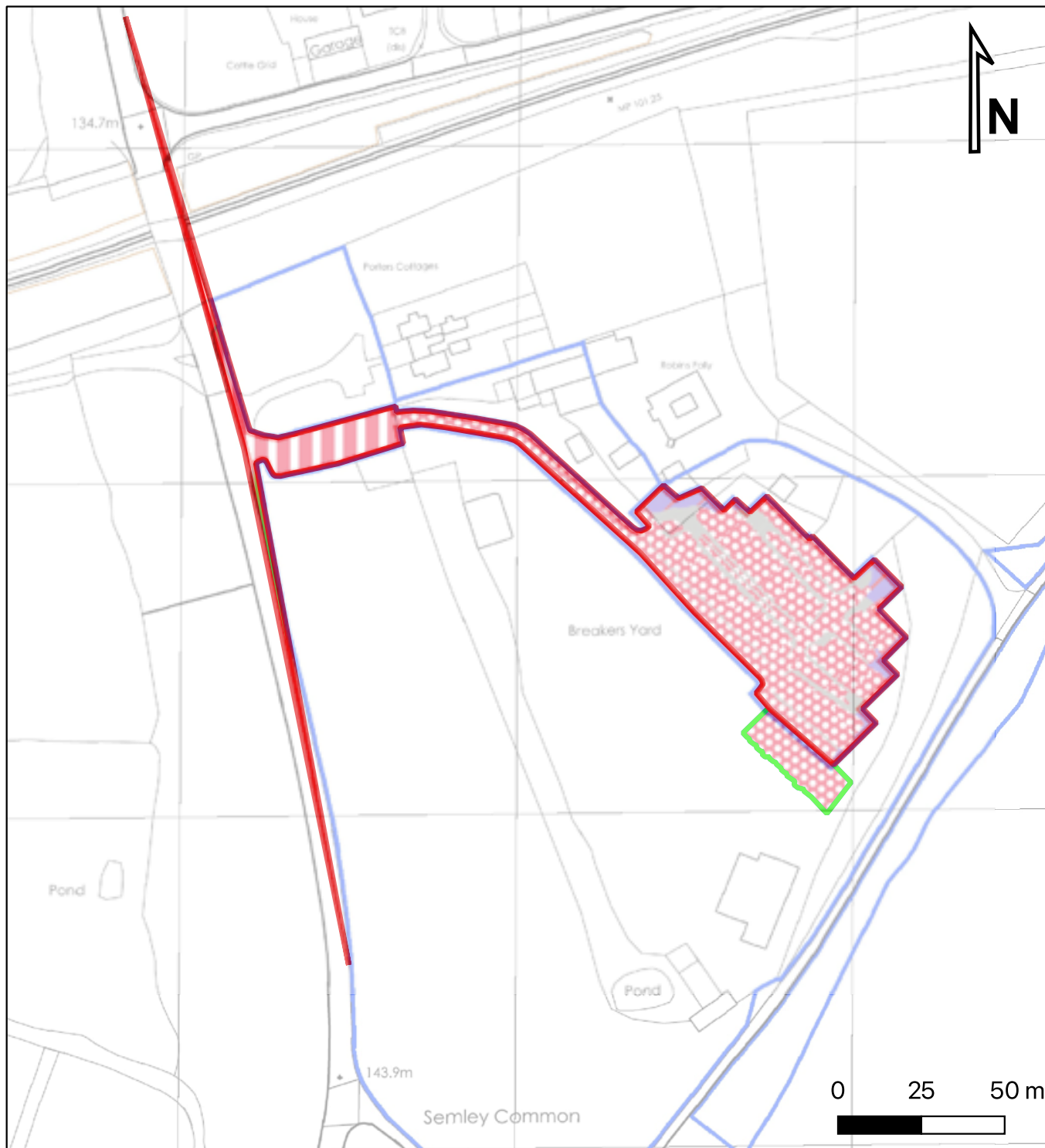
Table 3. Species list for u1f Sparsely vegetated land

h3d Bramble Scrub

- 5.8. Sections of bramble scrub were present along the north east fence line and south east boundary, these sections extended a few metres from the boundary where they merged with the sparsely vegetated urban land.

g4 Modified grassland

- 5.9. This habitat was formed the road verge as part of the site entrance visibility splay. Species comprised false oat grass *Arrhenatherum elatius*, cocksfoot *Dactylis glomerata*, yarrow *Achillea millefolium*, hogweed *Heracleum sphondylium*, and dandelion *Taraxacum sp.*



 Red Line Boundary

Habitats

 Artificial unvegetated/unsealed surface

 Bramble scrub

 Developed land; sealed surface

 Modified grassland

 Sparsely vegetated urban land

**Project: Langfords Car Spares,
Semley, Wiltshire**

Figure 3 : Habitat Map

Date: 25/10/2024



Info@darwin-ecology.co.uk www.darwin-ecology.co.uk

Site Photographs



Image 1. Looking along track to NE boundary



Image 2. Looking SW towards adjacent Woodland



Image 3. Sparse mixed vegetation among cars



Image 4. Sparse mixed vegetation between cars



Image 5. Sparse mixed vegetation between cars



Image 6. Sparse mixed vegetation between cars

5.10. Protected Species

Bats

- 5.11. No records of European protected species (EPS) licenses currently exist within 1km of the site. The nearest licence is 2014-3702-EPS-MIT, located 1.5 km east. It expired in 2019 and allowed for the destruction a resting place for common pipistrelles.
- 5.12. No evidence of bats (feeding remains, droppings etc) were observed within the stored cars. Stored cars on site provide negligible suitability for roosting bats. No further surveys are recommended
- 5.13. The south eastern boundary comprises a strip of deciduous woodland bordering a road. This strip of woodland connects directly to Coppitt Dennis, an area of ancient woodland to the north east. This strip of woodland also connects to further hedgerow and woodland to the south and south west. Priority habitat deciduous woodland meets the boundary to the north east. These local features also connect to the wider network of hedgerows and further parcels of deciduous woodland.
- 5.14. Together, these local and wider habitat features provide highly suitable habitat for foraging and commuting bats of all species.

Great Crested Newt and Common Amphibians

- 5.15. There are no records of EPS licences within 1km of the site. The nearest EPS licence granted for GCN is 2014-4803-EPS-MIT, it concerns a site approximately 3.5km to the south.
- 5.16. The Great Crested Newt Class Survey Licence Returns (England) lists GCN present in a waterbody approximately 1.8 km to the east.
- 5.17. An HSI assessment was carried out for all ponds within 500 m of the site, with a total of one pond being surveyed A single pond at grid reference ST87232644 was also identified within 250m of the proposed development site using 1:10,000 Ordnance Survey mapping and aerial imagery. The site visit showed no signs of this mapped pond on the ground and the area is part of broadleaf woodland. It is not considered further in this assessment.
- 5.18. One pond exists within 250 m of the site located in a back garden approximately 35 m north of the site. This pond is connected to the edge of the site by lawn and ruderal vegetation beneath ill defined hedgerow and some larger trees.
- 5.19. The pond was rated as **below average** using HSI indicator score. Full results of the HSI calculations are provided at **Appendix**.
- 5.20. The Risk Assessment Tool contained within the Natural England Great Crested Newt Method Statement for EPS licence application template determined that an offence was likely due to the proximity of the existing pond to the site. **Figure 4.**

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.5
Rapid risk assessment result:	AMBER: OFFENCE LIKELY	

Figure 4. Results of Risk Assessment Tool within the Natural England Great Crested Newt Method statement template.

- 5.21. The site is sparsely vegetated with a substrate comprising almost entirely of hard packed stone chippings.
- 5.22. Stored vehicles towards the edges of the site may provide some limited refugia opportunities for amphibians and reptiles. The sparsely vegetated habitat surrounding these features is considered to have negligible potential for amphibians and reptiles.

Reptiles

- 5.23. There are no records of EPS licences for reptiles within 1km of the site. The nearest site is 28 km to the south east.
- 5.24. The site is sparsely vegetated with a substrate comprising almost entirely of hard packed stone chippings. This habitat does provide some basking and foraging opportunities for reptiles but the vegetation is too sparse to support a significant population. It therefore provides negligible suitability for reptiles.

Dormouse

- 5.25. There are no records of EPS licences for Dormice within 1km of the site. The nearest site is 4 km to the north and expired in December 2024.
- 5.26. There is currently no suitable habitat on site to support dormice. Highly suitable dormouse habitat exists within the woodland strip immediately adjacent the south east boundary and also within the deciduous woodland adjacent to the north east boundary

Other Terrestrial Mammals

- 5.27. No mammal trails, sett entrances, snuffle holes, latrines or any other evidence of badgers using the site was observed during the walkover survey. The adjacent wooded strip and deciduous woodland provide highly suitable habitat for badgers.

- 5.28. The old cars throughout the site have potential to offer highly suitable refugia for nesting and hibernating hedgehogs, especially where the site abuts the woodland on the south west and north east boundaries.
- 5.29. The site itself, with its sparse vegetation and hard packed substrate offers low suitability for foraging hedgehogs.

Breeding Birds

- 5.30. One small nest was observed within a stored vehicle during the site visit. The numerous stored cars on site offer further highly suitable habitat for nesting birds.
- 5.31. The woodland surrounding the site offers further highly suitable habitat for nesting birds

Invertebrates

- 5.32. Insect activity on the site was low during the site visit. Thirty species of plant were recorded during the habitat survey, providing a good variety of forage for a range of invertebrates. The stored vehicles also provide moderately suitable hibernacula for invertebrates throughout their life cycles.

6. IMPACT ASSESSMENT

Designated Sites and Priority Habitats

- 6.1. The site lies within Cranbourne Chase and West Wiltshire Downs AONB. Gutch Common SSSI lies 1.8 km to the south east.
- 6.2. Priority deciduous woodland joins with the northern boundary of the site. Coppit Dennis, an area of ancient woodland lies 130m to the east.

Potential Impacts and Mitigation

- 6.3. The site largely comprises a sparsely vegetated habitat separated from the adjacent woodlands by a fence. The proposals do not show any encroachment on the adjacent woodland habitat.
- 6.4. It is considered unlikely that the proposed development will cause impact (residual or otherwise) on any priority habitat.

Habitats

Status of Habitats on Site

- 6.5. If sparsely vegetated urban land comprises the dominant habitat on site. This habitat is prevalent where vegetation has grown on the thin (typically 20-50 cm wide) strips of fallow areas between the regular used trackways and the stored cars. Sections of bramble scrub were present along the north east fence line and south east boundary. These habitats represent areas of moderate ecological importance within the context of the site.

Potential Impacts

- 6.6. The above habitats are set to be largely removed as a result of the proposed plans, with some retention of small areas of bramble scrub.

Mitigation

- 6.7. The proposals are set to retain the current substrate with proposed storage units occupying a different position but similar area to the existing stored cars. Due to the pioneering nature of the species present it is thought that the existing plants will quickly re-establish themselves within the site around the newly created edges within the compound.
- 6.8. Substrate should be re-used on site in order to maintain its existing seed bank.
- 6.9. Mitigative steps should be taken throughout the works process to limit any direct and indirect impacts which may occur to any retained and adjacent habitats such as the woodland to the south west of the site.
- 6.10. *Dust pollution:* In order to reduce air pollution and nuisance to nearby residences there should be adequate screening and damping down measurements implemented during all excavation works, clearance works and other site preparations (including storage of construction materials).

- 6.11. *Liquid storage*: All oils and fuels must be stored in compliance with the Control of Pollution (Oil Storage) Regulations 2001. Fuel must therefore be stored in dedicated impervious storage areas away from drains and watercourses. Drums over 200L must be stored on drip trays capable of holding 25% of the drum's maximum capacity. The storage of bowzers and fuel tanks must also comply with the regulations ensuring they are stored in areas capable of holding 110% of the volume. If oil or fuel is stored on site, spill kits must be available.
- 6.12. *Solid storage*: Best housekeeping practice will ensure that spillages of dry and dusty materials will be avoided. These items should be covered when not immediately in use to reduce the risk of materials becoming airborne. All stored materials will be raised off the ground on pallets or skids to remove any refuge potential for protected species such as hedgehogs, reptiles or amphibians. Aggregates such as gravel and sand must be delivered in bulk bags and stored on pallets.
- 6.13. *Run-off and site drainage*: Rainwater or waste water carrying construction debris or oils must not be allowed to flow towards adjacent habitats, the risk should be fully assessed by the site manager before and during the works. If a risk is identified, suitable drainage or an earth bund for the construction site must be established to prevent pollution of surrounding habitats
- 6.14. *Litter*: Waste and litter produced during the construction phase must be disposed of appropriately. Good site management and waste management procedures will prevent litter or debris from the construction site impacting any adjacent or nearby habitats. If any construction waste is found outside the site boundary it will be retrieved and disposed of appropriately and the measures taken to avoid this occurrence will be reviewed.
- 6.15. *Noise and vibration*: Noise and vibration will be managed in order to reduce impacts wherever practicable. Wherever available quiet equipment will be selected in order to control noise at source. Machinery will be shut down when not in use and throttling will be kept at a minimum. It will be maintained in good working condition to minimise mechanical vibration.
- 6.16. All retained trees will be protected in accordance with British Standards BS 5837:2012. Root protection areas will be 12x the diameter at breast height (DBH) or the reach of the longest branch (whichever is greater), unless otherwise advised by a qualified arboriculturalist. Trees located off site but with their roots on site should also be protected. No materials should be allowed to be stored within these root protection areas and no heavy machinery should run over them
- 6.17. The loss and subsequent mitigation, compensation and enhancement of the above habitats is dealt with in the accompanying Biodiversity Net Gain (BNG) report for the site.
- 6.18. After implementation of the above measures, it is considered likely that there will be no residual impacts on habitats within the site.

Protected Species

Bats

Status of Bats on Site

- 6.19. Deciduous woodland meets the boundary to the north east and south east. These local features also connect to the wider network of hedgerows and parcels of deciduous woodland.
- 6.20. These local and wider landscape features provide highly suitable habitat for foraging and commuting bats of all species.
- 6.21. The individual vehicles stored on site provide a negligible suitability for bats, however given the suitability of the habitats surrounding the site, opportunistic bats may use the features they present on occasion.

Potential Impacts

- 6.22. Removal of the stored vehicles could result in harm to bats. Any lighting scheme installed as part of the development has potential to impact foraging and commuting bats using the highly suitable linear features bordering the site.

Mitigation

- 6.23. Precautionary mitigation should be employed during the clearance of stored vehicles from the site due to the limited potential for them to contain roosting bats.
- 6.24. *Toolbox Talk:* Before commencing any work on site, all contractors will be inducted by a licensed bat ecologist or accredited agent in a tool box talk, to ensure they are aware of the risks to wildlife on site, particularly the presence of bat roosts, their legal protection and of working practices to avoid harming bats and other species in order to ensure working practices on site follow legal requirements.
- 6.25. *Lighting:* Any new external lighting should be directed to avoid light spillage onto vegetation, particularly linear habitat features such as woodland edges or potential roosting sites within trees and buildings. Bats are sensitive to light and could potentially avoid the area if access points or the surrounding areas become lit. Appropriate lighting options will prevent a negative impact on bats potentially using the habitats on site and should be approved by a suitably qualified and licensed bat ecologist. Lighting plans should be approved and signed off by a licensed bat ecologist prior to submission, to ensure the scheme is suitable for bats. If appropriate measures are taken to reduce light spillage from the development, it is likely that there will be no negative impacts on local bat populations.
- 6.26. See **Appendix** for further information on designing lighting to minimise impacts on bats.

Great Crested Newt and Common Amphibians

Status on Site

- 6.27. The site is sparsely vegetated with a substrate comprising almost entirely of hard packed stone chippings resulting in the habitat having negligible suitability for GCN and common amphibians.
- 6.28. A pond is present approximately 35 metres north of the site and connected by suitable GCN habitat.
- 6.29. The pond was rated as **below average** using HSI indicator score.
- 6.30. The Risk Assessment Tool contained within the Natural England Great Crested Newt Method Statement for EPS licence application template determined that an offence was likely due to the proximity of the existing pond to the site. **Figure 4.**
- 6.31. Stored vehicles towards the edges of the site may provide some limited refugia opportunities for amphibians and reptiles. The sparsely vegetated habitat surrounding these features is considered to have negligible potential for amphibians.

Potential Impacts

- 6.32. Impacts to individual amphibians may occur at the site clearance stage of the works. The removal of any existing vehicles has potential to kill or injure GCN and other common amphibians that may have ventured on to the site and may be using the structures as hibernacula/refugia.
- 6.33. An offence would be likely if GCN are confirmed to be using the pond 35 m north of the site, this pond has a below average HSI score.
- 6.34. Removal of refugia represents a potential loss of hibernacula for GCN and other common amphibians

Mitigation

- 6.35. Although the pond achieved a below average HSI score, due to its proximity to the site, an eDNA analysis of the pond is recommended to determine if a population of GCN is present and to fully inform the mitigation for the proposed works. The eDNA survey can take place within the appropriate survey season of April to June inclusive. If the result of the survey establishes presence of GCN within the pond, the CEMP shall be suitably updated as required. Given the size of the wider ownership of the site within the blue line boundary, suitable compensatory hibernacula and enhancements can be provided for GCN within the wider site.
- 6.36. The removal of any stored vehicles must be carried out during the Great Crested Newt breeding season months between 1st April and 30th June when any GCN which may be

present will have returned to nearby ponds. A suitably qualified ecologist must supervise these works to ensure that no individuals of these species are harmed.

6.37. The site clearance should be carried out under a clearly produced Construction Environmental Method statement (CEMP) for the site which should include:

- Any ground vegetation within the application boundary should be maintained to a short sward length before the works begins to prevent the habitat becoming suitable for reptiles and amphibians.
- Should the vegetation grow longer than 30cm then any vegetation clearance should be done by hand and only during the reptile key active season (March-September, inclusive). Weather should be 9 degrees or higher, and dry with no strong winds. This will allow active reptiles and amphibians to move to more suitable habitat nearby, if they are present within the working area.
- In order to prevent creating suitable refuges for reptiles during construction, all stored materials should be raised off the ground on pallets or skids. Aggregates, such as gravel or sand, must be delivered in bulk bags and stored on pallets.
- All contractors on site will attend a tool box talk given by a suitably qualified ecologist, including information on GCN and other amphibians which may be present within the site and immediate area.
- A laminated summary of the identification of UK amphibian species will be provided for the Site Office with contact numbers of a qualified ecologist to contact if any are found.
- All works which may impact amphibians will be undertaken during the day.
- Any excavations or trenches on site must be covered whilst works are paused (such as overnight), or a ramp should be provided in order to prevent animals from becoming trapped.
- Suitable woodland habitat adjacent to the site will be fenced from the works in order to prevent damage from machine and storage of materials etc.
- In the event a GCN is discovered on site during the construction phase then all works must stop and a licensed GCN ecologist contacted.

6.38. Given the above avoidance and mitigation strategies, it is considered likely that there will be no residual impacts on amphibians.

Reptiles

Status on Site

6.39. The habitat on site provides some basking and foraging opportunities for reptiles although the vegetation is too sparse to support a population.

Potential Impacts and mitigation

- 6.40. Potential impacts and mitigation mirrors that discussed above in the GCN and amphibian section.

Dormouse

Status on Site

- 6.41. There is no suitable habitat on site to support dormice. Highly suitable dormouse habitat exists within the woodland strip immediately adjacent the south east boundary and also within the deciduous woodland adjacent to the north east boundary.

Potential Impacts/Mitigation

- 6.42. Due to there being no suitable habitat on site for hibernating, nesting, foraging or commuting dormice no residual impacts to dormice are envisaged from the proposals.

Other Terrestrial Mammals

Status on Site

- 6.43. No evidence of badger activity was observed during the site visit. The habitats on site offer low suitability for sett creation and negligible suitability for foraging badgers and hedgehogs.
- 6.44. The site is adjacent to highly suitable woodland habitat and terrestrial mammals may use the site for commuting purposes. The stored vehicles also have moderate potential to be used as refugia/hibernacula by hedgehogs.

Potential Impacts

- 6.45. If badgers and hedgehogs are able to access the site during proposed works, they may be injured due to destructive activity of site clearance or may become trapped in any excavations.

Mitigation

- 6.46. A pre-commencement badger survey will be conducted prior to the start of construction works, to ensure there is no badger activity on or within 30m of the site. Should sett entrances be discovered, appropriate mitigation (including monitoring, protective buffers and / or appropriate licensing) will be implemented.
- 6.47. All existing and proposed fencing will have hedgehog gaps installed at the base post-development. Gaps are to be 13cm x 13cm.
- 6.48. General mitigation measures are considered sufficient to protect terrestrial mammals during clearance and construction works within the application area. It is considered that the methods outlined under the amphibian section above will be sufficient to protect hedgehogs and badgers should they be present on site.

- 6.49. Given the above avoidance and mitigation strategies, it is considered likely that there will be no residual impacts on badgers.

Breeding Birds

Status on Site

- 6.50. One small nest was observed within a stored vehicle during the site visit. The numerous stored cars on site offer further highly suitable habitat for nesting birds on site.
- 6.51. The woodland adjacent to the site offers highly suitable habitat for nesting birds

Potential Impacts

- 6.52. The removal of the above habitat could potentially result in the injury/killing of birds, if works are carried out during the nesting bird season (March-September, inclusive).

Mitigation

- 6.53. Where possible it is recommended that works take place outside of breeding bird season.
- 6.54. If works are required during the breeding bird season, a pre-works check by a suitability qualified ecologist will be conducted to ensure that no active nests are present.
- 6.55. If active nests are recorded, a suitable buffer will be retained around these until all chicks have fledged (to be confirmed by a suitably qualified ecologist).
- 6.56. Given the above mitigation strategies, it is considered likely that there will be no residual impacts on birds.

Invertebrates

Status on Site

- 6.57. The habitats on site provided a good variety of forage for a range of invertebrates. The stored vehicles also provide moderately suitable hibernacula for common invertebrates throughout their life cycles.

Recommendations

- 6.58. Due to the total loss of the existing stored cars habitat as a result of the proposed works, compensation measures should be implemented. A minimum of four insect houses will be located around the site to compensate for the loss of habitat. Details of these are to be found in the **Appendix**.
- 6.59. Given the above mitigation/compensation strategies, it is considered likely that there will be no residual impacts on invertebrates.

7. ENHANCEMENT RECOMMENDATIONS

- 7.1. National planning policy states that all developments should seek to enhance onsite biodiversity whether impacts on protected species are recorded or not. Incorporating enhancement features into new or renovated buildings should be carefully considered. These features can be simple and inexpensive, please see below for specific recommendations.

Bats

- 7.2. Two tree mounted bat boxes, such as the Schwegler 2FN should be installed. As there are no suitable trees on site, the boxes should be mounted on the existing trees adjacent to the site (but under the same ownership). The location should be determined by a licensed bat ecologist to ensure likelihood of repeated use is increased and should be installed at a height of at least 4 m, preferably on a southern un-cluttered aspect with good connectivity to linear features such as other mature trees and hedgerows. See the **Appendix** for further details.

Wildlife Beneficial Landscaping Scheme

- 7.3. Any future landscape planting should seek to enhance biodiversity, improve connectivity to the surrounding habitats and provide food and shelter for a wide range of wildlife. All amenity planting and formally landscaped areas should be designed using a variety of plant species beneficial for wildlife. These do not necessarily have to be native but should be chosen for their ability to provide nectar or fruit and should be non-invasive species. There are a number of specialist seed mixes available specific to certain soil types, growing conditions and designed to benefit different groups of species such as bees or butterflies and moths.
- 7.4. All habitats should be managed in a suitable way to encourage a wide variety of insects and other wildlife to use the site.
- 7.5. Further information regarding habitat creation, enhancement and management can be provided on request.

8. REFERENCES

CIEEM (2012) Guidelines for Preliminary Ecological Appraisal. *Technical Guidance Series*

Collins, J. (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition)* The Bat Conservation Trust, London

P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines (2023). *Bat Mitigation Guidelines*. English Nature, Peterborough

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd Edition)*. JNCC, Peterborough

Chartered Institute for Ecological and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (2017)

UKHab Ltd (July 2023). *UK Habitat Classification Version 2.0* (at <https://ukhab.org>)

CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (2018).

Ordnance Survey Maps [online] www.osmaps.ordnancesurvey.co.uk October 2024

Schofield, H. W. & Mitchell-Jones, A.J. (2004). *The Bats of Britain and Ireland*. Vincent Wildlife Trust, Ledbury.

UK Government's Countryside Geographic Information Website [online] www.magic.gov.uk October 2024

Legislation and Policy

Council of the European Communities (1992) *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (EN)*. Official Journal of the European Communities [online] www.eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:1992:206:TOC October 2024

Council of the European Communities (2009) *Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (EN)*. Official Journal of the European Union [online] eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:EN:PDF October 2024

Department for Environment, Food and Rural Affairs (2011) *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services* [online] www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf October 2024

Ministry of Housing, Communities & Local Governments (2023) National Planning Policy [online] https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf

NPPF_Feb_2019_revised.pdf [Aug 2020] Natural Environment and Rural Communities Act 2006 (UK Parliament). *The National Archives* [online] www.legislation.gov.uk/ukpga/2006/16/contents

Office of the Deputy Prime Minister Circular (2005) *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System* [online] www.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf October 2024

Wiltshire Council, Wiltshire Local Development Framework, Wiltshire Core Strategy Adopted January adopted 2015.

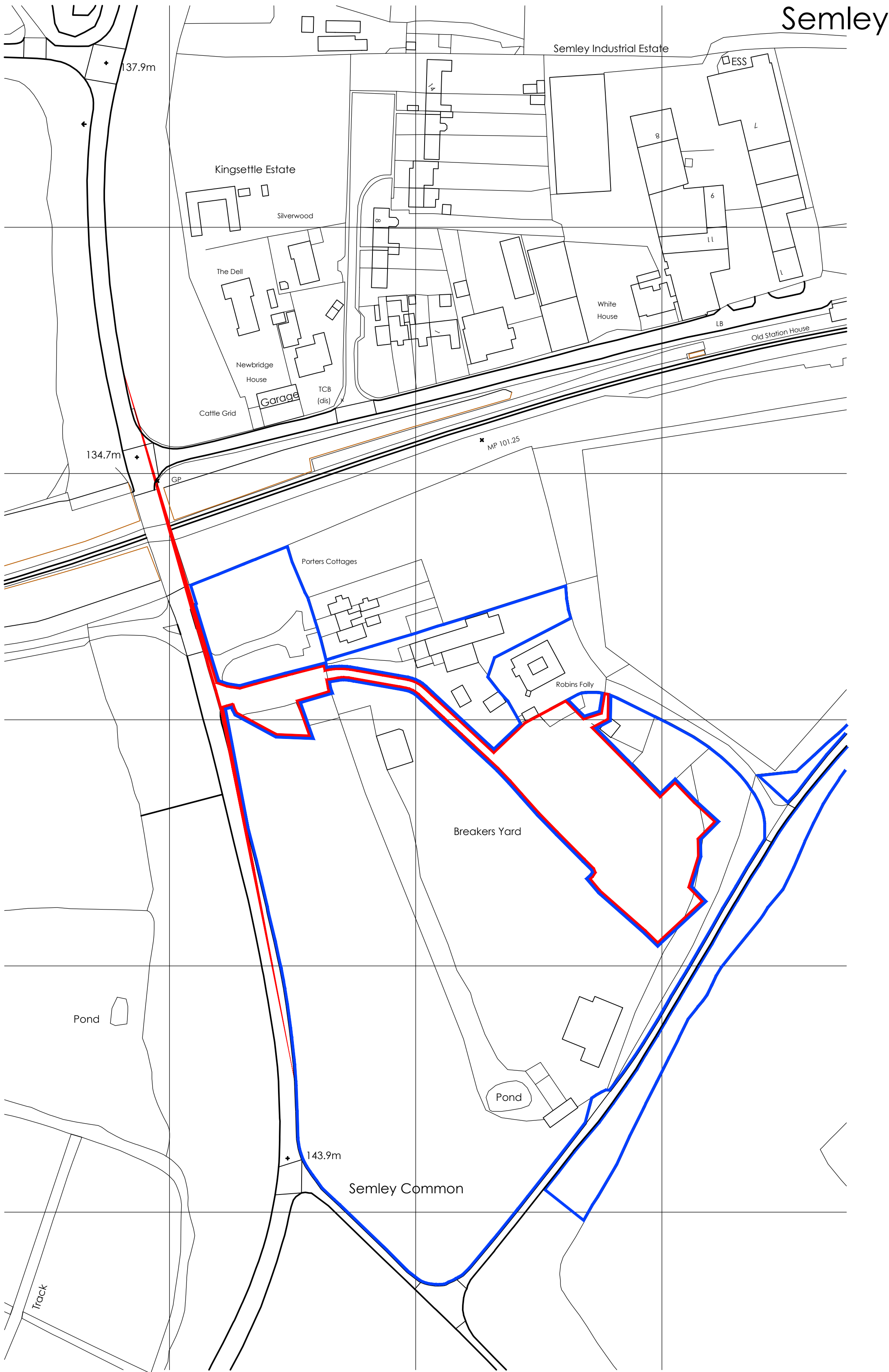
Protection of Badgers Act 1992 (UK Parliament). *The National Archives* [online] www.legislation.gov.uk/ukpga/1992/51/contents *The Hunting Act, 2004*

The Conservation of Habitats and Species (Amendment) Regulations 2012 (UK Parliament). *The National Archives* [online] www.legislation.gov.uk/uksi/2012/1927/contents/made

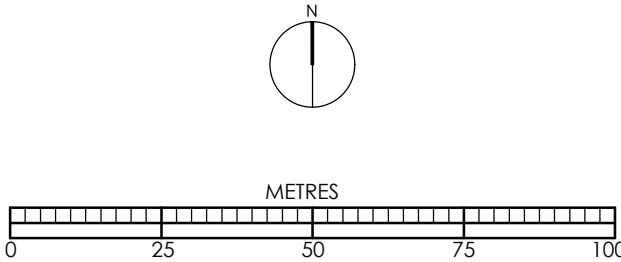
The Hunting Act (2004) *The National Archives* [online] www.legislation.gov.uk/uksi/2012/1927/contents/made

The Wildlife and Countryside Act 1981 (England and Wales) (Amendment) Regulations 2004 (UK Parliament). *The National Archives* [online] www.legislation.gov.uk/ukpga/1991/39/contents *Countryside and Rights of Way Act, 2000*

Rev	Dm	Date	Description
-	-	-	-

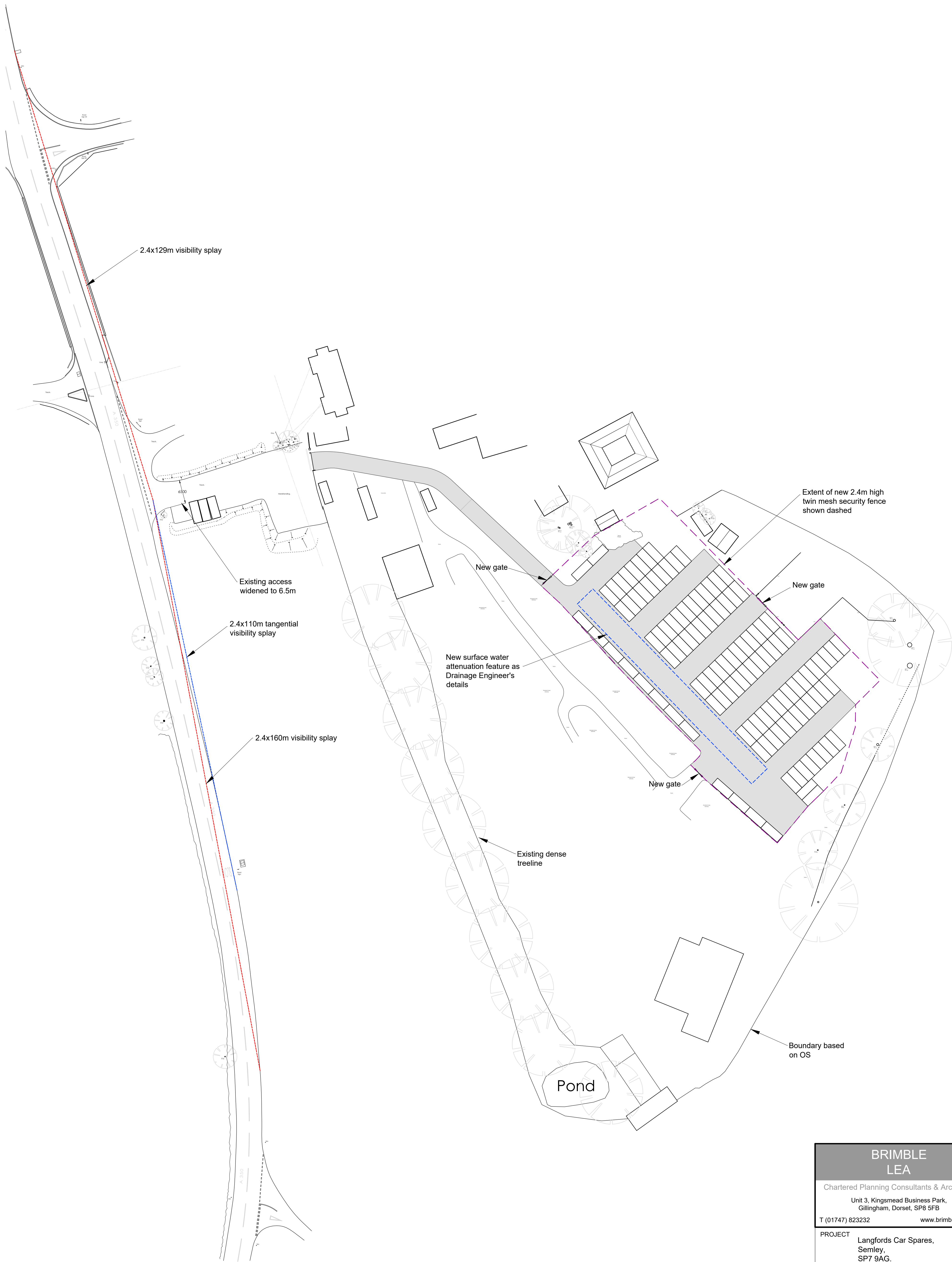


Ordnance Survey (c) Crown Copyright 2024. All rights reserved. Licence number 100022432



BRIMBLE LEA		
Chartered Planning Consultants & Architects		
Unit 3, Kingsmead Business Park, Gillingham, Dorset, SP8 5FB		
T (01747) 823232		www.brimblelea.com
PROJECT	Langfords Car Spares, Semley, SP7 9AG.	
DRAWING	Site Location Plan	
SCALE	1:1250 @ A1	
DRAWING ORIGINATOR DWR	DRAWING No.	REVISION
DATE 30.04.2024	23091 - 4	C

Rev	Dm	Date	Description
-	-	-	-



BRIMBLE
LEA

Chartered Planning Consultants & Architects

Unit 3, Kingsmead Business Park,
Gillingham, Dorset, SP8 5FB

T (01747) 823232 www.brimblelea.com

PROJECT

Langfords Car Spares,
Semley,
SP7 9AG.

DRAWING

Proposed Site Plan

SCALE

1:500 @ A1

DRAWING ORIGINATOR

DWR

DATE

18.04.2024

DRAWING No.

23091 - 3

REVISION

D



THE IMPACT OF LIGHTING ON BATS

Bats favour a dark environment for both roosting and foraging as they are adapted to low-light conditions. Artificial lighting will disturb bats if the lighting covers roost access points, flight paths or foraging habitats.

The main peak of nocturnal insect abundance occurs at dusk and a delay in emergence results in a lower foraging rate for bats.

Artificial lighting creates a 'vacuum effect' for nocturnal insects. During the night nocturnal insects use the light of the moon* to navigate. However, artificial lighting and even sky glow above cities obscures the natural moonlight as it is closer

and radiates light in multiple directions.

Some species of bats have been recorded foraging around street lights such as *Pipistrelle* species and *Nyctalus* species. However, species that are less tolerant of artificial light are at a disadvantage when foraging as insects are drawn away from these species usual foraging grounds into the zones of artificial light.

Lighting must be considered in context to any development as increased lighting may cause roost abandonment, reduced reproductive success, and reduced foraging. Mitigation to reduce the impacts of lighting for bats is therefore of great importance in bat conservation.

Table 1: Summary of predicted impact of lighting for each species/genus

Impact	High	Medium	Low
Roosting	All species		
Emergence	All species		
Foraging	<i>Myotis</i> spp. <i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus</i> spp. <i>Vesperugo</i> spp.	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus</i> spp. <i>Vesperugo</i> spp.	<i>Pipistrellus</i> spp. <i>Nyctalus</i> spp. <i>Eptesicus</i> spp. <i>Vesperugo</i> spp.
Reproductive	All species		
Navigation	All species		

*For more information see Warrant, E., and Dacke, M. (2016) Visual Navigation in Nocturnal insects. *Physiology*, 31, 182-196.

Sources of light that can disturb bats include; light spill via windows, sport floodlighting, car headlights, roadside lighting, security lighting, aesthetic lighting of waterways, and aesthetic illumination of buildings. Glare will affect bats over greater distance than the target area directly illuminated.

Avoidance is the most effective method, but if this is not possible the following measures should be considered.

What lighting should I use?

- Low pressure sodium lights or 'warm' LEDs
- Wavelength above 540nm
- Colour temperature below 2700K
- Shielded lights that prevent light spill above a 70 degree angle
- Passive infrared (PIR) motion sensors



What to avoid:

- Lighting roost entrances, flightpaths, and foraging or commuting routes
- Reflective surfaces beneath lighting
- High level lights
- Non-directional lighting

Lighting should be considered at an early stage allowing impacts to be minimised through the design of the site.

Key Points

- Keep lighting intensity to the minimum level required
- Limit the times that lights are on to provide some dark periods (e.g. switching installations off between midnight and 5am)
- Dim lighting according to demand
- As an alternative to lighting pathways use paving materials that reflect moonlight
- Low level lighting allows darkness to be retained within higher vegetation
- Set dark habitat buffers - lighting should always be a minimum of 25m from vegetated margins and 40m from waterbodies
- Incorporate dark corridors within the site
- Compensate for the loss of dark areas by enhancing other dark areas
- Consider building design - install internal lighting away from windows



General Mitigation for Bat Roosts

Bat Mitigation Class Licence (BMCL)

Registration for a BMCL can be submitted following planning approval. This licence permits the disturbance and/or capture of bats and/or damage/destruction of bat roosts of low conservation significance. You may apply for a BMCL in the following circumstances:

- No more than three common species of bat;
- Only individual or small numbers of bats of each species; and
- No more than three roosts in total across all structures at the site.

Natural England aim to provide licensing details in 10 working days



European Protected Species Licence (EPSL)

An application must be submitted by the local planning authority and must be granted before any works can commence on site. You must apply for an EPSL in the following circumstances:

- More than three species of bat or roosting structures are present at the site
- Rarer species are present
- Presence of a Maternity roost
- Roost present within a tree

Natural England aim to provide licensing decisions in 30 working days. Licences will only be granted where it can be shown there will be no detriment to the species of bats concerned.

Timing: If your roost is a confirmed **Hibernation** roost works cannot be carried out in **Oct-Feb**

If your roost is a confirmed **Maternity** roost works cannot be carried out in **May-Aug**



Supervision

Once you have been granted your licence, a Natural England bat-licensed ecologist will need to be on site to over see the stripping of any identified or potentially suitable roosting features. If any bats are found on site they can then be lawfully handled and placed safely into a newly provided bat box.

After the strip has taken place the provision of new roosting opportunities must be placed on site as mitigation such as bat boxes which are suitable for the roosting bat species which were found on site.

Materials

Breathable membrane (pictured on the left) should **not** be used in new loft voids as this can lead to entanglement and trapping of bats and increase the variability of the microclimate in the loft. Instead **bitumen felt** (pictured on the right) should be utilised as bats can grip onto it, helping to maintain a safe and suitable environment.





Gaps and Crevices

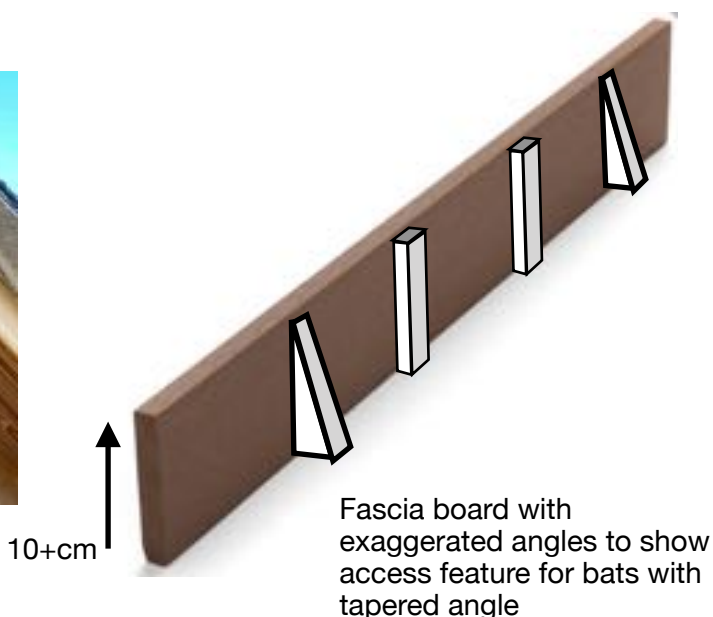


Crevice-dwelling bat species can utilise gaps in fascias, barge board and soffits, and potentially can gain entry to the interior roof void if the gap is large enough.

These areas of a building are often replaced or repaired which would destroy any identified roosting features. Luckily there are features that can be implemented to compensate for the loss of these features.

A simple option to compensate for a lost roosting feature in a fascia or barge board is to cut an access hole flush with the wall in which the new/replacement fascia, barge board, or soffit box is placed. It needs to be close to the wall as bats need somewhere to land before they can climb up into a gap

Alternatively, features can be created by installing wide barge boards directly on overlapping cladding, which creates suitable gaps for crevice roosting bats where natural crevices are created due to the profile of the boards. Gaps of at least 4 inches deep and approximately 15mm wide at the top are suitable for small bats such as pipistrelle species.





Lifted tile bat access features

Lifted tiles provide a simple, discreet bat roosting opportunity which are great for replicating existing roost features on traditional tiled roofs. They can be cheaply and easily created using materials available on site to provide a bespoke mitigation solutions for bat licence projects.



Small pieces of tile, mortar, pieces of wooden batten or rolled lead tingle can be used to raise the tile and create a suitable access gap for bats.

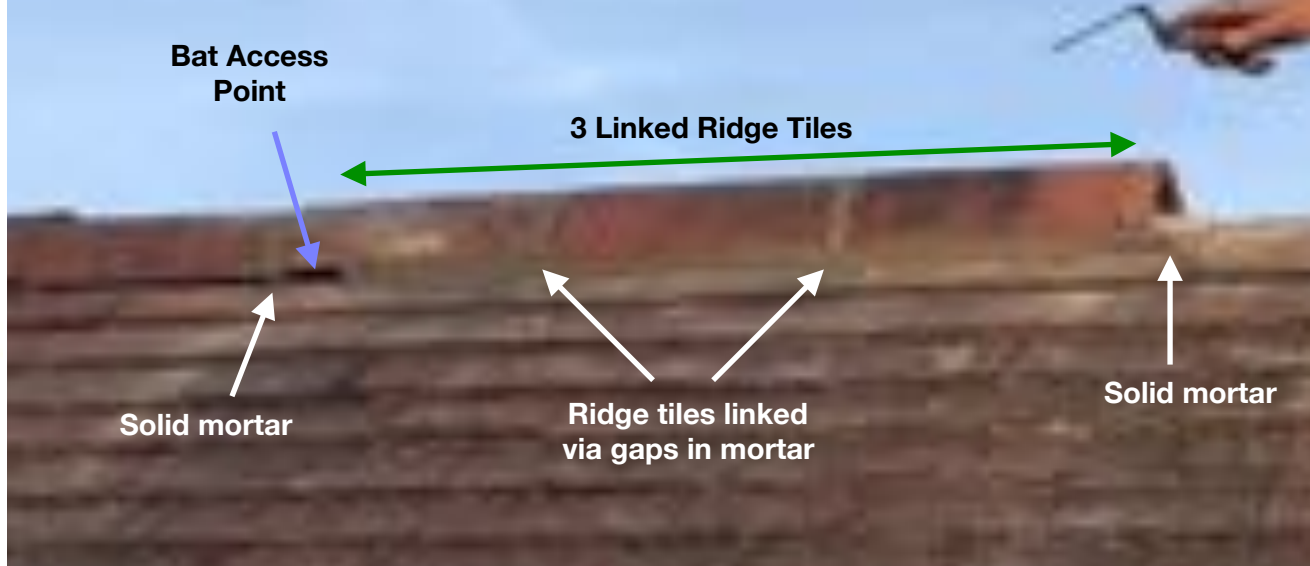
Lifted tiles should provide a gap of approximately 15-25 mm beneath the tile to provide access to the batten space of the roof. The roof should be lined with bitumastic felt to create the perfect warm crevices suitable for roosting bats.



These features are also suitable for incorporation on areas of hanging tiles to provide bat access to the batten space.

The locations for these features should be agreed with an ecologist to provide optimal conditions for the bat species and roost types present on site.

Lifted tile features can also be used to provide access into a roof void suitable for roosting bats. To provide access into the roof space, a small gap must be cut into the roofing felt. This should be approximately 50 mm x 20 mm to provide access for bats but discourage birds from entering the roof space.

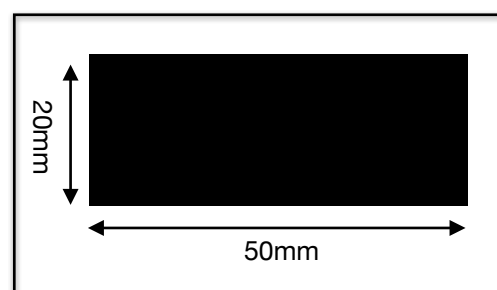


HOW TO CREATE

Note: Use three adjacent ridge tiles for one Ridge Tile Crevice Feature



1. Notch out the underside of a ridge tile measuring 20mm high by 50mm wide.



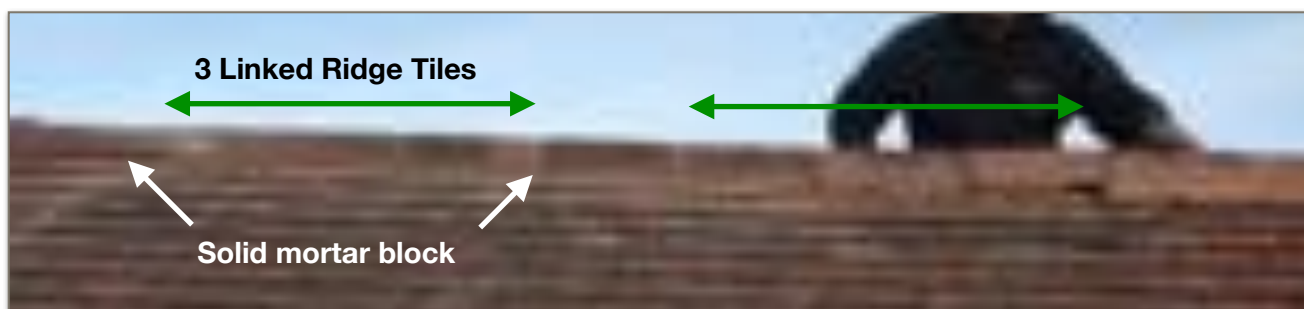
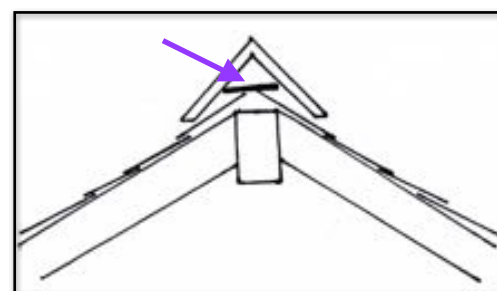
2. Or leave a gap in the mortar of the same size



3. Leave the gap mortar free when bedding the tile onto the ridge.



4. To ensure the three ridge tiles remain linked either; place a broken tile over the ridge and mortar only above the tile (left) or fill one side with mortar and leave the other side empty (do this on alternate sides to ensure the feature does not become draughty) (right).



5. At each end of the three linked ridge tiles insert a solid mortar block to reduce through draughts.



How to Install

Integrated Bat Boxes



Integrated bat boxes can be installed into the brickwork of buildings to provide a roosting spot for bat species.

Being embedded in the masonry of a building, they do not impact the exterior seal of structure and are commonly integrated in new builds.

With some modification or bespoke design, integrated bat boxes can be installed in such a way that it does not interfere with a building's exterior facade.

The 1FR bat tube has a 45 degree angle for bats to land on and crawl upwards into the bat tube. It has been designed to be installed within or adjacent to the the external skin of the block work or brickwork.

For a rendered finish, the 1FR bat tube can be built into the external skin of breeze blocks (acting as a block) and be rendered over (ensuring the access point is left clear). Ridges should be created in the render immediately below the access point, which will aid the bats when crawling into the bat tube.

For a brickwork finish, the 1FR bat tube should be installed within the brickwork, set back slightly to allow the front to either be rendered over or for a continuity of brick slips to be mortared over the top of the tube. The upper brick slip should overlap the access point and the lower brick slip should be in line with the 45 degree angle of the bat tube.

Alternatively, **Habibat** bat tubes can be purchased that are designed for brickwork design and can be custom made.





TYPES OF BAT BOXES



Schwegler 2F Double Front Panel

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle and Myotis species
- A second inner wooden panel is fitted adjacent to the front panel imitating a cavity wall



Schwegler 1FD Double Front Panel

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle and Myotis species
- A second inner wooden panel is fitted adjacent to the front panel imitating a cavity wall
- Small entrance hole discourages birds from using the box



Vincent Pro Bat Box

- Manufactured from timber and recycled plastic
- The front and the top of the box is black, which helps heat absorption
- Suitable for a range of species including pipistrelle species, Myotis species, and brown long-eared bats.
- No maintenance required



Schwegler 2FN

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for pipistrelle species, Myotis species, serotine, brown long-eared, noctule and Leisler's bats
- Dual entrance
- Birds and dormice have also been found using this box
- A newer model is now available, Schwegler 3FN, designed with smaller entrance holes which discourage birds and dormice



Schwegler 1FS Large Colony Box

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for a range of bats including pipistrelle species, Myotis species, Noctule, and brown long-eared bats
- Three grooved inner wooden panels are connected to the front panel, which are ideal for bats to cling to.
- Accommodates large summer colonies



Schwegler 1FF Colony Box

- Manufactured from long-lasting woodcrete
- Lifetime - 20-25 years
- Suitable for a range of crevice dwelling bats including pipistrelle species, barbastelle, noctule, and brown long-eared bats
- Rough wooden surface for bats to cling onto and climb



Greenwoods Ecohabitats Small Hollow Bat Box

- Manufactured from long-lasting ecostyrocete
- Lifetime - 20-25 years
- Suitable for a range of bats preferring a cavity space, including pipistrelle species, myotis species, noctule, and brown long-eared bats
- Suitable for hibernating bats



TYPES OF BIRD BOXES



Vivar Pro Seville 32mm WoodStone Nest Box

- Manufactured from woodstone - increases longevity and provides a consistent internal temperature
- The nest box compensates for the lack of natural cavities that are found in trees
- Suitable for blue tits, tree sparrows, house sparrows, great tits, crested tits, nuthatches, coal tits and pied flycatchers
- Should be installed between 1.5m and 3m high



House Martin Nest Cups



Swallow Nest Bowl

- Suitable nest building mud is difficult for house martins and swallows to find
- Alterations to house construction and roof design have resulted in a decrease of suitable nesting sites
- Install swallow nest bowls within an outbuilding or garage that has flight access - 6cm below the ceiling
- Install house martin nest cups under the eaves of a house - minimum of 2m high



Swift Nest Box

- Swift numbers are declining partly due to a loss of nesting sites
- The entrance hole discourages other birds such as starlings and sparrows
- Install a minimum of 5m high with unobstructed airspace in front of the nest
- Integrated models of swift nest boxes are also available



5KL Schwegler Nuthatch Nest Box

- Manufactured from woodcrete
- Nuthatches prefer nest boxes with larger cavities. They will often occupy owl nest boxes and fill the entrance hole with mud reducing the size to approximately 32mm
- Nuthatches plaster mud on the internal walls of the cavity and line the floor with wood chipping and leaves to nest
- To discourage nuthatches from using owl nest boxes try installing the 5KL immediately adjacent



Open-fronted Nest Box

- Manufactured from woodstone - lifetime of 20-25 years
- Suitable for robin, wren, spotted flycatchers, and black redstart
- Best installed hidden from view on the wall of a building or hidden within ivy/honeysuckle as the boxes open-front may attract predators
- Install at a height of 1-3m



Sparrow Terrace Nest Box

- Sparrow populations are decreasing due to a lack of nesting sites
- Sparrows are a sociable species and prefer to nest in a colony
- Likelihood of uptake is increased if more nesting chambers are available (the example nest box shown contains three nesting chambers)
- Various other nest box designs are available
- Install at a minimum of 2m high



Tawny Owl Nest Box

- Install on a mature tree within a woodland (not on the outskirts)
- Install a minimum of 3m high
- Face the box entrance away from prevailing wind (generally avoiding west/south-west)



Little Owl Nest Box

- Prefer areas of mixed farmland and orchards
- Essential features; small entrance hole (70mm), narrow tunnel, and a dark nesting chamber
- Install on a horizontal tree branch/wall top or beam so that owlets can walk in/out prior to fledging
- Can be installed on any tree species apart from cherry - the cherry harvest coincides with the little owl breeding season
- Entrance hole should face the tree trunk
- Install at a minimum height of 3m



Design and creation

Deadwood habitat piles offer valuable habitats for an array of saprophytic (deadwood eating) invertebrates that will in turn provide food for a wide range of predatory species of insects, birds, mammals, reptiles and amphibians.



On sites where vegetation structure is limited, brash and log piles provide an instant enhancement. Deadwood habitat piles also provide shelter and refuge opportunities for larger animals, particularly reptiles and amphibians.

They can also be suitable hibernation sites during the winter for reptiles, amphibians and small mammals including hedgehogs. Think bonfire!

Habitat piles should be located in sunny or part shaded sites. A compact central core, with larger woody material in contact with the ground is recommended to provide the damp and decomposing wood conditions that are most suitable for benefiting saprophytic invertebrates. The outer layers should be laid more loosely on top. This provides a diverse structure within the habitat pile and provides suitable cover and basking opportunities for reptiles.

Habitat piles should be maintained by adding material every few years as the pile decomposes and do not require much management.



To provide optimal conditions for reptiles, amphibians and mammals, log piles should contain a mixture of sizes and shapes with plenty of small diameter material included. This introduces voids of different sizes and creates a complex internal structure.

They can be created to be an attractive feature of the landscape where a more formal appearance is required.



Creation and design



Hibernacula offer sheltering opportunities for reptile and amphibian species, providing them with essential habitat in which to hibernate during the winter temporary shelter in the summer during the warmer months.

Hibernacula can be both naturally-occurring and artificial, and can be constructed of a range of materials. Our ecologists can advise on the best locations and materials for the placement of artificial hibernacula.

The optimum locations for hibernacula are on south-facing slopes within freely-draining soils. It is imperative that the hibernacula are exposed to direct sunlight for the majority of the day to ensure maximum thermal capacity.

It is also important that hibernacula are created within a mosaic of habitat types for example open areas of grassland adjacent to sheltered areas of scrub / hedgerow. This ensures excellent basking areas are available adjacent to well connected habitat and areas of shelter.



Hibernacula can range from underground chambers to sheltered areas at ground level, akin to refugia.

By digging a shallow pit and filling it with materials such as rocks and logs, a chamber can be created which contains several gaps within. Access can be enabled by placing entrance tubes at ground level that go into and out of the chamber.

When the chamber and access has been constructed, soil can be piled on top of the hibernacula to seal it. Plant wildflower seeds on top to further benefit local biodiversity!



Insect boxes and bug hotels



The provision of insect boxes and bug hotels provide a valuable resource for invertebrates, providing suitable nesting habitat for important native pollinators such as mason bees and leafcutter bees. They can also provide opportunities for a wide range of species to shelter and over-winter during the colder months.

Bug hotels are highly adaptable, and are therefore suitable for almost all developments and habitats. They can be made easily from a range of waste and plant materials, and more specialist items such as bee bricks can be purchased in order to target specific species.



Bug Hotel

These are easily implemented in almost any situation as bug hotels can be made from a range of materials, such as bricks, plant pots, tree cuttings, logs and broken tiles.

Bug hotels can also be adapted to benefit specific species, such as bees, woodlice, and ladybirds.

Other terrestrial species such as hedgehogs, reptiles and amphibians can also benefit from sheltering in a bug hotel.



Insect boxes

A range of prefabricated insect boxes such as the Green & Black Bee Brick (left) and the Woodstone Insect Box (above) are available and can be incorporated into or onto buildings or on trees to provide nesting habitats for a range of solitary bee species.



Wildflower Turf

Wildlife Friendly Landscaping



Wildflower turf is suitable for use in a wide range of applications to provide a naturalistic and attractive meadow landscape and provides a more reliable result compared with traditional seeding methods.

The seeded turf contains a diverse mix of native wildflower meadow species including grasses and flowering plants characteristic of lowland meadows on a range of soil types.

As the grassland matures, the meadow develops a characteristic composition with species that thrive on the local soil.



Wildflower turf provides an instant enhancement to any landscaping project with low maintenance and reliable establishment of native wildflower grassland.

Darwin Ecology Ltd are Accredited Partners of Wildflower Turf Ltd.

Accredited partners are trained in the use and installation of Wildflower Turf Ltd. products to deliver attractive and successful wildflower landscapes.



The flowers in the turf have been chosen to ensure that flowering plants are present from early spring through to autumn.

A diverse and thriving meadow will attract a huge range of invertebrates and pollinators to birds, reptiles and mammals.

Darwin Ecology can help you maximise the impact of your wildflower areas by designing and creating additional habitats for the species you will attract including rustic and visually pleasing deadwood habitats or hibernacula as shown.