

**PARCEL R10, PHASE 2B OF THE SOUTH
WOKINGHAM STRATEGIC DEVELOPMENT
LOCATION**

ECOLOGICAL MITIGATION STRATEGY

Final Document (Rev. 2)

July 2025

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
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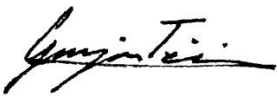
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¹ Chartered Institute of Ecology and Environmental Management (2015). *Guidelines for Ecological Report Writing*. Technical Guidance Series. <http://www.cieem.net/publications/23/ecological-report-writing>

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1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Miller Homes to produce an Ecological Mitigation Strategy in order to mitigate for identified adverse effects on Important Ecological Features as a result of the proposed redevelopment of Parcel R10, Phase 2b of the South Wokingham Strategic Development Location (SDL) (hereafter referred to as the site).

This document has been produced to support a reserved matters application for Parcel R10, following the granting of consent for a hybrid application for Phase 2b of the South Wokingham SDL by Wokingham Borough Council on 19th July 2024 (Ref. 191068). The hybrid application was supported by an Environmental Impact Assessment (Nexus, 2019) which included a mitigation strategy to be applied to the Phase 2b of the SDL, the purpose of this document is to provide detailed information on how the mitigation measures set out in the Environmental Impact Assessment will be implemented with in Parcel R10.

A Biodiversity Net Gain Assessment was also submitted as in support of the hybrid application (ECOSA, 2020). The baseline associated with this assessment was fixed at the hybrid application and therefore may not align with the current baseline of the site. This document provides details of the current ecological baseline and accounts for any amendments to the agreed mitigation strategy that may be required as a result of changes that have happened subsequently. It should therefore be noted that there may be discrepancies between the baseline described in this report and the baseline described in the Biodiversity Net Gain Assessment which will be submitted in tandem with this application in order to discharge Condition 23 of the hybrid application for Phase 2b of the South Wokingham SDL. These discrepancies are highlighted and explained within this document.

Miller Homes are also signatories to the Future Homes Hub 'Homes for Nature' scheme. This document also sets out measures that will ensure that Miller are meeting their commitments under this scheme.

Due to the potential presence of great crested newt on site, ECOSA are currently consulting with Naturespace to undertake works under their District Level Licensing scheme. Until the application is registered with the scheme, the exact nature of the mitigation works required in relation to this species is not known. This document will be updated and resubmitted once these details have been finalised.

1.2 The Site

The site is located on the border of the Wokingham Borough and Bracknell Forest administrative areas, between the two large towns of Wokingham and Bracknell, centred on National Grid Reference (NGR) SU 8320 6796.

1.3 Aims and Scope of Mitigation Strategy

The aim of this document is to detail suitable mitigation measures to be implemented during the construction phase to ensure that the favourable conservation status of Important Ecological Features present on site is maintained.

This document will:

- Provide information regarding the most recent update to the site's ecological baseline and explain where there may be discrepancies between the current ecological baseline, and the ecological baseline fixed as part of the hybrid application for the SDL for the purposes of Biodiversity Net Gain;
- Set out the Important Ecological Features that have been identified as at risk of being impacted by works during the construction phase;
- Set out detailed mitigation measures, including methods and timings and how measures should be monitored and maintained throughout the construction phase, to ensure that Important Ecological Features are not adversely impacted.

The primary purpose of this document is to support the reserved matters application, it is anticipated that the measures set out in this document will be translated into other working documents, such as the Construction and Environmental Management Plan (CEMP) and associated working drawings in order to be implemented on site.

As the scope of this document is for the construction phase, it does not include information on long-term ecological management and maintenance that would take during the operational phase. These elements will be included within the associated Landscape and Ecological Management Plan (LEMP).

1.4 Site Proposals

The proposals are for the construction of 215 dwellings with associated landscaping.

Consent was granted in June 2025, with works expected to start commencing on site during summer 2025.

2.0 CURRENT ECOLOGICAL BASELINE

2.1 Introduction

This section summarises the most recent ecological survey work undertaken and the current ecological baseline at the site.

2.2 Updating Ecological Survey

The most recent ecological surveys were updating walkover surveys undertaken by Joanne Richmond, Principal Ecologist of ECOSA on 26th October 2023 and Georgina Timmis, Principal Ecologist of ECOSA on 16th October 2024.

2.3 Changes to the Ecological Baseline

When the ecological baseline was established at outline, the fields within Phase 2b R10 had been planted with a cereal crop. Since then the land has been taken out of agricultural management, likely due to the commencement of construction works associated with the Southern Distributor Road (which is not the subject of the outline or reserved matters applications this report relates to). The cereal crop has been replaced with modified grassland, that has developed into a reasonably long sward, although is subject to regular management. This change means that the presence of reptiles in this area cannot be ruled out. The results of survey work at the site to date recorded only low populations of slow-worm and common lizard, primarily associated with habitat adjacent to the railway line on the northern boundary of the site. Given the low population size class of populations recorded historically and the relatively limited time the suitable habitat has been present, it has been assumed that low populations of slow-worm and common lizard are present on site and potential impacts on these species during construction have been mitigated accordingly within this document.

All other habitats are currently as described in the outline ecological baseline.

2.4 Important Ecological Features

The Important Ecological Features which may be affected by construction works are summarised in **Table 1**.

Table 1: Summary of Important Ecological Features

Important Ecological Feature	Reason for Importance	How IEF May Be Adversely Affected During Construction
Hedgerows	Hedgerows are a Habitat of Principal Importance, the Natural Environment and Rural Communities Act 2006 requires the local authority to have regard to the conservation of these habitats when making decisions.	Areas of hedgerow that are intended to be retained as part of the proposals could be accidentally damaged during construction, either as a result of direct impact by machinery, or due to root compaction by machinery driving over the ground nearby.
Bats	Bats are protected under Section 9(4) of the Wildlife and Countryside Act 1981 (as amended) and Regulation 43 of the Conservation of Habitats and Species Regulations 2017. This makes it an offence to injure or kill bats, damage or destroy their roosts or disturb them in a way that impairs their ability to survive, breed, raise their young or migrate.	Accidental damage to trees could result in killing and injury of bats within roosts, if present. Significant light spill on boundary hedgerows and trees could deter light averse bats from using these habitats as foraging areas or commuting routes.
Badger	Badgers are protected under the Protection of Badgers Act 1992. This Act makes it an offence to kill or injure a badger, or to damage or interfere with a badger sett.	Badgers may be injured by becoming trapped in excavations left open overnight where there is no way for them to escape. If setts are present at the time of works, badger may also be killed and injured, and setts damaged or destroyed by heavy machinery digging into setts or driving over them and causing them to collapse. Badger setts can extend up to 30 metres underground from the entrance visible at ground level.
Breeding birds	With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to intentionally kill or injure any wild bird, damage or destroy their nests or destroy their eggs.	The removal of woody vegetation could result in the killing or injury of birds, their nests and eggs if undertaken when birds are nesting. Significant noise or physical disturbance to these habitats could also result in birds abandoning active nests, killing their young or leaving eggs unviable.
Reptiles	Slow worm and common lizard are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to intentionally kill or injure these species.	The removal of grassland and woody vegetation could result in the killing or injury of reptiles. If exclusion fencing is not maintained around the site, reptiles may recolonise the construction area, particularly suitable habitats present such as spoil piles or piles of materials, which mimic naturally occurring reptile refugia. Individuals may then be killed or injured during regular site operations.
Great crested newt	Great crested newt are protected under Section 9(4) of the Wildlife and Countryside Act 1981 (as amended) and under	The removal of grassland and woody vegetation could result in the killing or injury of great crested newt. The construction will

	Regulation 43 of the Conservation of Habitats and Species Regulations 2017. These make it an offence to kill or injure great crested newt or to damage or destroy their habitat.	necessarily result in the damage or destruction of suitable great crested newt habitat. A District Level Licence will be agreed with Naturespace/Natural England to allow works to proceed where they would otherwise represent a legal offence. Works will need to strictly adhere the requirements of this licence to avoid a legal offence being committed. If exclusion fencing is not maintained around the site, reptiles may recolonise the construction area, particularly suitable habitats present such as spoil piles or piles of materials, which mimic naturally occurring reptile refugia. Individuals may then be killed or injured during regular site operations.
European hedgehog and common toad	European hedgehog and common toad are a Species of Principal Importance, the Natural Environment and Rural Communities Act 2006 requires the local authority to have regard to the conservation of these species when making decisions.	European hedgehog and common toad could be injured or killed during vegetation clearance works. European hedgehog and common toad may be harmed by becoming trapped in excavations left open overnight where there is no way for them to escape. Following construction, barriers such as walls and closed board fencing would prevent European hedgehog from accessing valuable garden habitat.

3.0 MITIGATION STRATEGY TIMETABLE

A summary of the works and associated timings relating included in the ecological works for site preparation, are provided in **Table 2**. These timescales are based on the assumption that reptile translocation work will commence in spring 2025. These timings should be treated as provisional and will be subject to update as works progress however, provide an indication of the delivery of the strategy.

Table 2: Mitigation Strategy Timetable

	Task PLANNED to be undertaken during this month															
	Task CAN be undertaken during this month															
	Task CANNOT be undertaken during this month															
	Task NOT REQUIRED to be undertaken during this month															
Task	Responsibility	Timing Requirements/ Constraints	Paragraph Ref.	J	F	M	A	M	J	J	A	S	O	N	D	
Hedgerow Protection Fencing	Site Contractors	N/A	4.1													
Badger Walkover Survey	Ecologist	Within 6 months prior to commencement of works.	4.2													
Badger Sett Closure (if required)	Ecologist/ Site Contractors	Badger sett closures take at least 21 days and must be undertaken when cubs are unlikely to be present underground.	4.2													
Nesting Bird Check	Ecologist	Immediately prior to vegetation removal.	4.3													
Installation of exclusion fencing	Ecologist/ Site Contractors	Prior to commencement of translocation works. Cannot be undertaken during reptile and great crested newt hibernation period or in unsuitable weather conditions.														
Reptile and Great Crested Newt ² Translocation	Ecologist	30 days prior to commencement of destructive search works. Cannot be undertaken during reptile and great crested newt hibernation period or in unsuitable weather conditions.	4.4													

² Requirement for great crested newt translocation to be confirmed pending further communication with Naturespace regarding District Level Licence application.

Supervised Destructive Search	Ecologist/ Site Contractors	Prior to commencement construction works. Cannot be undertaken until translocation exercise is complete.	4.5														
Sensitive Lighting	Site Contractors	N/A	4.6														
Installation of Bat and Bird Boxes	Site Contractors	N/A	4.7														
Compliance checks	Ecologist	Once a month throughout the construction period	5.1														

4.0 MITIGATION STRATEGY

4.1 Hedgerow Protection Fencing

Relevant Important Ecological Features: Hedgerows, Important Hedgerows, Breeding Birds

Wherever hedgerows are proposed to be retained they, and their Root Protection Zones, should be protected from accidental damage through the installation of Heras-type fencing. Accidental damage can occur as a result of direct impacts by machinery and also through root compaction as a result of tracking of heavy machinery or deposition of large amounts of spoil, for example.

The location of protective fencing is provided in **Appendix 1**.

4.2 Badger Walkover Survey

Relevant Important Ecological Features: Badger

Because badger are a highly mobile species, a walkover of the site will be undertaken within six months prior to the start of the construction phase to determine whether badger have colonised the site. Ideally the walkover will be undertaken no later than three months prior to the start of the construction phase, so that if a badger sett is identified, the necessary steps can be taken without impacting the proposed programme of works.

If badger setts are encountered, a report will be produced outlining the mitigation measures required, these cannot be specified here as they would depend on the nature and location of the sett. However, the principals of the mitigation approach have been set out below:

- Priority 1: Avoid impacts to the sett
Establish a suitable buffer around the sett, this may be between 10 and 30 metres depending on the nature of the works in the area and the weight of the machinery that needs to be used.
- Priority 2: If impacts on the sett cannot be avoided, close the sett.
If it is not feasible to incorporate the necessary buffer, the sett should be closed. The sett closure will involve the installation of one-way gates to exclude badgers from the sett. Exclusion usually takes 21 days and must be undertaken between 1st July and 30th November. Outside of this window badger cubs may be underground and would be separated from their mothers and starve if adults are excluded from the setts. Due to badger's legal protection, and the fact that it would otherwise be a legal offence to interfere with the badger sett, a licence will

need to be granted from Natural England to close the sett. The exact nature of the mitigation works will depend on the nature of the sett identified.

4.3 Nesting Bird Check

Relevant Important Ecological Features: Breeding Birds

Vegetation clearance will be undertaken outside the breeding bird season of March to August, inclusive, or if not possible, an ecologist should be present immediately prior to clearance to check vegetation. Any active nests discovered during checks will be left with an undisturbed buffer specified by the supervising ecologist until nesting ends.

4.4 Translocation Exercise

Relevant Important Ecological Features: Reptiles, Great Crested Newt

As only a small population of reptiles is anticipated to be present on site, any reptiles encountered will be relocated to suitable habitat along the railway embankment to the north of the site which is where the existing reptile population is known to be present, this will prevent isolation of a small number of reptiles and allow translocated individuals to disperse into habitat within the wider landscape. This area will hereafter be referred to as 'the receptor area'.

The site will be fenced using 1000-gauge semi-permanent exclusion fencing buried into the ground by 100 millimetres with an external return to prevent reptiles from burrowing beneath it. Posts will be erected at approximately 2-2.5 metre intervals to support the fence. Vegetation will be cleared along the alignment of the fencing immediately in advance of its installation. The exclusion fence will be installed by or under the supervision of a suitably qualified ecologist. The perimeter fencing will be located just outside the tree protection fencing (**Appendix 1**), to protect it from accidental damage by machinery during construction. This may require a very minor realignment of the tree protection fencing to accommodate the trenching for the exclusion fencing just outside the root protection zone. The exact alignment will be marked out by an engineer immediately prior to installation.

If required by the District Level Licence, pitfall traps will also be installed within the translocation area and great crested newt translocated to a suitable receptor area. Further details will be provided within this document, if this is confirmed to be required.

4.5 Supervised Destructive Search

Relevant Important Ecological Features: Reptiles, Great Crested Newt, European Hedgehog, Common Toad

The destructive search will be undertaken following completion of the translocation exercise. The destructive search will comprise methodical cutting of suitable habitat to

22 centimetres high, followed by the top layer of vegetation stripped using an excavator with a toothed bucket. All works will be supervised by a suitably qualified ecologist.

Any additional reptiles encountered as part of the destructive search will be captured by the ecologist and relocated to the receptor area. Once the destructive search has been completed, and all suitable reptile habitat has been removed from the site, the development work will be able to proceed.

In addition to reptiles, a watching brief will be kept for European hedgehog and common toad, and any individuals removed from the construction zone into suitable retained habitat in the surrounding area.

4.6 Sensitive Lighting

Relevant Important Ecological Features: Bats, Badger, European Hedgehog, Breeding Birds

Lighting must be installed in accordance with the agreed lighting strategy (**Appendix 2**), which has been designed to mitigate for the impacts of light spill on Important Ecological Features.

4.7 Installation of Bird Boxes

Relevant Important Ecological Features: Breeding Birds

One integral nest box will be installed in each plot within the site. The boxes type will comply with British Standard BS 42021:2022, for example Manthorpe Swift Bricks (**Figure 1**) or NHBS Swift Blocks (small) (**Figure 2**). Whatever brand of boxes are used, they will have entrance holes of 30 millimetres x 65 millimetres minimum to enable starlings to enter, and the entrance holes will be located close to the base of the box to avoid birds becoming trapped within them.



Figure 1: Manthorpe Swift Brick



Figure 2: NHBS Swift Block (small)

The boxes will be installed at gable ends close to the roof verge, or inserted tightly beneath eaves into walls which back onto cold voids where the installation will not result in cold bridging. For plots with hipped roofs, integral nest boxes will be installed as high as possible below soffit level, and ideally next to stairwells or bathrooms to reduce the possibility of noise from chicks.

Bird box locations are shown on **Map 1**.

4.8 Installation of Bat Boxes

Relevant Important Ecological Features: Bats

Integral bat boxes, such as Ibstock Enclosed Bat Box 'C' (**Figure 3**) or Schwegler Wall-Mounted Shelter 2FE (**Figure 4**), will be installed in all plots within the site that provide suitable conditions. A total of 74 boxes will be installed. Suitable conditions include locations away from artificial light sources, sheltered from strong winds, exposed to the sun for part of the day and located adjacent to suitable foraging and commuting habitats i.e. hedgerows and trees. Boxes will be installed at least 4 metres above the ground and away from windows that would expose them directly to artificial light spill.



Figure 3: Ibstock Enclosed Bat Box 'C'



Figure 4: Schwegler Wall-Mounted Shelter 2FE

Bat box locations are shown on **Map 1**.

4.9 Installation of Hedgehog 'Highways' and Log Piles/Houses

Relevant Important Ecological Features: European Hedgehog

Hedgehog 'Highways' will be created through the site by providing small gaps in fences and other impermeable boundary features, which would otherwise prevent hedgehog access. The location of gaps are shown on **Map 2**.

The gaps will be 130 millimetres by 130 millimetres installed at the base of impermeable boundary features to allow hedgehogs to pass through. Gaps should be positioned away from buildings where possible and in locations where planting and shrubs provide shelter.

The GPS locations of gaps should be recorded by site contractors when installed and this information should be provided to the ecologist, so that their correct installation can be confirmed during compliance checks (Paragraph 5.1).

In addition, seven log piles will be installed on site with the primary function of providing habitat for European hedgehog. The log piles will be installed in public areas where they will fall under the remit of future management companies rather than individual residents. The log piles will be located on woodland edge habitats as shown on **Map 2**, and will include suitable sized openings at the base and void inside that acts as a chamber for hedgehogs. Alternatively hedgehog houses, such as Wildcare Woodstone Hedgehog Houses, will be installed and partially buried to deter tampering and vandalism.

4.10 Site Housekeeping

Relevant Important Ecological Features: Badger, European hedgehog, reptiles, great crested newt and common toad

Hazards such as open excavations, pits, ditches, ponds and drains should be covered over or fitted with ramps to allow for animals to escape and checked regularly throughout construction.

The exclusion fencing installed around the construction area should be maintained in good condition throughout the construction period in order to prevent animals from recolonising the site after clearance.

Materials on site should be stored on pallets where practical to prevent colonisation and the locations of spoil piles should be carefully considered, to prevent accidental damage to fencing and to avoid creating suitable habitat for wildlife that could be recolonised during the construction period.

5.0 COMPLIANCE

5.1 Compliance Checks

An ecologist will visit the site on week days for the duration of the reptile translocation period and will check the reptile exclusion fencing is correctly located and in a good state of repair at each visit.

An Ecological Clerk of Works (ECoW) will be present for the destructive search to ensure compliance with the destructive search methodology.

Following site clearance and on commencement of construction works, the construction Site Manager will arrange for regular ad hoc checks throughout the construction period to ensure compliance with the measures set out within this document. In addition, an ECoW will attend site on a monthly basis to ensure compliance.

Date:		
ECoW in Attendance:		
Measure to Check	Compliance notes/ photos	Further Actions Required
Hedgerow protection fencing is correctly positioned and undamaged		
Exclusion zones around badger setts or active bird nests maintained (if required)		
Exclusion fencing correctly positioned and undamaged		
No works are being undertaken outside of the reptile excluded area		
Lighting has been installed in accordance with agreed specifications		
Bat boxes correctly installed		
Bird boxes correctly installed		
Hedgehog highway gaps correctly installed		
Hedgehog houses/log piles correctly installed		
Construction site housekeeping suitably maintained to avoid recolonisation of the site by wildlife.		

5.2 Compliance Reports

On completion of the works a formal compliance report will be produced, summarising the findings of the compliance checks undertaken throughout the construction period and confirming that the measures set out within this document have been complied with.

6.0 REFERENCES

ECOSA, 2020. *South Wokingham, Berkshire - Biodiversity Net Gain Assessment*, North Baddesley: ECOSA.

Nexus, 2019. *Land at Phase 2 of the South Wokingham Strategic Development Location Project Site - Environmental Statement (Chapter 14)*, Reading: Nexus.