

Billingshurst

784-B031362

Appendix 9.1H: Reptile Report

Highwood Ventures 5 Limited and Vivid Housing Limited

January 2026

**Document prepared on behalf of Tetra Tech Limited. Registered in England number:
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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this assessment is to:

- Describe the methods used to carry out the desk and field-based assessments for common reptiles; and
- Present the results of presence / absence surveys completed for common reptiles onsite.

Reptiles are protected in the UK under the Wildlife and Countryside Act 1981, as amended, and are Species of Principal Importance (SPIs) under the Natural Environment and Rural Communities (NERC) Act 2006.

This report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 DESK STUDY

The desktop study comprised two elements completed in January 2026:

- An updated data search obtained from Sussex Biological Records Centre (SxBRC) including records of reptiles within 2km of the site boundary. Only records from within the past ten years are considered within this report; and
- Online element including a 2km search using Magic (<https://magic.defra.gov.uk>) and Ordnance Survey (OS) and Aerial Imagery (<https://www.bing.com/maps>). This included a search for any designated sites within 2km supporting reptiles.

2.2 PRESENCE / LIKELY ABSENCE SURVEYS

All surveys were conducted by the following Tetra Tech surveyors who were experienced in undertaking reptile surveys:

- Consultant Ecologist Katie Hepburn BSc (Hons) MSc ACIEEM;
- Consultant Ecologist Rorie Hather BSc (Hons) MSc ACIEEM;
- Consultant Ecologist Jesse Ross BSc (Hons) MA ACIEEM; and
- Graduate Ecologist Charlie Lee BSc (Hons).

Surveys were undertaken in accordance with the Herpetofauna Workers' Manual (Gent & Gibson, 2003) and Advice Sheet 10 – Reptile Survey (Froglife, 1999) and comprised the use of two complementary methods – direct observation and artificial refuge checks. Surveys were undertaken between September and October 2023.

Direct observation required surveyors to walk slowly towards suitable basking spots and artificial refuges, scanning 3-4 m ahead of footfall to observe any reptiles which may be basking out in the open or upon natural / artificial refuges. Natural refuges onsite included piles of logs, brash and manmade objects and debris.

Artificial refugia used for the survey comprised of bitumen roofing felt approximately 0.5 x 0.5m, which were clearly numbered and placed across the site in areas considered to have habitat suitable to support reptile activity. The density of artificial refugia used was a minimum of 10 per ha. A total of 234 artificial refugia were deployed on 6th September 2023 (See **Figure 1**). The refugia were then left undisturbed for two weeks prior to the commencement of surveys. This allowed the refugia to settle within the environment and reptiles, if present, to find and utilise them.

The artificial refugia were checked on a total of seven occasions. On each visit, each refugia was first checked for basking individuals from a distance before being hand searched for sheltering reptiles. The location and species of each reptile sighting was recorded to allow for analysis of distribution across the site. Where possible to do so, the sex and age class of animals was also recorded.

Reptiles are active from March to October however it is considered that the most successful months to survey are April, May and September (Froglife, 1999 and 2016); although it is recognised that the exact optimal timing to survey is dependent on environmental variables such as temperature, rainfall and wind. Heavy rain, strong wind and high temperatures are unsuitable conditions to survey for reptiles. Froglife (1999) states that the best time of day to survey for reptiles is between 08:30 to 11:00 and between 16:00 and 18:30 when air temperature is between 9°C and 18°C. Weather conditions were recorded for each survey are presented in **Table 1**.

Table 1. Survey Dates and Weather Conditions for Presence / Likely Absence Surveys

Survey No.	Date	Air Temperature (°C)		Wind Speed (Beaufort scale)	Cloud Cover (%)	Precipitation (%)	Surveyor*
		Initial	Final				
1	20.09.2023	17	18	4	50	None	KH
2	22.09.2023	10	13	2	20	None	RH
3	25.09.2023	16	18	3	40	None	CL
4	26.09.2023	17	20	2	60	None	JR
5	27.09.2023	16	18	2	20	None	CL
6	28.09.2023	15	16	2	40	None	JR
7	02.10.2023	16	16	0	100	None	CL+RH

* Surveyors: KH – Katie Hepburn; RH – Rorie Hather; CL – Charlie Lee; JR – Jesse Ross.

All surveys were conducted in accordance with Tetra Tech’s Biosecurity Policy (2023).

2.4 LIMITATIONS

Any absence of desk study records cannot be relied upon to infer absence of a species / habitat as the absence of records may be a result of under-recording within the given search area.

Most of the surveys were conducted within optimal weather conditions. However, deviations to optimum timings were necessary in some cases due to the large size of the site. The temperatures for each survey were suitable aside from the end temperature on the fourth survey visit however this was only reached toward the end of the survey. The land parcels comprised neutral / modified grassland in field margins often close to hedgerows which provided regular shading across much of the site and would have resulted in some refugia being cooler, therefore warmer air temperatures are not considered likely to have impacted the findings.

To ensure that surveys were completed in suitable weather conditions surveys were condensed into a shortened survey period. Some of the survey visits (3-6) occurred on back-to-back days which is not ideal as it fails to survey a broad time frame and the results may be unduly biased by the survey conditions in that week. The surveys were also carried out in the latest part of the season, this means they are also limited to only one part of the season. More frequent surveying on back-to-back days may also lead to reptiles becoming more wary of using artificial refugia for basking / resting if they are being disturbed at a greater frequency by surveyors. Overall, this condensed survey time frame surveys present a moderate limitation to the survey, albeit not sufficient to invalidate the findings.

An incidental record of common lizard was made by a suitably experienced ecologist during the 2023 survey season; however, the precise location of this record has been lost, and the surveyor is no longer employed by Tetra Tech. Therefore, verification of the exact location was not possible at the time of writing this report (January 2026). Nonetheless, the site contains only limited areas of suitable reptile habitats, primarily field boundaries and hedgerows, most of which will be retained and buffered post-development. Presence of common lizard is therefore assumed across the site but likely at low densities due to the generally poor habitat quality. The post-development habitat is expected to improve for this species group, so this limitation is not considered significant in the overall assessment of the site's value for common lizard or reptiles in general.

Considering the limitations highlighted above, the survey effort undertaken is considered acceptable to provide an accurate assessment of reptile presence / likely absence at the site, if not an accurate indication of population levels, if present, in accordance with the best practice guidelines.

3.0 RESULTS

3.1 DESK STUDY

A search of MAGIC did not identify any known statutory designated or non-statutory sites which are designated in part for reptiles, or which are known to support reptiles, within 2km. The search also identified no previously granted European Protected Species Licences (EPSLs) relating to rare reptiles within 2km.

The SxBRC returned the following reptile records within a 2 km radius of the site boundary:

Table 2. Bat records within 5 km radius of the site boundary

Species	Number of records	Recorded individuals	Latest recorded year	Closest record
Common lizard	1	2	2015	0.6 km southeast
Grass snake	3	2	2020	1.0 km west
Slow-worm	3	20	2021	0.6 km southeast

3.2 FIELD SURVEYS

No reptiles were recorded nearby or underneath any of the artificial refugia during any of the seven reptile surveys.

Incidental Records

Although no reptiles were found during the seven visits of the reptile survey, two incidental sightings of reptiles whilst undertaking other site surveys were recorded including the following:

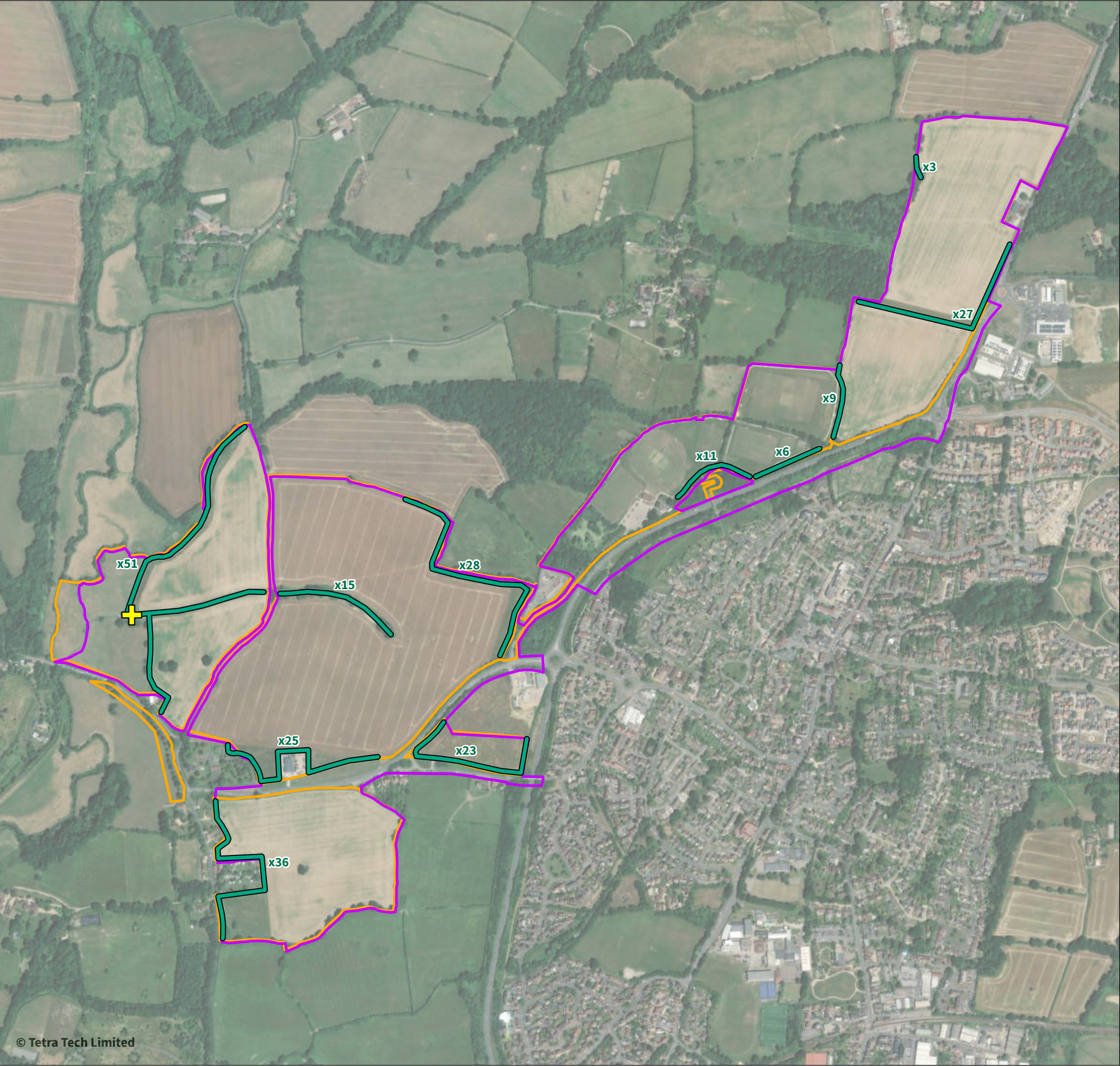
- A deceased juvenile grass snake *Natrix helvetica* in September 2023 along a field boundary / hedgerow (TQ07105 25903 – see **Figure 1**); and
- A common lizard *Zootoca vivipara* recorded along a field boundary / hedgerow (FROM 2023 and location unverified).

4.0 REFERENCES

- CIEEM (2019). Advice Note. On the Lifespan of Ecological Reports & Surveys. April 2019. [online] Available at: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>. Accessed January 2026.
- Froglife (1999). Advice Sheet 10 – Reptile Survey An introduction of planning, conducting and interpreting surveys for snake and lizard conservation.
- Froglife (2016). Surveying for reptiles Tips, techniques and skills to help you survey for reptiles.
- Gent, T. & Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Tetra Tech (2023). Biosecurity Policy (available upon request).

5.0 FIGURES

Figure 1. – Reptile Survey Plan



Reptile Survey Plan

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Legend

-  Survey area
-  EclA boundary
-  Reptile refugia location
-  Grass snake

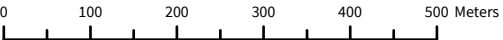
Drawn by: CHRIS.DAWE

Checked by: Frankie McDowell

Figure No. 1

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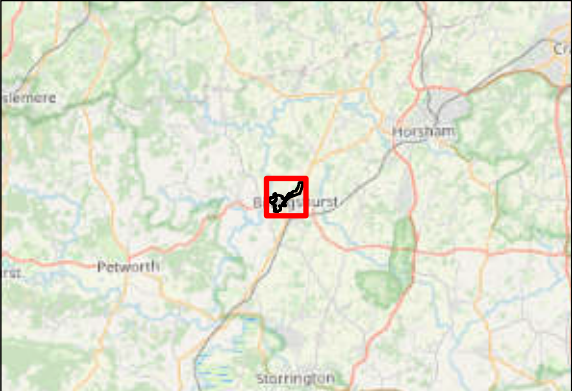


Scale 1:8,726 @A3

British National Grid

NGR: 508054E 126260N

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